Contract Provisions and Plans

For Construction of:

Stevens Creek Fish Passage Improvement Project #ES07000-15

SKAGIT COUNTY PUBLIC WORKS

Stevens Creek Fish Passage Improvement Project #ES07000-15

South Skagit Highway (#07000) from MP 5.3 to MP 5.4:

This Contract provides for the improvement of a Skagit County Road in accordance with the attached Contract Plans, these Contract Provisions, and the 2025 Standard Specifications.

Includes, but is not limited to: reconfiguring Stevens Creek by removing the existing culvert and replacing with a Contractor Designed Buried Structure, clearing and grubbing, removal of structures and obstructions, roadway excavation, backfill, channel excavation, streambed elements, temporary stream diversion and dewatering, fish exclusion, structure excavation class A, shoring, CSTC, CSBC, HMA, beam guardrail type 31 and non-flared terminal, landscaping, erosion control, surveying, traffic control, pavement marking, signage, and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

All work to be completed within 80 working days from Notice to Proceed.

Measurement & Payment: Each item will be per the bid proposal.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT
#ES07000-15

SKAGIT COUNTY, WASHINGTON

2026
SKAGIT COUNTY
DEPARTMENT OF PUBLIC WORKS
MOUNT VERNON, WASHINGTON 98273-5625

NOTICE TO ALL PLAN HOLDERS

Copies of the Plans and specifications are available at Skagit County Public Works, 1800 Continental Place, Mount Vernon, Washington 98273-5625. Telephone: (360) 416-1400. You may receive the bid information electronically; copies of the plans and specifications are available at: http://www.skagitcounty.net/rfp

APPROVED:

Thomas Weller, P.E.
County Engineer

MAPS, PLANS, AND SPECIFICATIONS APPROVED:

BOARD OF COUNTY COMMISSIONERS
SKAGIT COUNTY, WASHINGTON

Ron Wesen, Chair

Peter Browning, Commissioner

Joe Burns, Commissioner

STEVENS CREEK FISH PASSAGE IMROVEMENT PROJECT
Skagit County Project No. ES7000-15

CERTIFICATION

We hereby certify that these contract documents were prepared by us or under our direct supervision, and that we are duly registered Professional Engineers under the laws of the State of Washington.

Engineers of Record

Certificate of Division 1

12/30/2025

Thomas M. Weller, P.E.
Skagit County

Certificate of Divisions 2-9

12/11/2025

Santosh J. Kuruvilla, P.E., S.E.
Exeltech, a Bowman company

NOTICE OF CALL FOR BIDS

NOTICE IS HEREBY GIVEN by SKAGIT COUNTY that sealed bids will be received and publicly opened in the Commissioners' Hearing Room, 1800 Continental Place, Mount Vernon, WA 98273 on **Monday, February 23, 2026, at the hour of 1:00 p.m.,** or as soon thereafter as possible, for the following work:

Stevens Creek Fish Passage Improvement Project
#ES07000-15

Attendance will be in-person or remote by computer, tablet, or smartphone: https://us06web.zoom.us/j/87180001980?pwd=eEVGUGkxZ3NkQkhYSnhBMEo2RTQrdz09 or by phone: 1 (253) 215-8782 Meeting ID: 871 8000 1980

PROJECT DESCRIPTION:
South Skagit Highway (#07000) from MP 5.3 to MP 5.4:
This Contract provides for the improvement of a Skagit County Road in accordance with the attached Contract Plans, these Contract Provisions, and the 2025 Standard Specifications.

Includes, but is not limited to: reconfiguring Stevens Creek by removing the existing culvert and replacing with a Contractor Designed Buried Structure, clearing and grubbing, removal of structures and obstructions, roadway excavation, backfill, channel excavation, streambed elements, temporary stream diversion and dewatering, fish exclusion, structure excavation class A, shoring, CSTC, CSBC, HMA, beam guardrail type 31 and non-flared terminal, landscaping, erosion control, surveying, traffic control, pavement marking, signage, and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

The time limit for physical completion of work is a total of 80 WORKING DAYS. The Engineer's Estimate Range is $1,425,943 to $1,623,168.

Contractor and all subcontractors shall have a contractor's license to work in the State of Washington.

Information, copies of maps, plans, specifications, and addenda for this project will be available on-line beginning **January 29, 2026,** at http://www.skagitcounty.net/rfp or obtained at Skagit County Public Works Department, 1800 Continental Place, Mount Vernon, Washington: (360) 416-1400. Contractors who download plans and specifications are advised to e-mail brendao@co.skagit.wa.us to be added to plan holders list to receive any addenda that may be issued.

All technical questions regarding this project are to be submitted **no later than 5:00 p.m., Friday, February 6, 2026** in writing to David Walde, Design/Construction Section Manager, or by e-mail to davidw@co.skagit.wa.us with the subject line reading, **"Stevens Creek Fish Passage Improvement Project #ES07000-15"**. All project specific questions and response to answers for this project will be available on-line as received. **All Addenda will be posted on-line for this project by 5:00 p.m. Friday, February 13, 2026**. If further Addenda are required to be issued, the bid opening will be postponed.

All bid envelopes must be plainly marked on the outside, "**Sealed Bid, Stevens Creek Fish Passage Improvement Project #ES07000-15".** Sealed bids shall be received by one of the following delivery methods before **Monday, February 23, 2026, at the hour of 1:00 p.m**. Proposals are to be submitted on the forms provided in the Bid Proposal Packet. Incomplete proposals and proposals received after the time fixed for the opening cannot be considered. Oral, telephonic, telegraphic, electronic, or faxed proposals will not be accepted. All bidding shall be based upon compliance with the Contract Provisions and Plans.

1. **Hand delivered**: Bids delivered in person shall be received only at the office of the SKAGIT COUNTY COMMISSIONERS, Reception Desk, 1800 Continental Place, Suite 100, Mount Vernon, WA 98273-5625.
2. **Via mail**: Bids shall be mailed to the SKAGIT COUNTY COMMISSIONERS, 1800 Continental Place, Suite 100, Mount Vernon, WA 98273-5625.

BID GUARANTY: No bid will be considered unless accompanied by a surety company bid bond, or a certified or cashier's check payable to the order of Skagit County for a sum not less than five percent (5%) of the total amount of the bid. A Contract Bond covering performance and payment will be required with the contract. Washington State Prevailing Wage Rates apply to this contract and bidders are advised to consider this charge when tabulating bids.

Skagit County reserves the right to reject any or all bids, and the right to waive any informalities or irregularities in any bid or in any bidding and to further award the Project to the lowest, responsive, responsible bidder whose bid complies with all of the prescribed formalities, as it best serves the interest of Skagit County. After the date and hour set for the opening of bids, no bidder may withdraw its bid unless the award of the contract is delayed for a period exceeding forty-five (45) calendar days following bid opening. All bidders agree to be bound by their bids until the expiration of this stated time period.

The Skagit County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

For questions regarding Skagit County's Title VI Program, you may contact the Public Works Department's Title VI Coordinator, Michael See, at (360) 416-1400.

The Board of Skagit County Commissioners reserves the right to reject any or all bids.

NOTICE GIVEN BY ORDER OF THE BOARD OF SKAGIT COUNTY COMMISSIONERS this 26 day of January, 2026.

Amber Fife
Clerk of the Board

Published: Skagit Valley Herald – January 29, February 5, and February 12, 2026
Daily Journal of Commerce - January 29, February 5, and February 12, 2026

Posted: Washington State Office of Minority & Women's Business Enterprises (OMWBE) – Bids & Contracting Opportunities webpage – January 29, 2026
https://omwbe.wa.gov/small-business-assistance/bids-contracting-opportunities

Skagit County Website – January 29, 2026
www.skagitcounty.net/rfp

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INTRODUCTION TO THE SPECIAL PROVISIONS

(December 10, 2020 APWA GSP)

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 project-specific Special Provisions are not labeled as such. 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 SkagitR)

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/APWA, current edition

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

Division 1
General Requirements

DESCRIPTION OF WORK

(March 13, 1995)
This Contract provides for the improvement of *** reconfiguring Stevens Creek by removing the existing culvert and replacing with a Contractor Designed Buried Structure, clearing and grubbing, removal of structures and obstructions, roadway excavation, backfill, channel excavation, streambed elements, temporary stream diversion and dewatering, fish exclusion, structure excavation class A, shoring, CSTC, CSBC, HMA, beam guardrail type 31 and non-flared terminal, landscaping, erosion control, surveying, traffic control, pavement marking, signage, *** and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

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.

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")	4	Furnished automatically upon award.
Contract Provisions	4	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	2	Furnished only upon request.

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.

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 ten (10) business days preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.4(2) Subsurface Information

(March 6, 2025 SkagitR)

The second sentence in the first paragraph is revised to read:

The Geotechnical Report, including conditions and boring logs, are included as an appendix to the Special Provisions and shall be considered part of the Contract.

1-02.5 Proposal Forms

(November 25, 2024 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 DBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be in legible figures (not words) written in ink or typed and expressed in U.S. dollars. 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 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
(April 22, 2025 APWA GSP, Option A)

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.

To be considered responsive on a FHWA-funded project, the Bidder may be required to submit the following items, as required by Section 1-02.6:

- DBE Utilization Certification
- DBE Written Confirmation Document (from each DBE firm listed on the Bidder's completed DBE Utilization Certification
- Good Faith Effort (GFE) Documentation (if applicable)
- DBE Bid Item Breakdown

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 Confirmations 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.

Supplemental bid information submitted after the Proposal submittal but within 48 hours of the time specified for receipt of Proposals, shall be submitted in a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added.

DBE DOCUMENT SUBMITTAL REQUIREMENTS

DBE Utilization Certification (WSDOT Form 272-056)

The DBE Utilization Certification shall be received at the same location and no later than the time required for delivery of the Proposal. The Contracting Agency will not open or consider any Proposal when the DBE Utilization Certification is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals. The DBE Utilization Certification may be submitted in the same envelope as the Bid deposit.

DBE Written Confirmation Document (WSDOT Form 422-031) and/or GFE Documentation, (if applicable)

The DBE Written Confirmation Documents and/or GFE Documentation are not required to be submitted with the Proposal. The DBE Written Confirmation Document(s) and/or GFE Documentation (if applicable) shall be received either with the Bid Proposal or as a Supplement to the Bid. Written Confirmation and/or GFE Documentation shall be received no later than 48 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. To be considered responsive, Bidders shall submit a Written Confirmation Document from each DBE firm listed on the Bidder's completed DBE Utilization Certification and/or the GFE Documentation as required by Section 1-02.6.

DBE Bid Item Breakdown Form (WSDOT Form 272-054)

The DBE Bid Item Breakdown shall be received either with the Bid Proposal or as a Supplement to the Bid. The documents shall be received no later than 48 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. To be considered responsive, Bidders shall submit a completed DBE Bid Item Breakdown,

however, the Contractor may correct minor errors to the DBE Bid Item Breakdown for a period up to five calendar days after bid opening (not including Saturdays, Sundays and Holidays). DBE Bid Item Breakdowns that are still incorrect after the correction period will be determined to be non-responsive.

The DBE Bid Item Breakdown will not be included as part of the executed Contract.

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.

1-02.12 Public Opening Of Proposal
(July 14, 2016 SkagitR)

Section 1-02.12 is supplemented with the following:

Sealed bids shall be received at the time and location specified in the Call for Bids, unless modified by addenda.

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

(May 17, 2018 APWA GSP, Option A)

Delete this section and replace it with the following:

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.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the

Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) 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.

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.

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

(January 19, 2022 APWA GSP)

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 21 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 ten (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.

Scope of the 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 Changes

(January 19, 2022 APWA GSP)

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

1-04.4(1) Minor Changes

(May 30, 2019 APWA GSP)

Delete the first paragraph and replace it with the following:

Payments or credits for changes amounting to $25,000 or less may be made under the Bid item "Minor Change". At the discretion of the Contracting Agency, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes. All "Minor Change" work will be within the scope of the Contract Work and will not change Contract Time.

Control of Work

Conformity with and Deviations from Plans and Stakes

Section 1-05.4 is supplemented with the following:

(September 3, 2024)

Contractor Surveying - Structure

The Contracting Agency has provided primary survey control in the Plans.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of bridges, noise walls,

retaining walls, buried structures, and marine structures. Except for the survey control data to be furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans “DO NOT DISTURB” shall be protected throughout the length of the project or be replaced at the Contractor’s expense.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work by the Contractor shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.

2. Establish, by placing hubs and/or marked stakes, the location with offsets of foundation shafts and piles.

3. Establish offsets to footing centerline of bearing for structure excavation.

4. Establish offsets to footing centerline of bearing for footing forms.

5. Establish wing wall, retaining wall, noise wall, and buried structure horizontal alignment.

6. Establish retaining wall top of wall profile grade.

7. Establish buried structure profile grade.

8. Establish elevation benchmarks for all substructure formwork.

9. Check elevations at top of footing concrete line inside footing formwork immediately prior to concrete placement.

10. Check column location and pier centerline of bearing at top of footing immediately prior to concrete placement.

11. Establish location and plumbness of column forms, and monitor column plumbness during concrete placement.

12. Establish pier cap and crossbeam top and bottom elevations and centerline of bearing.

13. Check pier cap and crossbeam top and bottom elevations and centerline of bearing prior to and during concrete placement.

14. Establish grout pad locations and elevations.

15. Establish structure bearing locations and elevations, including locations of anchor bolt assemblies.

16. Establish box girder bottom slab grades and locations.

17. Establish girder and/or web wall profiles and locations.

18. Establish diaphragm locations and centerline of bearing.

19. Establish roadway slab alignment, grades and provide dimensions from top of girder to top of roadway slab. Set elevations for deck paving machine rails.

20. Establish traffic barrier and curb profile.

21. Profile all girders prior to the placement of any deadload or construction live load that may affect the girder's profile.

22. Establish locations for marine structures including fixed and floating berthing structures, vehicle and pedestrian foundations and spans, and marine-based buildings.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

The Contractor shall submit the computed elevations at the top of bridge decks as a Type 2 Working Drawing. To compute top of bridge deck elevations, elevations shall be taken at the tenth points along the centerline of each girder web from center-to-center of bearing. For girders exceeding 100 feet in length, the elevations shall be taken at equivalent intervals not to exceed 10 feet.

The Contractor shall ensure a surveying accuracy within the following tolerances:

	Vertical	Horizontal
1. Stationing on structures		±0.02 feet
2. Alignment on structures		±0.02 feet
3. Superstructure elevations	±0.01 feet variation from plan elevation	
4. Substructure	±0.02 feet variation from Plan grades.	

Buried structures shall be within the tolerances described in Section 6-20.3.

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking the following items, the Contractor shall perform independent checks from different secondary control to ensure that the points staked for these items are within the specified survey accuracy tolerances:

Piles
Shafts
Footings
Columns

The Contractor shall calculate coordinates for the points associated with piles, shafts, footings and columns. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the survey work. The Contracting Agency will require up to seven calendar days from the date the data is received to issuing approval.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Payment

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

"Structure Surveying", lump sum.

The lump sum contract price for "Structure Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

(January 13, 2021)

Contractor Surveying - Roadway

The Contracting Agency has provided primary survey control in the Plans.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage, surfacing, paving, channelization and pavement marking, illumination and signals, guardrails and barriers, and signing. Except for the survey control data to be furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans “DO NOT DISTURB” shall be protected throughout the length of the project or be replaced at the Contractors expense.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record

shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.

2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.

3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.

4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor

5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.

6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.

7. Establish intermediate elevation benchmarks as needed to check work throughout the project.

8. Provide references for paving pins at 25-foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.

9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals,

guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

10. Contractor shall determine if changes are needed to the profiles or roadway sections shown in the Contract Plans in order to achieve proper smoothness and drainage where matching into existing features, such as a smooth transition from new pavement to existing pavement. The Contractor shall submit these changes to the Engineer for review and approval 10 days prior to the beginning of work.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

The Contractor shall ensure a surveying accuracy within the following tolerances:

	Vertical	Horizontal
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking roadway alignment and stationing, the Contractor shall perform independent checks from different secondary control to ensure that the points staked are within the specified survey accuracy tolerances.

The Contractor shall calculate coordinates for the alignment. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the work. The Contracting Agency will require up to seven calendar days from the date the data is received.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are needed that are not described in the Plans, then those stakes shall be marked, at no additional cost to the Contracting Agency as ordered by the Engineer.

Payment

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

"Roadway Surveying", lump sum.

The lump sum contract price for "Roadway Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

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:

1-05.18 Record Drawings

(March 8, 2013 APWA GSP)

The Contractor shall maintain one set of full size plans for Record Drawings, updated with clear and accurate red-lined field revisions on a daily basis, and within 2 business days after receipt of information that a change in Work has occurred. The Contractor shall not conceal any work until the required information is recorded.

This Record Drawing set shall be used for this purpose alone, shall be kept separate from other Plan sheets, and shall be clearly marked as Record Drawings. These Record Drawings shall be kept on site at the Contractor's field office, and shall be available for review by the Contracting Agency at all times. The Contractor shall bring the Record Drawings to each progress meeting for review.

The preparation and upkeep of the Record Drawings is to be the assigned responsibility of a single, experienced, and qualified individual. The quality of the Record Drawings, in terms of accuracy, clarity, and completeness, is to be adequate to allow the Contracting Agency to modify the computer-aided drafting (CAD) Contract Drawings to produce a complete set of Record Drawings for the Contracting Agency without further investigative effort by the Contracting Agency.

The Record Drawing markups shall document all changes in the Work, both concealed and visible. Items that must be shown on the markups include but are not limited to:

- Actual dimensions, arrangement, and materials used when different than shown in the Plans.
- Changes made by Change Order or Field Order.
- Changes made by the Contractor.
- Accurate locations of storm sewer, sanitary sewer, water mains and other water appurtenances, structures, conduits, light standards, vaults, width of roadways, sidewalks, landscaping areas, building footprints, channelization and pavement markings, etc. Include pipe invert elevations, top of castings (manholes, inlets, etc.).

If the Contract calls for the Contracting Agency to do all surveying and staking, the Contracting Agency will provide the elevations at the tolerances the Contracting Agency requires for the Record Drawings.

When the Contract calls for the Contractor to do the surveying/staking, the applicable tolerance limits include, but are not limited to the following:

	Vertical	Horizontal
As-built sanitary & storm invert and grate elevations	± 0.01 foot	± 0.01 foot
As-built monumentation	± 0.001 foot	± 0.001 foot
As-built waterlines, inverts, valves, hydrants	± 0.10 foot	± 0.10 foot
As-built ponds/swales/water features	± 0.10 foot	± 0.10 foot
As-built buildings (fin. Floor elev.)	± 0.01 foot	± 0.10 foot
As-built gas lines, power, TV, Tel, Com	± 0.10 foot	± 0.10 foot
As-built signs, signals, etc.	N/A	± 0.10 foot

Making Entries on the Record Drawings:

- Use erasable colored pencil (not ink) for all markings on the Record Drawings, conforming to the following color code:
- Additions - Red
- Deletions - Green
- Comments - Blue
- Dimensions - Graphite
- Provide the applicable reference for all entries, such as the change order number, the request for information (RFI) number, or the approved shop drawing number.
- Date all entries.
- Clearly identify all items in the entry with notes similar to those in the Contract Drawings (such as pipe symbols, centerline elevations, materials, pipe joint abbreviations, etc.).

The Contractor shall certify on the Record Drawings that said drawings are an accurate depiction of built conditions, and in conformance with the requirements detailed above. The Contractor shall submit final Record Drawings to the Contracting Agency. Contracting Agency acceptance of the Record Drawings is one of the requirements for achieving Physical Completion.

Payment will be made for the following bid item:

Record Drawings (Minimum Bid $2,500)	Lump Sum

Payment for this item will be made on a prorated monthly basis for work completed in accordance with this section up to 75% of the lump sum bid. The final 25% of the lump sum item will be paid upon submittal and approval of the completed Record Drawings set prepared in conformance with these Special Provisions.

A minimum bid amount has been entered in the Bid Proposal for this item. The Contractor must bid at least that amount.

Control of Material

Section 1-06 is supplemented with the following:

Buy America Requirements

(March 20, 2025)

General Requirements

In accordance with Buy America requirements contained in 23 CFR 635.410 and 2 CFR 184, the following materials must be produced in the United States:

1. All Iron or Steel Products used in the project. This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

2. All Manufactured Products used in the project. This means the manufactured product was manufactured in the United States.

3. All Construction Materials used in the project. This means that all manufacturing processes for the construction material occurred in the United States.

An article, material, or supply will be classified in one of four categories: 1) Iron or Steel Product, 2) Manufactured Product, 3) Construction Material, or 4) Excluded Material. Only a single category will apply to an item except as follows:

1. With respect to precast concrete products that are classified as Manufactured Products, the components of precast concrete products that consist wholly or predominantly of iron, steel, or combination of both shall meet the requirements for and be tracked as an Iron or Steel Product. The item shall also meet the requirements for a Manufactured Product, and the cost of the iron or steel components shall be included in determining if the Manufactured Product was produced in the United States.

2. With respect to intelligent transportation systems and other electronic hardware systems that are classified as Manufactured Products, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron, steel, or a combination of both, shall meet the requirements for and be tracked as an Iron or Steel Products. The item shall also meet the requirements for a Manufactured Product and the cost of the iron or steel components shall be included in determining if the manufactured product was produced in the United States.

Some contract items are composed of multiple parts that may fall into different categories. Individual components will be categorized as a Construction Material, a Manufactured Product, an Iron or Steel Product, or an excluded material based on their composition when they arrive at the staging area or work site.

Definitions

1. Construction Material: Defined as any article, material, or supply brought to the construction site for incorporation into the final product. Construction materials include an article, material, or supply that is or consists primarily of:

a. Non-ferrous metals including all manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly;

b. Plastic and polymer-based products including all manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form);

c. Glass including all manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting);

d. Fiber optic cable (includes drop cable) including all manufacturing processes, from initial ribboning (if applicable), through buffering, fiber stranding and jacketing, (fiber optic cable also includes the standards for glass and optical fiber);

e. Optical fiber including all manufacturing processes, from the initial preform fabrication stage, though the completion of the draw;

f. Lumber including all manufacturing processes, from initial debarking through treatment and planing;

g. Drywall including all manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels; or

h. Engineered wood including all manufacturing processes from the initial combination of constituent materials until the wood product is in its final form.

If a Construction Material is not manufactured in the United States it shall be considered a Foreign Construction Material.

2. Excluded Material: A material where Buy America requirements do not apply. This includes the following:

a. Materials excluded by Section 70917(c) of the Buy America, Build America Act with respect to aggregates this includes cement and cementitious materials, aggregates such as stone, sand, or gravel or aggregate binding agents or additives. These materials shall be classified as excluded materials based on the composition when brought to the work site. It also includes combinations of these excluded materials when mixtures of Excluded Materials are delivered to the work site without final form for incorporation into the project (i.e. wet concrete and HMA). If they are formed prior to delivery, they are a Manufactured Product and not an Excluded Material.

b. Temporary materials that are not being permanently incorporated into the project.

c. Raw or minimal processed materials where the article, material, or supply does not fall into any of the categories, as it is not a Manufactured Product, an Iron or Steel Product, or a Construction Material and when these materials are delivered to the work site without final form for incorporation into the product (i.e.

seed mix and topsoil). If they are formed prior to delivery, they are a Manufactured Product and not an Excluded Material.

3. Iron or Steel Product: An article, material, or supply that consist of wholly or predominantly of iron or steel or a combination of both. To be considered predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is based on a good faith estimate of the cost of the iron or steel components.

4. Manufactured Product: A Manufactured Product includes any item produced as a result of the manufacturing process. Items that should be treated as a manufactured product (rather than a construction material) are: 1) items that consist of two or more of the listed construction materials that have been combined together through a manufacturing process, and 2) items that include at least one of the listed construction materials as defined above, combined with a material that is not listed through a manufacturing process.

   If a product is not an Iron or Steel Product, a Construction Material, or an Excluded Material, it is a Manufactured Product.

5. United States: To further define the coverage, a domestic product is a manufactured steel construction material that was produced in one of the 50 states, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

Iron or Steel Product Requirements

Iron or Steel Products that are permanently incorporated into the project shall consist of American-made materials only. Buy America requirements do not apply to temporary steel or iron items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework.

Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the foreign material used does not exceed one-tenth of one percent of the total contract cost or $2,500.00, whichever is greater.

American-made material is defined as material having all manufacturing processes occurring domestically.

If domestically produced steel billets or iron ingots are exported outside of the United States, as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.

Manufacturing begins with the initial melting and mixing and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or

enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.

Due to a nationwide waiver, Buy America requirements do not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron ore processed, pelletized, and reduced iron ore.

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:

    a. Open hearth furnace.

    b. Basic oxygen.

    c. Electric furnace.

    d. Direct reduction.

2. Rolling, heat treating, and any other similar processing.

3. Fabrication of the products:

    a. Spinning wire into cable or strand.

    b. Corrugating and rolling into culverts.

    c. Shop fabrication.

A certification of materials origin will be required for all iron or steel products prior to such items being incorporated into the permanent work. The Contractor will not receive payment until the certification is received by the Engineer. The certification shall be on WSDOT Form 350-109 provided by the Engineer, or such other form the Contractor chooses, provided it contains the same information as WSDOT Form 350-109.

Manufactured Products

Due to a nationwide waiver, Buy America requirements do not apply to Manufactured Products except as follows:

1. When a precast concrete product is classified as a Manufactured Product, the components that are an Iron or Steel Product shall follow the “Iron and Steel Requirements” of this Specification.

2. When an electronic hardware system such as an intelligent transportation system is classified as a Manufactured Product, the cabinets and the other enclosures of such systems that are an Iron or Steel Product shall follow the “Iron and Steel Requirements” of this Specification.

Construction Material Requirements

A Contractor provided certification of materials origin will be required before each progress estimate or payment. The Contractor will not receive payment until the certification is received by the Engineer. The Contractor shall certify that all Construction

Materials installed during the current progress estimate period meet the Buy America requirements. The certification shall be on WSDOT Form 350-111 provided by the Engineer, or such other form the Contractor chooses, provided it contains the same information as WSDOT Form 350-111.

Waiver for De Minimis Costs

Minor amounts of Foreign Construction Materials may be utilized in this project, provided that the total cost of the Foreign Construction Materials does not exceed $1,000,000 and does not exceed 5 percent of the total applicable material costs calculated as follows:

$$\frac{Total\ cost\ of\ Foreign\ Construction\ Materials}{Total\ applicable\ material\ costs} < 0.05$$

The total applicable material costs shall be the sum of the costs all Construction Materials, all Iron or Steel Products, and all Manufactured Products. Total applicable material costs does not include Excluded Materials.

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.

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).

Environmental Regulations

Section 1-07.5 is supplemented with the following:

(September 20, 2010)

Environmental Commitments

The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the various documents referenced in the Special Provision **Permits and Licenses**. Throughout the work, the Contractor shall comply with the following requirements:

(April 1, 2019)

The Contractor shall notify the Engineer a minimum of *** forty-five (45) *** calendar days prior to commencing any work in sensitive areas, mitigation areas, and wetland buffers. Installation of construction fencing is excluded from this notice requirement.

(August 3, 2009)

Payment

All costs to comply with this special provision for the environmental commitments and requirements are incidental to the contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the contract.

State Department of Fish And Wildlife

Section 1-07.5(2) is supplemented with the following:

(April 2, 2018)
The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the Washington State Department of Fish and Wildlife. Throughout the work, the Contractor shall comply with the following requirements:

(April 2, 2018)
The Contractor may begin Work below the Ordinary High Water Line on *** July 15 *** and must complete all the Work by *** September 30 ***.

(April 2, 2018)
All costs to comply with this special provision are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the Contract.

State Department of Ecology

Section 1-07.5(3) is supplemented with the following:

(April 2, 2018)
The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the Washington State Department of Ecology. Throughout the work, the Contractor shall comply with the following requirements:

(August 3, 2009)
A mixing zone is established within which the turbidity standard is waived during actual in-water work. The mixing zone is established to only temporarily allow exceeding the turbidity criteria (such as a few hours or days) and is not authorization to exceed the turbidity standard for the entire duration of the construction. The mixing zone shall not exceed *** 100 *** feet downstream from the construction area.

(April 1, 2019)
Stormwater, dewatering water, or other authorized non-stormwater discharges that has come into contact with pH modifying substances such as concrete rubble, cast concrete or amended soils, need to be maintained between 6.5 – 8.5 standard units (su). If pH exceeds 8.5 su, the Contractor shall immediately discontinue work and initiate treatment to prevent discharges outside the acceptable range from occurring. All neutralization methods used shall be in accordance with the permit. Work may resume once treatment has been implemented and pH of the stormwater or authorized non-stormwater discharge is between 6.5 - 8.5 su or it can be demonstrated that high pH waters will not discharge to surface waters.

Stormwater, dewatering water, and other authorized non-stormwater discharges are monitored weekly for compliance with the turbidity benchmark (25

nephelometric turbidity units (ntu)) and the phone reporting trigger value (250 ntu) by the Contracting Agency. When the turbidity benchmark is breached, the best management practices (BMPs) installed on-site are not working adequately and need to be adapted, maintained or more BMPs shall be installed. When the turbidity phone reporting trigger value is breached, immediate action is required in order to lower the turbidity to ≤25 ntu or to eliminate the discharge. Daily follow-up discharge samples will be collected at all locations where a discharge of 250 ntu or higher was collected unless the discharge was stopped or eliminated.

(April 2, 2018)
All costs to comply with this special provision are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the Contract.

U.S. Army Corps of Engineers

Section 1-07.5(5) is supplemented with the following:

(April 2, 2018)
The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the U.S. Army Corps of Engineers. Throughout the work, the Contractor shall comply with the following requirements:

(February 25, 2013)
Temporary structures and dewatering of areas under the jurisdiction of the U.S. Army Corps of Engineers must maintain normal downstream flows and prevent upstream and downstream flooding to the maximum extent practicable.

(April 2, 2018)
All costs to comply with this special provision are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the Contract.

Permits and Licenses

Section 1-07.6 is supplemented with the following:

(March 6, 2025 SkagitR)
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.

***

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
Hydraulic Project Approval (HPA)	Department of Fish & Wildlife (WDFW)	2024-4-297+01
USACE Nationwide Permit (NWP) #27	United States Army Corps of Engineers (USACE)	NWS 2023-72

***

Load Limits

Section 1-07.7 is supplemented with the following:

(March 13, 1995)
If the sources of materials provided by the Contractor necessitates hauling over roads other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

Wages

Section 1-07.9(1) is supplemented with the following:

(January 6, 2025)
The Federal wage rates incorporated in this contract have been established by the Secretary of Labor under United States Department of Labor General Decision No. WA20250001.

The State rates incorporated in this contract are applicable to all construction activities associated with this contract.

1-07.9(5)A Required Documents

(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

(October 1, 2020 APWA GSP, Option A)

Supplement this section with the following:

Disadvantaged Business Enterprise Participation

The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 and USDOT's official interpretations (i.e., Questions & Answers) apply to this Contract. As such, the requirements of this Contract are to make affirmative efforts to solicit DBEs,

provide information on who submitted a Bid or quote and to report DBE participation monthly as described elsewhere in these Contract Provisions. No preference will be included in the evaluation of Bids/Proposals, no minimum level of DBE participation shall be required as a Condition of Award and Bids/Proposals may not be rejected or considered non-responsive on that basis.

DBE Abbreviations and Definitions

Broker – A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract, or, persons/companies who arrange or expedite transactions.

Certified Business Description – Specific descriptions of work the DBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.

Certified Firm Directory – A database of all Minority, Women, and Disadvantaged Business Enterprises. The on-line Directory is available to Contractors for their use in identifying and soliciting interest from DBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page at: https://omwbe.diversitycompliance.com.

Commercially Useful Function (CUF)

49 CFR 26.55(c)(1) defines commercially useful function as: "*A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.*"

Contract – For this Special Provision only, this definition supplements Section 1-01.3. 49 CFR 26.5 defines contract as: "… a legally binding relationship obligating a seller to furnish supplies or services (including, but not limited to, construction and professional services) and the buyer to pay for them. For purposes of this part, a lease is considered to be a contract."

Disadvantaged Business Enterprise (DBE) – A business firm certified by the Washington State Office of Minority and Women's Business Enterprises, as meeting the criteria outlined in 49 CFR 26 regarding DBE certification.

Force Account Work – Work measured and paid in accordance with Section 1-09.6.

Manufacturer (DBE) – A DBE firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the Contract. A DBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

Regular Dealer (DBE) – A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Regular Dealer, the DBE firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.

DBE Goals

No DBE goals have been assigned as part of this Contract.

Affirmative Efforts to Solicit DBE Participation

The Contractor shall not discriminate on the grounds of race, color, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. DBE firms shall have an equal opportunity to compete for subcontracts in which the Contractor enters into pursuant to this Contract.

Contractors are encouraged to:

1. Advertise opportunities for Subcontractors or suppliers in a timely and reasonably designed manner to provide notice of the opportunity to DBEs capable of performing the Work. All advertisements should include a Contract Provision encouraging participation by DBE firms. This may be accomplished through general advertisements (e.g. newspapers, journals, etc.) or by soliciting Bids/Proposals directly from DBEs.

2. Establish delivery schedules that encourage participation by DBEs and other small businesses.

3. Participate with a DBE as a joint venture.

DBE Eligibility/Selection of DBEs for Reporting Purposes Only

Contractor may take credit for DBEs utilized on this Contract only if the firm is certified for the Work being performed, and the firm performs a commercially useful function (CUF).

Absent a mandatory goal, all DBE participation that is attained on this project will be considered as "race neutral" participation and shall be reported as such.

Crediting DBE Participation

All DBE Subcontractors shall be certified before the subcontract on which they are participating is executed.

Be advised that although a firm is listed in the directory, there are cases where the listed firm is in a temporary suspension status. The Contractor shall review the OMWBE Suspended DBE Firms list. A DBE firm that is included on this list may not enter into new contracts that count towards participation.

DBE participation is only credited upon payment to the DBE.

The following are some definitions of what may be counted as DBE participation.

DBE Prime Contractor

Only take credit for that portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work that the DBE Prime Contractor performs with its own forces and is certified to perform.

DBE Subcontractor

Only take credit for that portion of the total dollar value of the subcontract equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces. The value of work performed by the DBE includes the cost of supplies and materials purchased by the DBE and equipment leased by the DBE, for its work on the contract. Supplies, materials or equipment obtained by a DBE that are not utilized or incorporated in the contract work by the DBE will not be eligible for DBE credit.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor's resources available to DBE subcontractors at no cost, shall not be credited.

DBE credit will not be given in instances where the equipment lease includes the operator. The DBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the DBE, but payment is deducted from the Contractor's payment to the DBE is not allowed.

If a DBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be credited only if the DBE's Lower-Tier Subcontractor is also a DBE. Work subcontracted to a non-DBE shall not be credited.

Count expenditures toward race/gender-neutral participation only if the DBE is performing a CUF on the contract.

DBE Subcontract and Lower Tier Subcontract Documents

There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the DBE. The subcontract agreement shall incorporate requirements of the primary Contract. Subcontract agreements of all tiers, including lease agreements shall be readily available at the project site for the Engineer review.

DBE Service Provider

The value of fees or commissions charged by a DBE Broker, a DBE behaving in a manner of a Broker, or another service provider for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited as DBE participation, if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF.

Temporary Traffic Control

If the DBE firm is being utilized in the capacity of only "Flagging", the DBE firm must provide a Traffic Control Supervisor (TCS) and flagger, which are under the direct control of the DBE. The DBE firm shall also provide all flagging equipment (e.g. paddles, hard hats, and vests).

If the DBE firm is being utilized in the capacity of "Traffic Control Services", the DBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project. In addition, if the DBE firm utilizes the Contractor's equipment, such as Transportable Attenuators and Portable Changeable Message Signs (PCMS) no DBE credit can be taken for supplying and operating the items.

Trucking

DBE trucking firm participation may only be credited as DBE participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier. In situations where the DBE's work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine DBE credit for hauling.

The DBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The DBE receives credit for the value of the transportation services it provides on the Contract using trucks it owns or leases, licenses, insures, and operates with drivers it employs.

The DBE may lease additional trucks from another DBE firm. The Work that a DBE trucking firm performs with trucks it leases from other certified DBE trucking firms qualify for 100% DBE credit

The trucking Work subcontracted to any non-DBE trucking firm will not receive credit for Work done on the project. The DBE may lease trucks from a non-DBE truck leasing company, but can only receive credit as DBE participation if the DBE uses its own employees as drivers.

DBE credit for a truck broker is limited to the fee/commission that the DBE receives for arranging transportation services.

Truck registration and lease agreements shall be readily available at the project site for the Engineer review.

DBE Manufacturer and DBE Regular Dealer

One hundred percent (100%) of the cost of the manufactured product obtained from a DBE Manufacturer can count as DBE participation.

Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited as DBE participation. If the role of the DBE Regular Dealer is determined to be that of a pass-through, then no DBE credit will be given for its services. If the role of the DBE Regular Dealer is determined to be that of a Broker, then DBE credit shall be limited to the fee or commission it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract-by-Contract basis.

Regular Dealer DBE firms must be approved before being used on a project. The WSDOT Approved Regular Dealer list published on WSDOT's Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. The Regular Dealer must submit the Regular Dealer Status Request form a minimum of five days prior to being utilized on the specific project.

Purchase of materials or supplies from a DBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can count as DBE participation provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the DBE. The cost of the materials and supplies themselves cannot be counted toward as DBE participation.

Note: Requests to be listed as a Regular Dealer will only be processed if the requesting firm is a material supplier certified by the Office of Minority and Women's Business Enterprises in a NAICS code that falls within the 42XXXX NAICS Wholesale code section.

Procedures Between Award and Execution

After Award and prior to Execution, the Contractor shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder's Proposal bond or deposit.

1. A list of all firms who submitted a bid or quote in attempt to participate in this project whether they were successful or not. Include the business name and mailing address.

   Note: The firms identified by the Contractor may be contacted by the Contracting Agency to solicit general information as follows: age of the firm and average of its gross annual receipts over the past three-years.

Procedures After Execution

Commercially Useful Function (CUF)

The Contractor may only take credit for the payments made for Work performed by a DBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the DBE. This applies to all DBEs performing Work on a project, whether or not the DBEs are COA, if the Contractor wants to receive credit for their participation. The Engineer will conduct CUF reviews to ascertain whether DBEs are performing a CUF. A DBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The DBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a DBE does not perform "all" of these functions on a furnish-and-install contract, it has not performed a CUF and the cost of materials cannot be counted toward DBE COA Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be readily available for review by the Engineer.

In order for a DBE traffic control company to be considered to be performing a CUF, the DBE must be in control of its work inclusive of supervision. The DBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of DBE participation.

The following are some of the factors that the Engineer will use in determining whether a DBE trucking company is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on the Contract. The owner demonstrates business related knowledge, shows up on site and is determined to be actively running the business.

- The DBE shall with its own workforce, operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the DBE must be exclusively employed by the DBE and reflected on the DBE's payroll.

- Lease agreements for trucks shall indicate that the DBE has exclusive use of and control over the truck(s). This does not preclude the leased truck from working for others provided it is with the consent of the DBE and the lease provides the DBE absolute priority for use of the leased truck.

- Leased trucks shall display the name and identification number of the DBE.

Joint Checking

A joint check is a check between a Subcontractor and the Contractor to the supplier of materials/supplies. The check is issued by the Contractor as payer to the Subcontractor and the material supplier jointly for items to be incorporated into the project. The DBE must release the check to the supplier, while the Contractor acts solely as the guarantor.

A joint check agreement must be approved by the Engineer and requested by the DBE involved using the DBE Joint Check Request Form (form # 272-053) prior to its use. The form must accompany the DBE Joint Check Agreement between the parties involved, including the conditions of the arrangement and expected use of the joint checks.

The approval to use joint checks and the use will be closely monitored by the Engineer. To receive DBE credit for performing a CUF with respect to obtaining materials and supplies, a DBE must "be responsible for negotiating price, determining quality and quantity, ordering the material and installing and paying for the material itself." The Contractor shall submit DBE Joint Check Request Form for the Engineer approval prior to using a joint check.

Material costs paid by the Contractor directly to the material supplier is not allowed. If proper procedures are not followed or the Engineer determines that the arrangement results in lack of independence for the DBE involved, no DBE credit will be given for the DBE's participation as it relates to the material cost.

Prompt Payment

Prompt payment to all subcontractors shall be in accordance with Section 1-08.1. Prompt Payment requirements apply to progress payments as well as return of retainage.

Reporting

The Contractor and all subcontractors/suppliers/service providers that utilize DBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify DBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this Contract.

Decertification

When a DBE is "decertified" from the DBE program during the course of the Contract, the participation of that DBE shall continue to count as DBE participation as long as the subcontract with the DBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a DBE does not have an executed subcontract agreement at the time of decertification.

Consequences of Non-Compliance

Each contract with a Contractor (and each subcontract the Contractor signs with a Subcontractor) must include the following assurance clause:

The Contractor, subrecipient, or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the

award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;

(2) Assessing sanctions;

(3) Liquidated damages; and/or

(4) Disqualifying the Contractor from future bidding as non-responsible.

Payment

Compensation for all costs involved with complying with the conditions of this Specification and any other associated DBE requirements is included in payment for the associated Contract items of Work, except otherwise provided in the Specifications.

Protection and Restoration of Property

Archaeological and Historical Objects

Section 1-07.16(4) is supplemented with the following:

(December 6, 2004)

The project area potentially contains archaeological or historical objects that may have significance from a historical or scientific standpoint. To protect these objects from damage or destruction, the Contracting Agency, at its discretion and expense, may monitor the Contractor's operations, conduct various site testing and perform recovery and removal of such objects when necessary.

The Contractor may be required to conduct its operations in a manner that will accommodate such activities, including the reserving of portions of the work area for site testing, exploratory operations and recovery and removal of such objects as directed by the Engineer. If such activities are performed by consultants retained by the Contracting Agency, the Contractor shall provide them adequate access to the project site.

Added work necessary to uncover, fence, dewater, or otherwise protect or assist in such testing, exploratory operations and salvaging of the objects as ordered by the Engineer shall be paid by force account as provided in Section 1-09.6. If the discovery and salvaging activities require the Engineer to suspend the Contractor's work, any adjustment in time will be determined by the Engineer pursuant to Section 1-08.8.

To provide a common basis for all bidders, the Contracting Agency has entered an amount for the item "Archaeological and Historical Salvage" in the Proposal to become a part of the total bid by the Contractor.

Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

(April 2, 2007)
Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

***

Ziply Fiber
Contact: Logan Rypysc
595 Pease Road Burlington, WA 98233
Office: (860) 977-3379
logan.rypysc@atcotelecom.com

Skagit Public Utility District
Contact: Mike Larson
1415 Freeway Drive Mount Vernon, WA. 98273
Office and Emergency: (360) 391-4918
larson@skagitpud.org

Puget Sound Energy
Contact: Jane Major
1660 Park Lane, Burlington, WA 98233
(360) 715-7221
jane.major@pse.com

Comcast
Contact: Joe Norris
(206) 735-5958
joseph_norris@comcast.com

Astound Broadband
Fiber Contact: Marta Sanchez
(425) 389-3647
marta.sanchez@astound.com

Cable Contact: Todd Gibbons
(360) 333-7627
todd.gibbons@astound.com

Cascade Natural Gas
Contact: Addam Sad
1520 S 2nd Street, Mount Vernon, WA 98273
(360) 391-6097
addam.sad@cngc.com

Lumen
Contact: Morgan Roehl
(206) 348-9025
Morgan.roehl1@lumen.com

Utility Location Center (One Call Center) (800) 424-5555
***

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:

$2,000,000	Each Occurrence
$3,000,000	General Aggregate
$3,000,000	Products & Completed Operations Aggregate
$2,000,000	Personal & Advertising Injury each offence
$2,000,000	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.

1-07.18(5)K Professional Liability

(December 30, 2022 APWA GSP)

The Contractor and/or its subcontractor(s) and/or its design consultant providing construction management, value engineering, or any other design-related non-construction professional services shall provide evidence of Professional Liability insurance covering professional errors and omissions.

Such policy shall provide the following minimum limits:

$1,000,000 per claim and annual aggregate

If the scope of such design-related professional services includes work related to pollution conditions, the Professional Liability insurance shall include coverage for Environmental Professional Liability.

If insurance is 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.

Public Convenience and Safety

Construction Under Traffic

Section 1-07.23(1) is supplemented with the following:

(October 3, 2022)
Public Notification

The Contractor shall furnish and install information signs that provide advance notification of a ramp closure, roadway closure, or both, a minimum of *** 10 *** working days prior to the closure. Sign locations, messages, letter sizes, and sign sizes are shown in the Plans.

The Contractor shall notify *** Skagit County ***, in writing, a minimum of *** 15 *** working days prior to each closure. The Contractor shall furnish copies of these notifications to the Engineer.

1-07.24 Rights of Way

(April 22, 2025 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 as described below.

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, 2024APWA 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 5 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

(December 30, 2022 APWA GSP, Option A)

Section 1-08.1 is supplemented with the following:

Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall submit to the Engineer a certification (WSDOT Form 420-004) that a written agreement between the Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has been executed. This certification shall also guarantee that these subcontract agreements include all the documents required by the Special Provision Federal Agency Inspection.

A subcontractor or lower tier subcontractor will not be permitted to perform any work under the contract until the following documents have been completed and submitted to the Engineer:

1. Request to Sublet Work (WSDOT Form 421-012), and

2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for Federal-aid Projects (WSDOT Form 420-004).

The Contractor shall submit to the Engineer a completed Monthly Retainage Report (WSDOT Form 272-065) within 15 calendar days after receipt of every monthly progress payment until every subcontractor and lower tier subcontractor's retainage has been released.

The Contractor's records pertaining to the requirements of this Special Provision shall be open to inspection or audit by representatives of the Contracting Agency during the life of the contract and for a period of not less than three years after the date of acceptance of the contract. The Contractor shall retain these records for that period. The Contractor shall also guarantee that these records of all subcontractors and lower tier subcontractors shall be available and open to similar inspection or audit for the same time period.

Progress Schedule

Progress Schedule Types

Section 1-08.3(2)B is supplemented with the following:

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 three 11x17 hardcopies and one electronic pdf 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

Delete this section and replace it 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.

Time for Completion

Section 1-08.5 is supplemented with the following:

(March 13, 1995)
This project shall be physically completed within *** 80 *** working days.

1-08.5 Time for Completion
(November 25, 2024 APWA GSP, Option B)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the tenth calendar day after the Notice to Proceed date. If the Contractor starts work on the project at an earlier date, then contract time shall begin on the first working day when onsite work begins.

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:

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

Suspension of Work

Section 1-08.6 is supplemented with the following:

(February 6, 2023)
Contract time may be suspended for procurement of critical materials (Procurement Suspension). In order to receive a Procurement Suspension, the Contractor shall within 21 calendar days after execution by the Contracting Agency, place purchase orders for all materials deemed critical by the Contracting Agency for physical completion of the contract. The Contractor shall provide copies of purchase orders for the critical materials. Such purchase orders shall disclose the purchase order date and estimated delivery dates for such critical material.

The Contractor shall show procurement of the materials listed below as activities in the Progress Schedule. If the approved Progress Schedule indicates that the materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then contract time will be suspended upon physical completion of all critical work except that work dependent upon the below listed critical materials:

*** Contractor Designed Buried Structure No. 1 ***

Charging of contract time will resume upon delivery of the critical materials to the Contractor or *** 80 *** calendar days after execution by the Contracting Agency, whichever occurs first.

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 *** $1,550 *** 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.

Measurement and Payment

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.

1-09.7 Mobilization

(December 30, 2022 APWA GSP)

Delete this Section and replace it with the following:

Mobilization consists of preconstruction expenses and the costs of preparatory Work and operations performed by the Contractor typically occurring before 10 percent of the total original amount of an individual Bid Schedule is earned from other Contract items on that Bid Schedule. Items which are not to be included in the item of Mobilization include but are not limited to:

1. Portions of the Work covered by the specific Contract item or incidental Work which is to be included in a Contract item or items.
2. Profit, interest on borrowed money, overhead, or management costs.
3. Costs incurred for mobilizing equipment for force account Work.

Based on the lump sum Contract price for “Mobilization”, partial payments will be made as follows:

1. When 5 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 50 percent of the Bid Item for mobilization on that original Bid Schedule, 5 percent of the total of that original Bid Schedule, or 5 percent of the total original Contract amount, whichever is the least, will be paid.
2. When 10 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 100 percent of the Bid Item for mobilization on that original Bid Schedule, 10 percent of the total of that original Bid Schedule, or 10 percent of the total original Contract amount, whichever is the least, will be paid.
3. When the Substantial Completion Date has been established for the project, payment of any remaining amount Bid for mobilization will be paid.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the Contract.

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.

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.

Claims Resolution

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.

1-09.13(4) Venue for Litigation

(December 30, 2022 APWA GSP)

Revise this section to read:

Litigation shall be brought in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. It is mutually agreed by the parties that when litigation occurs, 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.

Temporary Traffic Control

Traffic Control Management

Section 1-10.2 is supplemented with the following:

(November 2, 2022)

Work Zone Safety Contingency

Enhancements to improve the effectiveness of the accepted traffic control plans to increase the safety of the work zones shall be discussed on a weekly basis between the Contractor and the Contracting Agency. Enhancements shall be mutually agreed upon by the Contractor and Engineer prior to performing any Work to implement the enhancement.

Enhancements do not include the use of Uniformed Police Officers or WSP, address changes to the allowed work hour restrictions, or changes to the staging plans in the Contract (if applicable). If allowed by the Engineer, these items will be addressed in accordance with Section 1-04.4.

The Contractor shall be solely responsible for submitting any traffic control plan revision to implement the enhancement in accordance with Section 1-10.2(2).

General

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

(October 3, 2022)
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.nethttps://www.ussafetyalliance.com/

(January 5, 2015)
The primary TCS shall have a minimum of 500 hours of experience providing traffic control as a TCS or traffic control labor on multilane highways with a speed limit of 55 mph or greater. The Contractor shall submit a certification of the TCS's experience with the TCS designation. Documentation of experience shall be available upon request by the Engineer.

Payment

Item Bids with Lump Sum for Incidentals

Section 1-10.5(2) is supplemented with the following:

(November 2, 2022)
"Work Zone Safety Contingency", by force account.

All costs as authorized by the Engineer will be paid for by force account as specified in Section 1-09.6.

For purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Work Zone Safety Contingency" in the Proposal to become a part of the Contractor's total bid.

The Engineer may choose to use existing bid items for the implementation of the agreed upon enhancement.

Division 2
Earthwork

Clearing, Grubbing, and Roadside Cleanup

Description

Section 2-01.1 is supplemented with the following:

(March 13, 1995)
Clearing and grubbing on this project shall be performed within the following limits:

*** Clearing and grubbing shall be as shown in the plans. Trees (15) identified for removal shall be felled into the Contracting Agency right of way areas that will be cleared for vegetation. Trees deemed suitable for use as large woody material with and without rootwad shall be stockpiled. The Contractor shall notify the Contracting Agency two business days before the work begins and the Contracting Agency will document the stockpile upon the work's completion. The Contractor will be responsible for securing stockpiled woody material and shall be financially responsible for replacement in-kind for any sustained loss.***

Removal of Structures and Obstructions

Construction Requirements

Section 2-02.3 is supplemented with the following:

(September 7, 2021)
Removal of Obstructions
The following miscellaneous Obstructions shall be removed and disposed of:

***
This Work includes, but may not be limited to, demolition and removal of the following items as shown in the Plans:
• Existing Storm Culvert (Approx. 57 LF)
• Trees (15 Each)

These quantities listed are approximate and provided only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for approved changes will be made in the lump sum contract price even though the actual quantities required may deviate from those listed. All elements that are removed as part of the demolition for this Contract shall become property of the Contractor and be disposed of offsite, with the exception of the trees which shall be cut and stockpiled as described in Section 2-01.1.***

Measurement

Section 2-02.4 is supplemented with the following:

Embankment Construction

Compacting Earth Embankments

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

(March 13, 1995)
All embankments, except waste embankments, shall be compacted using Method A.

Measurement

Section 2-03.4 is supplemented with the following:

(September 3, 2024)
Only one determination of the original ground elevation will be made on this project. Measurement for roadway excavation and embankment will be based on the original ground elevations recorded previous to the award of this contract.

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.

Electronic Design Files will be available by request for the Bidder's inspection before the opening of Bids.

Structure Excavation

Construction Requirements

General Requirements

Removal of Unstable Base Material

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

(September 8, 2020)
If the soil in the footing excavation *** below the 3' excavation under the box culvert as called for in the Plans *** is disturbed and becomes unsuitable before placement of the geosynthetic reinforcement and geotextile for soil stabilization, the Contractor shall excavate below the plan grade a maximum of 1 foot, as determined by the Engineer, and backfill with gravel backfill for foundations.

Construction Requirements, Structure Excavation, Class A

Excavation Using Open Pits – Extra Excavation

Section 2-09.3(3)B is supplemented with the following:

(April 1, 2019)
The Contracting Agency has identified the following areas where the Contractor may dig open pits or perform extra excavation without shoring or cofferdams provided slope stability is evaluated using limit equilibrium methods:

*** Contractor Designed Buried Structure No. 1 including wing walls ***

Submittals and Design Requirements
At the locations identified above, the temporary excavation slopes shall be designed by an engineer or engineering geologist licensed in Washington State. The Contractor shall submit Type 2E Working Drawings for the areas identified above. The Type 2E Working Drawings may address each site individually, as groups, or in entirety. The design shall use limit equilibrium slope stability methods and software and shall be completed in conformance with the WSDOT *Geotechnical Design Manual* M 46-03. The design shall be based on site specific conditions and shall include a stability assessment of interim or intermediate stages if they are used and shall include all applicable surcharge loads including those from construction equipment or stock piled materials. Required submittal elements include, at a minimum, the following:

1. A plan view showing the limits of the excavation and its relationship to traffic, Structures, utilities and other pertinent project elements. If the stability of the excavation requires no-load zones or equipment setback distances, those shall be shown on the plan view.

2. A typical or controlling cross section showing the proposed excavation, original ground line, and locations of traffic, existing Structures, utilities, site constraints, surcharge loads, or other conditions that could affect the stability of the slope. If the stability of the excavation requires no-load zones or equipment setback distances, those shall be shown in cross section.

3. A summary clearly describing subsurface conditions and groundwater conditions, sequencing considerations, and governing assumptions.

4. Supporting calculations for the design of the excavation, the soil and material properties selected for design, and the justification for the selection for those properties, in accordance with the WSDOT *Geotechnical Design Manual* M 46-03.

5. Safety factors, or load and resistance factors used, and justification for their selection, in accordance with the WSDOT *Geotechnical Design Manual* M 46-03, and referenced AASHTO design manuals.

6. A monitoring plan to evaluate the excavation performance throughout its design life.

7. Any supplemental subsurface explorations made by the Contractor to meet the requirements for geotechnical design of excavation slopes, in accordance with the WSDOT *Geotechnical Design Manual* M 46-03.

Construction Geosynthetic

Measurement

Section 2-12.4 is supplemented with the following:

(******)
Geosynthetic reinforcement will be measured by the square yard for the ground surface area actually covered.

Payment

Section 2-12.5 is supplemented with the following:

(November 17, 1997)
"Geosynthetic Reinforcement", per square yard.

The unit contract price per square yard for "Geosynthetic Reinforcement" shall be full pay to perform the work as specified.

Division 5
Surface Treatments and Pavements

5-04 Hot Mix Asphalt

(January 31, 2023 APWA GSP)

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:

- Be designed for *** 2 *** million equivalent single axle loads (ESALs).
- 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, except the cost of temporary pavement markings, 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

(March 13, 2025 SkagitR)

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 fall within the following minimum and maximum depths:

Gradation	Minimum	Maximum
HMA Class 1”	0.25 feet	0.35 feet
HMA Class ¾”		
wearing course	0.20 feet	0.30 feet
other courses	0.20 feet	0.35 feet
HMA Class ½”		
wearing course	0.15 feet	0.30 feet
other courses	0.15 feet	0.35 feet
HMA Class ⅜”	0.10 feet	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.

(January 31, 2023 APWA GSP)

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 (Va), 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 sublot shall be equal to one day's production or 800 tons, whichever is less except that the final sublot 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 sublot.

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 (Va) (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 sublot 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 sublot 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 sublot 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 sublot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the sublot 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 sublot 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 sublot shall be equal to one day's production or 400 tons, whichever is less except that the final sublot 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 sublot per WSDOT T 738.

The sublot 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 sublot, with one test per sublot.

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 sublot 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 ½ 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 ⅛ 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 ¼ 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 coordinations 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 planing 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. ___ PG ___, HMA for ___ Cl. ___ PG ___, and Commercial HMA 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.

Roadway cores will be measured per each for the number of cores taken.

Pavement repair excavation will be measured by the square yard of surface marked prior to excavation.

Planing bituminous pavement will be measured by the square yard.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

"HMA Cl. ___ PG ___", per ton.

"HMA for Approach Cl. ___ PG ___", per ton.

"HMA for Preleveling Cl. ___ PG ___", per ton.

"HMA for Pavement Repair Cl. ___ PG ___", per ton.

"Commercial HMA", per ton.

The unit Contract price per ton for "HMA Cl. ___ PG ___", "HMA for Approach Cl. ___ PG ___", "HMA for Preleveling Cl. ___ PG ___", "HMA for Pavement Repair Cl. ___ PG ___", and "Commercial HMA" 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.

"Pavement Repair Excavation Incl. Haul", per square yard.

The unit Contract price per square yard for "Pavement Repair Excavation Incl. Haul" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4) with the exception, however, that all costs involved in the placement of HMA shall be included in the unit Contract price per ton for "HMA for Pavement Repair Cl. ___ PG ___", per ton.

"Asphalt for Prime Coat", per ton.

The unit Contract price per ton for "Asphalt for Prime Coat" shall be full payment for all costs incurred to obtain, provide and install the material in accordance with Section 5-04.3(4).

"Prime Coat Agg.", per cubic yard, or per ton.

The unit Contract price per cubic yard or per ton for "Prime Coat Agg." shall be full pay for furnishing, loading, and hauling aggregate to the place of deposit and spreading the aggregate in the quantities required by the Engineer.

"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).

"Job Mix Compliance Price Adjustment", by calculation.

"Job Mix Compliance Price Adjustment" will be calculated and paid for as described in Section 5-04.3(9)C6.

"Compaction Price Adjustment", by calculation.

"Compaction Price Adjustment" will be calculated and paid for as described in Section 5-04.3(10)D3.

"Roadway Core", per each.

The Contractor's costs for all Work associated with the coring (e.g., traffic control) shall be incidental and included in the unit Bid price per each.

"Cyclic Density Price Adjustment", by calculation.

"Cyclic Density Price Adjustment" will be calculated and paid for as described in Section 5-04.3(10)B.

Division 6
Structures

Concrete Structures

Materials

Section 6-02.2 is supplemented with the following:

(September 8, 2020)

Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels

Epoxy bonding agent for surfaces shall be Type II, as specified in Section 9-26.1. Epoxy bonding agent for steel reinforcing bar dowels shall be either Type I or Type IV, as specified in Section 9-26.1. The grade and class of epoxy bonding agent shall be as recommended by the resin manufacturer.

(June 26, 2000)

Bridge and Structures Minor Items

For the purpose of payment, such bridge and structures items as *** tie plates, resin anchors, and external sealing bands *** etc., for which there is no pay item included in the proposal, are considered as bridge and structures minor items. All costs in connection with furnishing and installing these bridge and structures minor items as shown and noted in the Plans and as outlined in these specifications and in the Standard Specifications shall be included in the *** Bid Item – Contractor Designed Buried Structure No. 1. ***

Division 8
Miscellaneous Construction

Erosion Control and Water Pollution Control

Construction Requirements

Erosion and Sediment Control (ESC) Lead

Item number 3 and 4 in the second paragraph of Section 8-01.3(1)B are revised to read:

(October 3, 2022)

3. Submit to the Engineer no later than the end of the next working day following the inspection a TESC Inspection Report that includes:

    a. When, where, and how BMPs were installed, maintained, modified, and removed.

    b. Observations of BMP effectiveness and proper placement.

    c. Recommendations for improving future BMP performance with upgraded or replacement BMPs when inspections reveal TESC BMP deficiencies.

    d. Identify for each discharge point location whether there is compliance with state water quality standards in WAC 173-201A for turbidity and pH.

Temporary Seeding and Mulching

Temporary Seeding

Section 8-01.3(2)B is supplemented with the following:

(August 4, 2014)

Seed of the following mix, rate, and analysis shall be applied at the rates shown below on all areas requiring *** Erosion Control Seed Mix with Pollinators *** seeding within the project:

Seed by Common Name, (Botanical Name), and "Source Identification"	Pounds Pure Live Seed (PLS) Per Acre
***	
Meadow Barley (Hordeum brachyantherum)	13.0
Blue Wildrye (Elymus glaucus)	7.0

Common Camas (Camassia quamash)	6.5
Miniature Lupine (Lupinus bicolor)	5.7
Crimson Clover (Trifolium incarnatum)	4.0
Showy Milkweed (Asclepias speciosa)	4.0
Roemer's Fescue (Festuca roemeri)	3.5
Puget Sound Gumweed (Grindelia integrifolia)	2.3
Farewell To Spring (Clarkia amoena)	1.8
Self-Heal (Prunella vulgaris var. lanceolata)	1.1
Tufted Hairgrass (Deschampsia cespitosa)	0.8
Western Yarrow (Achillea millefolium)	0.3
Total	50.0

***

Source Identified seed shall be generation four or less. Non-Source Identified seed shall meet or exceed Washington State Department of Agriculture Certified Seed Standards and be from within the appropriate genetic zones of the *** Puget Lowland, North Cascades, Cascades, Eastern Cascades Slopes and Foothills *** Ecoregion(s) as defined by the US Environmental Protection Agency (EPA).

The seed certification class shall be Certified (blue tag) in accordance with WAC 16-302 and meet the following requirements:

Prohibited Weed	0% max.
Noxious Weed	0% max.
Other Weed	0.20% max.
Other Crop	0.40% max.

The Contractor shall document all Source Identified seed by providing the Association of Official Seed Certifying Agents (AOSCA) yellow seed label for each species in the mix. Site Identification Logs can be supplied for collections where the AOSCA yellow label is not available.

(September 3, 2019)
Grass seed shall be a commercially prepared mix, made up of low growing species which will grow without irrigation at the project location, and approved by the Engineer. The application rate shall be two pounds per 1000 square feet. Fertilizer shall be a commercially prepared mix of 10-20-20 and shall be applied at the rate of 10 pounds per 1000 square feet.

Roadside Restoration

Erosion Control and Roadside Planting

Section 9-14 is supplemented with the following:

Topsoil

Topsoil Type A
Section 9-14.2(1) is supplemented with the following:

(******)
Topsoil Type A
Topsoil Type A shall consist of a uniform blend composed by volume of 67% Sandy loam and 33% compost. Ninety five percent of this mixture shall pass through a 1-inch sieve.

Sandy Loam
Sandy Loam shall be as defined by the US Department of Agriculture Soil Texture Triangle and documented with a Particle Size Analysis from a laboratory accredited to perform AASHTO 88 “Particle size Analysis of Soils.

Compost
Compost shall meet the material requirements as specified in Section 9-14.4(8).

Mixing Requirements
Topsoil type A shall be thoroughly mixed prior to being placed in the planting area. The mixed topsoil shall meet the following requirements:

A. Gradation:

Screen Size	Percent Passing
½ inch	100
¼ inch	95-100
#10	85-95
#30	60-75
#60	50-60
#100	20-30
#200	5-15

B. Soil pH range: 5.5 – 7.5. Soils selected for use having a pH below 5.5 shall be treated with dolomitic limestone as necessary to attain

this pH range. Soils having a pH greater than 7.5 shall be treated with sulfur as necessary to attain this pH range.

The Contractor shall submit a certified laboratory analysis from an independent accredited soils testing laboratory for each 50 cubic yard batch of topsoil indicating the Material source and compliance with all Topsoil Type A specifications to the Engineer for approval before delivery to the Project Site. The laboratory analysis shall be with a sample size of no less than 2 pounds.

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.

Construction Requirements

Topsoil

Topsoil Type A

Section 8-02.3(4)A is supplemented with the following:

(August 3, 2015)

Topsoil Type A shall be placed to a non-compacted depth of *** 12 *** inches. The topsoil shall be thoroughly blended prior to placement.

The Contractor shall submit a Type 1 Working Drawing consisting of independent test results from an accredited laboratory demonstrating the Topsoil Type A meets the requirements of Section 9-14.1(1). The Type 1 Working Drawing shall also include the Request for Approval of Material in accordance with Section 1-06.1(2).

Mulch

Section 8-02.3(11) is supplemented with the following:

(April 2, 2012)

Bark mulch or wood chip mulch shall be placed to a uniform non-compacted depth of *** 3 inches *** over all planting areas.

Bark or wood chip mulch shall not be placed in areas of standing or flowing water.

Guardrail

Construction Requirements

Section 8-11.3 is supplemented with the following:

(October 3, 2022)

Installing Steel Posts on New Box Culverts

Post Installation

See the Contract plans or culvert Working Drawings for the method of steel post attachment to the box culvert (embedded or bolt through). Steel posts shall be installed in accordance with Standard Plan C-20.41 or Standard Plan C-20.43.

The Contractor shall exercise care in locating and drilling the holes to avoid damage to existing steel reinforcing bars and concrete. To avoid damaging the existing steel reinforcing bars, the location of the holes may be shifted slightly with the acceptance of the Engineer. All damage caused by the Contractor's operations shall be repaired by the Contractor in accordance with Section 1-07.13.

Additional Box Culvert Guardrail Steel Post Assemblies

For each culvert with embedded or bolt through guardrail steel posts, furnish and deliver one complete set of Box Culvert Guardrail Steel Post Assemblies. Box Culvert Guardrail Steel Post Assemblies shall be delivered to the Contracting Agency locations as listed below:

Box Culvert Designation & Location (SR & MP)	Contracting Agency Delivery Location/Contact Phone Number
***Contractor Designed Buried Structure No. 1 ***	*** 201 Avon Ave., Burlington, WA 360-416-1480 ***

A complete set of assemblies will include the following:

When using Embedded Anchor Box Culvert Guardrail Steel Posts (Standard Plan C-20.41):

1. Steel Post and Base Plate Assembly – One replacement post and base plate for each post installed on culvert

2. Embedded Anchor Bolt Assemblies including Four threaded rods, bolts, and resin adhesive for each post installed on culvert

When using Bolt-Thru Anchor Box Culvert Guardrail Steel Posts (Standard Plan C-20.43):

1. Steel Post and Base Plate Assembly – One replacement post and base plate for each post installed on culvert

2. Bottom Plate – One plate for each post installed on culvert

3. Hex Head Bolts, Nuts, & Washers – 4 bolts, 4 nuts, and 8 washers for each post installed on culvert

Provide 48-hours' notice to both the Engineer and the contact(s) listed above prior to delivery. Damaged items will not be accepted and shall be replaced at no cost to the Contracting Agency.

Measurement

Section 8-11.4 is supplemented with the following:

(October 3, 2022)
Box culvert guardrail steel posts type 31 will be measured per each, for each post installed.

Payment

Section 8-11.5 is supplemented with the following:

(October 3, 2022)
"Box Culvert Guardrail Steel Post Type 31", per each.

The unit contract price per each for "Box Culvert Guardrail Steel Post Type 31" shall be full pay for completing the installation of the posts, including obtaining field measurements, excavation, furnishing, placing and compacting the backfill material, and when required, repairing surfacing materials. Beam guardrail will be paid for in accordance with Section 8-11.5.

"Additional Box Culvert Guardrail Steel Post Assemblies", lump sum.

The lump sum contract price for "Additional Box Culvert Guardrail Steel Post Assemblies" shall be full pay to complete the work as specified.

Water Crossings

Description

Section 8-30.1 is supplemented with the following:

(******)
This Work includes furnishing, mixing, and placing streambed organic material in constructed stream channels, stream banks, and floodplains as shown on the Plans or established by the Engineer.

Definitions

Section 8-30.1(1) is supplemented with the following:

(******)
Streambed Organic Material – A mixture of small branches, twigs, roots, and leaves that is incorporated into the final lift or finished grade of stream channels, stream banks, and floodplains.

Materials

Section 8-30.2 is supplemented with the following:

(******)

Streambed Organic Material

Streambed organic material shall be naturally occurring organic material free of trash, metals, concrete, and processed wood (e.g., lumber scraps). Streambed organic material

may be obtained from vegetation at the project site that is within the limits of clearing for the project or may be imported. Streambed organic material shall not be harvested from vegetation at the project site if outside the identified limits of clearing for the project. and any.

Streambed organic material shall consist of an assortment of small branches, twigs, small roots, and leaves from tree and shrub species native to the vicinity of the project. When onsite materials are used the species of the materials shall be approved by the Engineer from visual inspection. When imported materials are used the Contractor shall provide a complete list of all plant species included in the mixture and identify the source of the material which must be approved by the Engineer prior to placement.

The maximum diameter of any piece of material included in streambed organic material shall be 2 inches. The maximum length of any piece of material included in streambed organic material shall be 4 feet.

Streambed organic material shall meet the following mixture requirements:

Length	Diameter (at largest end)	Mixture (percent by volume)
6” or less	¼” – 1”	50% - 75%
6” – 48”	1” – 2”	25% - 50%

The size and mixture ratio of the material shall be determined by the Engineer by visual inspection of the material in a stockpile prior to placement.

Branches used should have leaves and needles left intact to the extent possible given the mechanics of harvesting and handling. No method of testing will be applied to the items included in this paragraph and there will be no enforcement of the items discussed in this paragraph. This paragraph is provided entirely for informational purposes as an explanation of the preferred finished product.

Construction Requirements

Mixing of Streambed Aggregates

Section 8-30.3(2) is supplemented with the following:

(February 13, 2024)
Blending Streambed Aggregates
Streambed aggregates shall be mixed in the following proportions:

***

Streambed Material shall be a mix of the following aggregates with associated ratios:

Streambed Sediment: 67%, by volume
Streambed Cobbles 6 In.: 33%, by volume

Meander Bar Head material shall be a mix of the following aggregates with the associated ratios:

Streambed Boulders Type Two: 100%, by volume

Meander Bar Tail material shall be a mix of the following aggregates with the associated ratios:

Streambed Sediment: 50%, by volume
Streambed Cobbles 8 In.: 50%, by volume

***

Section 8-30.3 is supplemented with the following:

(******)

Streambed Organic Material Placement

Streambed organic material shall be placed only in the top lift of the constructed streambed or stream banks, or in the finished grade of floodplains at locations shown on the Plans or locations as directed by the Engineer. When placed in the streambed material of constructed streambeds or stream banks the streambed organic material may be placed as part of the final lift or placed after the final lift has been approved. When placed in floodplain areas streambed organic material shall be placed after final grading of the ground surface has been approved by the Engineer.

Streambed organic material shall be placed in a random manner at locations identified for placement to create the visual appearance of material that has been naturally transported by the stream and deposited at the location. Larger pieces of streambed organic material may extend into the area of flow conveyance for the constructed stream channel, but shall be oriented in a manner that prevents excessive debris accumulation or flow impedance.

Streambed organic material shall be between 5% and 15% of the total volume of streambed material in the locations where it is placed. Streambed organic material is included to provide biological benefits to the mineral materials that comprise a majority of the constructed stream channel, but the density of streambed organic material shall never be so great that it reduces the ability of the constructed stream channel to maintain surface flow.

Measurement

Section 8-30.4 is supplemented with the following:

(******)

Streambed Organic Material will be measured by the cubic yard.

Payment

Section 8-30.5 is supplemented with the following:

(******)

”Streambed Organic Material”, per cubic yard.

The unit Contract price per cubic yard for “Streambed Organic Material” shall be full payment for all costs to complete the Work as specified, including acquiring, storing, hauling to the site, unloading, mixing, installing, excavation, backfill, compaction and grading needed for final placement.

Temporary Stream Diversion

Construction Requirements

Section 8-31.3 is supplemented with the following:

(******)

Section 8-31.3(8) Unanticipated Dewatering

Unanticipated Dewatering, as ordered by the Engineer, consists of Work not otherwise provided for in the Contract. Such Work may include dewatering the site after an unexpected flooding or rise of groundwater due to storm event or other natural phenomenon.

Unanticipated dewatering does not apply to a failure of the Contractor's Temporary Stream Diversion system.

Engineer approval will be required prior to performing the work.

Payment

Section 8-31.5 is supplemented with the following:

(******)

Payment for unanticipated work performed during construction will be made using the below listed estimated bid items when they are included in the bid proposal:

"Unanticipated Dewatering", by force account as provided in Section 1-09.6

(January 6, 2025)

WOODY MATERIAL

Description

This Work shall consist of furnishing and installing woody material where shown in the Plans or where specified by the Engineer.

Definitions

Diameter at breast height (DBH) - The method of expressing the diameter of the trunk of a tree measured 4.5 feet above ground when standing.

Large Woody Material (LWM) - Trees and parts of trees including any variation of logs, rootwads, or stumps greater than 4 inches in diameter.

Small Woody Material (SWM) - Small trees and parts of trees where the trunk is 2 to 4 inches in diameter.

Slash - Small trees and parts of trees where the trunk is less than 2 inches in diameter.

Materials

Large Woody Material (LWM)

LWM shall be a log with or without rootwad as specified in the Plans. LWM shall be free of soil and rocks, rot and disease, and shall be free of fractures. It shall retain at least 50% of the original bark in its final placement. Cleaning shall not strip LWM of bark and roots.

Log without Rootwad

When a log without rootwad is specified in the Plans, it shall meet the following requirements:

1. The trunk shall be of a native coniferous tree excluding Western red cedar (Thuja plicata).

2. Diameter shall be as specified in the Plans with an acceptable tolerance of ±10%. Diameter shall be measured at the midpoint of the cut log.

3. The length shall be as specified in the Plans with an acceptable tolerance of ±6 inches. The length shall be measured from cut end to cut end.

Log with Rootwad

When a log with rootwad is specified in the Plans, it shall meet the following requirements:

1. The trunk shall be of a trunk of a native coniferous tree excluding Western red cedar (Thuja plicata).

2. Diameter is defined as the DBH as specified in the Plans with an acceptable tolerance of ±10%.

3. The length shall be as specified in the Plans with an acceptable tolerance of ±6 inches. The length shall be measured from the cut end of the log to the start of the rootwad mass.

4. The rootwad diameter, averaged from two orthogonal measurements, shall be a minimum of 2.5 times DBH and maximum as determined by the Engineer with roots intact. Rootwads shall not be cut, unless approved by the Engineer.

Boulder Anchoring

When anchoring of the LWM is specified in the Plans, the anchoring shall meet the following requirements:

1. Wire Rope - Wire Rope utilized for connecting LWM to the boulders shall be ½-inch stainless steel, multi-strand, flexible wire rope. Wire rope shall meet the requirements of ASTM A492.

2. Wire Rope Clips and Thimbles - Shall meet the requirements of Section 9-16.4(4).

3. Epoxy Adhesive - Epoxy adhesive used for boulder anchors shall be Type IV and meet the requirements of Section 9-26.

4. Rebar Pin - Rebar used to anchor the LWM shall be No. 4 (½-inch) steel reinforcing bar conforming to Section 9-07.2.

5. Eye Bolt - Eye Bolt used for connecting the LWM to the streambed boulders shall be ¾-inch diameter stainless steel (ASTM A193) threaded eye bolt

with a minimum of a 4,000-pound working load limit and pull out strength. Eye Bolts shall have a minimum 1½ inch opening for the “eye” and have sufficient length and threads to be embedded a minimum of 6 inches into the Boulder Anchor. Eye Bolt shall meet the requirements of ASTM A489.

6. No galvanized steel shall be used.

7. Boulders - Boulders used for anchoring shall meet the requirements for Streambed Boulders in accordance with Section 9-03.11(5).

Small Woody Material (SWM)

SWM shall consist of a random assortment of branches, trees, brush and treetops of the following native species: Western red cedar (Thuja plicata), douglas fir (Pseudotsuga mensezeii), western hemlock (Tsuga heterophylla) coniferous trees, or various hardwood trees. No more than 50% of hardwood species shall be used. Branches, twigs, leaves and needles shall be left intact to the extent possible given the mechanics of handling SWM. The maximum diameter of any piece of SWM shall be 4 inches. The maximum length of any piece of SWM shall be 6 feet. SWM shall not contain any material which causes turbidity.

Slash

Slash shall consist of a random assortment of branches, trees, brush and treetops of the following native species: Western red cedar (Thuja plicata), douglas fir (Pseudotsuga mensezeii), western hemlock (Tsuga heterophylla), sitka spruce (Picea sitchensis) coniferous trees, or various hardwood trees. No more than 50% of hardwood species shall be used. Branches, twigs, leaves and needles shall be left intact to the extent possible given the mechanics of handling Slash. The maximum diameter of any piece of Slash shall be 2 inches. The maximum length of any piece of Slash shall be 6 feet. Slash shall not contain any material which causes turbidity.

Woody material may be available from trees removed by excavation or clearing and grubbing limits as shown in the Plans. Components of the removed trees which meet the criteria for the specific woody material may be used to supplement the woody material and will be accepted based on a visual inspection by the Engineer.

Acceptance of Woody Material will be based upon inspection by the Engineer prior to placement.

Construction Requirements

General

The Contractor shall install woody material at the location shown in the Plans and as directed by the Engineer.

The Contractor shall exercise care when installing and transporting the Woody Material to avoid damage. Rootwads shall remain intact during delivery and installation.

The streambed and bank shall be temporarily excavated to allow placement of the woody material as specified in the Plans. Backfill shall be native material or streambed material, unless otherwise shown in the Plans. Backfill shall be placed in lifts no thicker than 12 inches and shall be compacted to be uniformly dense and unyielding as approved by the Engineer.

The Contractor shall exercise care when placing the Woody Material to ensure that the method of installation minimizes disturbance of waterways and prevents sediment or pollutant discharge into water.

After the woody material has been placed, the area shall be graded as shown in the Plans.

Boulder Anchoring

When anchoring LWM is called out in the Plans, each anchor shall consist of two boulders as detailed in the Plans. One ⅞ inch hole shall be drilled a minimum of 6 inches deep into each boulder. After the hole is drilled in the boulder anchors, the hole shall be cleaned using compressed air to blow out the dust and rock particles. After being cleaned, the hole in the boulder anchors shall be filled with epoxy adhesive in accordance with the manufacturer's instructions, and eye bolt inserted as shown in the Plans. Note that the minimum amount of epoxy adhesive to place in each hole is equal to the amount necessary to fill the hole to the top with the eye bolt inserted.

After epoxy adhesive has cured, in accordance with the manufacturer's instructions, the Contractor shall anchor the LWM to the boulders as shown in the Plans. All LWM to be anchored shall be anchored such that there is no slack in the wire rope. The wire rope shall be looped around a thimble, through the eye bolt, then doubled back on itself. The end of the wire rope shall be secured using three wire rope clips, with the saddle of the clip placed on the "live" end of the wire rope, as described in Section 6-02.3(17)F2. Three stainless steel, malleable wire rope clips per connection shall be used to complete the anchor assembly as specified in the Plans. Stainless steel thimbles shall be used wherever the wire rope terminates in a loop.

Measurement

Large Woody Material – Log without Rootwad DIA___, Large Woody Material – Log with Rootwad DIA ___, Boulder Anchor will be measured per each.

SWM and Slash will be measured by the cubic yard, in the hauling conveyance.

Payment

Payment will be made in accordance with Section 1-04.1, for each of the following bid items.

"Large Woody Material - Log without Rootwad DIA_____", per each.
"Large Woody Material - Log with Rootwad DIA_____", per each.
The unit contract price for each "Large Woody Material - Log without Rootwad DIA_____" and "Large Woody Material -Log with Rootwad DIA_____" shall be full payment for all Work as specified, including acquiring, storing, hauling to the site, unloading, assembling, pinning, bundling, installing, excavation, backfill, compaction and grading.

"Boulder Anchor", per each.
"Boulder Anchor" shall be full payment for all Work as specified, including acquiring, storing, hauling to the site, unloading, assembling, bundling, drilling, epoxy, installing, anchoring, excavation, backfill, compaction and grading.

"Slash" and "Small Woody Material", per cubic yard.

The unit Contract price per cubic yard for “Slash” and “Small Woody Material” shall be full payment for all Work as specified, including acquiring, storing, hauling to the site, unloading, assembling, bundling, installing, excavation, backfill, compaction and grading.

Division 9
Materials

Appendices
(January 2, 2012)

The following appendices are attached and made a part of this contract:

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APPENDIX A:
Standard Plans

APPENDIX B:
Washington State Prevailing Wage Rates

APPENDIX C:
Construction Contract and Contract Bond – Informational Only

APPENDIX D:
Proposal Forms – Informational Only

APPENDIX E:
Permits, Army Corps of Engineers Nationwide Permit 27, Department of Fish and Wildlife Hydraulic Project Approval

APPENDIX F:
Geotechnical Engineering Report

APPENDIX G:
Vicinity Map and Plans

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(May 5, 2025)
Standard Plans

The Washington State Department of Transportation *Standard Plans* M21-01, published September 2024, is made a part of this Contract with the following revisions:

A-10.30
RISER RING detail (Including SECTION view and RISER RING DIMENSIONS table): The RISER RING detail is deleted from the plan.

INSTALLATION detail, SECTION A: The “1/4”” callout is revised to read “+/- 1/4" (SEE CONTRACT ~ Note: The + 1/4" installation is shown in the Section A view)”

A-40.20
Sheet 1, NOTES 1, 2, 3, and 4 are replaced with the following:

1. Use the ½ inch joint details for bridges with expansion length less than 100 feet and for bridges with L type abutments. Use the 1 inch joint details for other applications.

2. Use detail 5, 6, 7 on steel trusses and timber bridges with concrete bridge deck panels.

3. For details 1, 2, 3, and 4, the item “HMA Joint Seal at Bridge End” shall be used for payment. For details 5 and 6, the item “HMA Joint Seal at Bridge Deck Panel Joint” shall be used for payment. For detail 7, the item “Clean and Seal Bridge Deck Panel Joint” shall be used for payment.

Sheet 2, Detail 8 reference to “6-09.3(6)” is revised to read “6-21.3(7)”.

A-50.40

Sheet 1, Plan View: The callout “BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21 OR TYPE 24 (SEE STANDARD PLAN C-25.20 OR C-25.30)” is revised to read “BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21, 24, OR 25 (SEE STANDARD PLAN C-25.20, C-25.30, OR C-25.32)”

A-60.40

Note 2 reference to “6-09.3(6)” is revised to read “6-21.3(7)”.

B-90.40

Valve Detail – DELETED

C-20.41

Note 4, First Sentence, “Box Culvert guardrail steel posts are not needed for fill depths greater than 40 inches.” is revised to read; “Box culvert guardrail steel posts are not needed for fill depths greater than 46 inches. Provide 6-inches or greater of separation between the bottom of the guardrail post and top of the culvert”

BOX CULVERT POST ASSEMBLY, ELEVATION VIEW, post assembly length dimension “41” MIN. 72” MAX.” is revised to read; “41” MIN. 78” MAX.”

SECTION A, base material depth dimension - “9” MIN. 40” MAX. (SEE NOTE 4)” is revised to read: “9” MIN. 46” MAX. (SEE NOTE 4)”

C20-43

Note 4, First Sentence: “Box culvert guardrail steel posts are not needed for fill depths greater than 40 inches.” is revised to read: “Box culvert guardrail steel posts are not needed for fill depths greater than 46 inches. Provide 6-inches or greater separation between the bottom of guardrail post and top of culvert.”

BOX CULVERT POST & BASE PLATE ASSEMBLY, ELEVATION VIEW, post assembly length dimension – “41” MIN. 72” MAX.” is revised to read: “41” MIN. 78” MAX.”

SECTION A, base material depth dimension - “9” MIN. 40” MAX. (SEE NOTE 4)” is revised to read: “9” MIN. 46” MAX. (SEE NOTE 4)”

C-23.70

Sheet 2, ANCHOR BRACKET ASSEMBLY DETAIL, dimension, “R. 5/16” is revised to read; R. 15/16”

ANCHOR PLATE DETAIL, weld callout (fillet), 1/4" is revised to read; 3/16”

C-60.20

Sheet 1, Plan view, callout – “1/2” (IN) DIAMETER X 6 1/2" (IN) LONG ANCHOR BOLT ~ PER STD. SPEC. SECT. 9-06.5(4) (TYPICAL) (SEE NOTE 7)” is revised to read: “5/8”

DIAMETER x 6 1/2" (IN) LONG ANCHOR BOLT ~ PER STD. SPEC. SECT. 9-06.5(4) (TYPICAL) (SEE NOTE 7)"

C-70.15

BARRIER CONNECTION DETAIL, callout – "CENTER GRID IN CONNECTION BLOCKOUT AND FILL VOID WITH TYPE 3 GROUT (STD. SPECIFICATION SECTION 9-20.3(3) PLACED IN ACCORDANCE WITH STD. SPECIFICATION SECTION 6-20.3(20)" is revised to read "CENTER GRID IN CONNECTION BLOCKOUT AND FILL VOID WITH GROUT TYPE 3 (STD. SPECIFICATION SECTION 9-20.3(3) PLACED IN ACCORDANCE WITH STD. SPECIFICATION SECTION 6-02.3(20)"

C81.10

Sheet 1, TYPICAL SECTION – TRAFFIC BARRIER the R4 #6 bar on the traffic face may be placed 4" down from the top of the barrier to allow additional room to install BP railing or other attachments. The R4 bar shall be kept tight to the front R2 bar.
Sheet 4, the existing table "IMPACT SHEAR AND IMPACT MOMENT TABLE" is renamed to "IMPACT SHEAR AND MOMENT TABLE DECK OVERHANG AND CONNECTIONS" keynote 25 is still applicable.
Sheet 4, NOTES, the following Note is added: "3. Deck overhangs for this use constitute plain reinforced concrete typically around 8" in thickness, non-prestressed moment slabs or approach slabs, or plain reinforced and longitudinally prestressed box girders which employ a topping slab. Other Supporting Structure Systems inclusive of post-tensioned decks, walls, and or Structure segments tied together without a topping slab, with the ties in the barrier resistance load path, shall use the impact shear and moments for other supporting structures."
Sheet 4, the following table is added with a keynote 25.

IMPACT SHEAR AND MOMENT TABLE OTHER SUPPORTING STRUCTURES										
	Interior Segment					**End Segment**				
Roadway and Fill Height at Curb Line (in)	0	6	12	18	24	0	6	12	18	24
End Segment Length (ft)	-	-	-	-	-	10.00	10.50	11.25	11.75	12.50
Impact Moment (kip*ft/ft)	19.86	24.12	28.55	33.16	37.97	20.80	25.17	29.65	34.27	39.04
Impact Shear (kip/ft)	7.89	8.04	8.23	8.44	8.68	8.27	8.39	8.54	8.72	8.92

C-81.15

Sheet 1, General Notes, Add Note 7, to read;"7. The concrete class for the moment slab shall be class 4000 typically and class 4000A when the top of the slab is used as the roadway, or sidewalk, surface. The concrete class for the barrier is defined in Standard Specification Section 6-10.3."

C-85.11

On Section B, the callout “3” EXPANDED POLYSTYRENE AROUND COLUMN (TYP.)” is revised to read “3” EXPANDED POLYSTYRENE OR POLYETHYLENE FOAM AROUND COLUMN (TYP.)”

D-3.09

Sheet 1, GEOSYNTHETIC WALL WITH 2 FT TRAFFIC SURCHARGE detail, callout – “BARRIER ON WALL ~ SEE Standard Plan D-3.15 or D-3.16” is revised to read: “BARRIER ON WALL ~ SEE CONTRACT PLANS”

D-3.10

Sheet 1, Typical Section, callout – “FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.15” is revised to read; ”FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER, SEE CONTRACT PLANS”

Sheet 1, Typical Section, callout – “FOR WALLS WITH F-SHAPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.16” is revised to read; ”FOR WALLS WITH F-SHAPE TRAFFIC BARRIER, SEE CONTRACT PLANS”

D-3.11

Sheet 1, Typical Section, callout – “”B” BRIDGE APPROACH SLAB (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD PLANS D-3.15 OR D-3.16” is revised to read; ”B” BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)

Sheet 1, Typical Section, callout – “TYPICAL BARRIER ON BRIDGE APPROACH SLAB (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD PLANS D-3.15 OR D-3.16” is revised to read; “TYPICAL BARRIER ON BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)

D-10.10

Note 7, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 1 and 1SW”.

D-10.15

Note 7, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 2 and 2SW”.

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

Note 5, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 7”.

D-10.45

Note 5, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 8”.

F-10.18

Note 1; “Construct curb joints at concrete pavement transverse joint locations. If all adjacent pavement is HMA, see Standard Plam F-30.10 for Curb Expansion and Contraction Joint Spacing.” is revised to read – “See Standard Plan F-30.10 and Standard Specification Section 8-04.3 for Curb Expansion and Contraction Joint details and spacing.”

F-30.10

All five instances of the “2.0% MAX.” are replaced with “2.1% MAX.”

F-40.12

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”
Note 7 is replaced with the following:
7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement. When a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius along the back of the walkway.
Section B is amended as follows:
Delete: “15’ – 0” MAX. (TYP.)”
Section C is amended as follows:
Delete: “15’ – 0” MAX. (TYP.)”

F-40.14

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”
Note 7 is replaced with the following:
7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement. When a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius along the back of the walkway.
Section A is amended as follows:
Delete: “15’ – 0” MAX. (TYP.)”
Section C is amended as follows:
Delete: “15’ – 0” MAX. (TYP.)”

F-40.15

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”
Note 7 is replaced with the following:
7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement.
Section A is amended as follows:
Delete: “15’ – 0” MAX. (TYP.)”

F-40.16

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 8 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement.

Section A is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

Section B is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

F-80.10

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 6 is replaced with the following:

The running slope of the Pedestrian Ramp shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk.

Section A is amended as follows:

Delete: “15” Max.”

J-10.10

Sheet 4 of 6, “Foundation Size Reference Table”, PAD WIDTH column, Type 33xD=6’ – 3” is revised to read: 7’ – 3”. Type 342LX / NEMA P44=5’ – 10” is revised to read: 6’ – 10”

Sheet 5 of 6, Plan View, “FOR EXAMPLE PAD SHOWN HERE:, “first bullet” item, “-SPACE BETWEEN TYPE B MOD. CABINET AND 33x CABINET IS 6” (IN)” IS REVISED TO READ: “SPACE BETWEEN TYPE B MOD. CABINET (BACK OF ALL CHANNEL STEEL) AND 33x CABINET IS 6” (IN) (CHANNEL STEEL ADDS ABOUT 5” (IN)”

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-20.01

STANDARD DIMENSIONS AND REFERENCES table, TYPE FB, Standard Height column – “15’-0” ”is revised to read; “14’-0” ”

J-20.10

DELETED

J-20.11

DELETED

J-20.26

Add Note 1, “1. One accessible pedestrian pushbutton station per pedestrian pushbutton post.”

Add General Note 2, to read: “Signs shown are for locations with pedestrian signal displays (Accessible Pedestrian Signals/APS). Accessible information device (AID) pushbuttons signs not shown.”
Revise View Titles (Both Sheets) to read: “ACCESSIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY”

J-20.16
View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE

J-21.10
Sheet 1, Anchor Bolt Template, callout; “9” (IN) BOLT CIRCLE” is revised to read: “9” (IN) DIA.BOLT CIRCLE”
Base Plate Detail, callout; “3/4” (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/6” (IN)” IS REVISED TO READ; “3/4” (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/16” (IN)”
Flat Foundation Detail – Elevation, callout; “ANCHOR BOLTS ~ ¾” (IN) x 30” (IN) FULL THREAD ~ THREE REQ’D. PER ASSEMBLY” is revised to read; “ANCHOR BOLTS ~ ¾” (IN) x 30” (IN) FULL THREAD ~ FOUR REQ’D. PER ASSEMBLY”
Flat Foundation Detail – Elevation, dimension; 4’ – 0” is revised to read; “4’ – 0” ROUND OR 3’ – 0” SQUARE”

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
On both elevation views, the overall standard height dimension “15’-0” ” is revised to read; “14’-0” ”

J-28.30
General Note 13 – “See Standard Plans C-8b and C-85.14 for steel light standards on traffic barrier” is revised to read; “See Standard Plan C-85.15 for steel light standards on traffic barrier.”

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-50.15
Sheet 1, SECTION A, the call out “LOOP LEAD-IN WIRES, TWISTED PAIRS ~ MAX. 3 PAIRS” is revised to read “LOOP LEAD-IN WIRES, TWISTED PAIRS ~ MAX. 6 PAIRS”

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.”

J-75.55

Notes, Note A1, Revise reference, was – G-90.29, should be – G-90.20.

L-5.10

Add new general Note 9 on sheet 1 – “9. The top of wall in Section A on Sheet 1 shall be located as follows: 1) flush with the finished grade when placed within the deflection distance of the long span guardrail system (Std. Plan C-20.40), 2) Two inches maximum above finished grade when placed behind a box culvert guardrail steel post system (Std. Plan C-20.41 or C-20.43), 3) Six inches minimum for all other applications. The bottom rail shall be located at mid height between the top rail and the top of structure.”

M-20.30

Wide Dotted Lane Line Detail, reference below title, (SEE NOTE 6) is revised to read: (SEE NOTE 5)

M-40.10

Guide Post Type ~ Reflective Sheeting Applications Table, remove reference - “(SEE NOTE 5)”

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-50.10-02 .....7/18/24
A-10.20-00.....10/5/07	A-40.00-01.....7/6/22	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-40.50-03..... 9/12/23	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-75.50-02 ..... 3/15/22
B-5.60-02.....1/26/17	B-30.40-03 .....2/27/18	B-70.60-01 ..... 1/26/17
B-10.20-03.....8/23/23	B-30.70-04 .....2/27/18	B-75.60-00 ..... 6/8/06
B-10.40-02.....8/17/21	B-30.80-01 .....2/27/18	B-80.20-00 ..... 6/8/06
B-10.70-03.....8/23/23	B-30.90-02 ..... 1/26/17	B-80.40-00 ..... 6/1/06
B-15.20-01..... 2/7/12	B-35.20-00 .....6/8/06	B-85.10-01 ..... 6/10/08
B-15.40-01..... 2/7/12	B-35.40-01 ..... 8/23/23	B-85.20-00 ..... 6/1/06
B-15.60-02.....1/26/17	B-40.20-00 .....6/1/06	B-85.30-00 ..... 6/1/06
B-20.20-02.....3/16/12	B-40.40-02 ..... 1/26/17	B-85.40-00 ..... 6/8/06
B-20.40-04.....2/27/18	B-45.20-01 ..... 7/11/17	B-85.50-01 ..... 6/10/08
B-20.60-03.....3/15/12	B-45.40-01 .....7/21/17	B-90.10-00 ..... 6/8/06
B-25.20-02.....2/27/18	B-50.20-00 .....6/1/06	B-90.20-00 ..... 6/8/06
B-25.60-03.....8/23/23	B-55.20-03 .....8/17/21	B-90.30-00 ..... 6/8/06

B-30.05-00 ..... 9/9/20
B-30.10-03 ..... 2/27/18
B-30.15-00 ..... 2/27/18
B-30.20-04 ..... 2/27/18
B-30.30-03 ..... 2/27/18
B-60.20-02 ..... 9/9/20
B-60.40-01 ..... 2/27/18
B-65.20-01 ..... 4/26/12
B-65.40-00 ..... 6/1/06
B-70.20-01 ..... 3/15/22
B-90.40-01 ..... 1/26/17
B-90.50-00 ..... 6/8/06
B-95.20-02 ..... 8/17/21
B-95.40-01 ..... 6/28/18

1

C-1 ..... 9/8/22
C-1b 10/12/23
C-1d 10/31/03
C-6a 9/8/22
C-7 ..... 9/8/22
C-7a 9/8/22
C-20.10-09 ..... 10/12/23
C-20.14-05 ..... 9/8/22
C-20.15-03 ..... 10/12/23
C-20.18-04 ..... 9/8/22
C-20.40-10 ..... 10/12/23
C-20.41-05 ..... 7/18/24
C-20.43-01 ..... 7/18/24
C-20.44-00 ..... 8/13/24
C-20.45-03 ..... 9/8/22
C-20.55-00 ..... 7/30/24
C-22.16-08 ..... 10/17/23
C-22.40-11 ..... 7/21/24
C-22.45-07 ..... 7/21/24
C-23.70-01 ..... 10/16/23
C.24.10-05 ..... 7/21/24
C-24.15-00 ..... 3/15/22
C-25.20-07 ..... 8/20/21
C-25.22-06 ..... 8/20/21
C-25.26-05 ..... 8/20/21
C-25.30-01 ..... 8/20/21
C-25.32-00 ..... 7/29/24
C-25.80-05 ..... 8/12/19
C-60.10-04 ..... 7/21/24
C-60.15-01 ..... 7/21/24
C-60.20-01 ..... 9/8/22
C-60.30-02 ..... 7/21/24
C-60.40-01 ..... 7/21/24
C-60.45-01 ..... 7/21/24
C-60.50-01 ..... 7/21/24
C-60.60-01 ..... 7/21/24
C-60.70-01 ..... 9/8/22
C-60.80-02 ..... 7/21/24
C-70.10-04 ..... 10/16/23
C-70.15-01 ..... 7/21/24
C-75.10-02 ..... 9/16/20
C-75.20-03 ..... 8/20/21
C-75.30-03 ..... 8/20/21
C-80.10-03 ..... 10/16/23
C-80.20-01 ..... 6/11/14
C-80.30-02 ..... 8/20/21
C-80.40-01 ..... 6/11/14
C-85.10-00 ..... 4/8/12
C-85.11-01 ..... 9/16/20
C-85.15-03 ..... 10/17/23
C-85-18-03 ..... 9/8/22
C-81.10-00 ..... 9/12/23
C-81.15-00 ..... 9/12/23

2

D-2.36-03 ..... 6/11/14
D-2.46-02 ..... 8/13/21
D-2.84-00 ..... 11/10/05
D-2.92-01 ..... 4/26/22
D-3.09-00 ..... 5/17/12
D-3.10-01 ..... 5/29/13
D-3.11-03 ..... 6/11/14
D-4 ..... 12/11/98
D-6 ..... 6/19/98
D-10.10-01 ..... 12/2/08
D-10.15-01 ..... 12/2/08
D-10.20-01 ..... 8/7/19
D-10.25-01 ..... 8/7/19
D-10.30-00 ..... 7/8/08
D-10.35-00 ..... 7/8/08
D-10.40-01 ..... 12/2/08
D-10.45-01 ..... 12/2/08
D-20.10-00 ..... 10/9/23

3

E-1 ..... 2/21/07
E-2 ..... 5/29/98
E-4 ..... 8/27/03
E-4a 8/27/03
E-20.10-00 ..... 9/12/23
E-20.20-00 ..... 10/4/23

4

F-10.12-04 ..... 9/24/20
F-10.16-00 ..... 12/20/06
F-10.18-04 ..... 6/28/24
F-10.40-04 ..... 9/24/20
F-10.42-00 ..... 1/23/07
F-10.62-02 ..... 4/22/14
F-10.64-03 ..... 4/22/14
F-30.10-04 ..... 9/25/20
F-40.12-03 ..... 6/29/16
F-40.14-03 ..... 6/29/16
F-40.15-04 ..... 9/25/20
F-40.16-03 ..... 6/29/16
F-45.10-05 ..... 6/4/24
F-80.10-04 ..... 7/15/16

5

G-10.10-00 ..... 9/20/07
G-20.10-03 ..... 8/20/21
G-22.10-04 ..... 6/28/18
G-24.10-00 ..... 11/8/07
G-24.20-01 ..... 2/7/12
G-24.30-02 ..... 6/28/18
G-24.40-07 ..... 6/28/18
G-24.50-05 ..... 8/7/19
G-24.60-05 ..... 6/28/18
G-25.10-05 ..... 9/16/20
G-26.10-00 ..... 7/31/19
G-30.10-04 ..... 6/23/15
G-50.10-03 ..... 6/28/18
G-90.10-03 ..... 7/11/17
G-90.20-05 ..... 7/11/17
G-90.30-04 ..... 7/11/17
G-95.10-02 ..... 6/28/18
G-95.20-03 ..... 6/28/18
G-95.30-03 ..... 6/28/18

6

H-10.10-01 ..... 6/2/24
H-10.11-00 ..... 6/2/24
H-30.10-00 ..... 10/12/07
H-32.10-00 ..... 9/20/07
H-70.10-02 ..... 8/17/21
H-70.20-02 ..... 8/17/21

H-10.15-01..... 6/2/24
H-10.16-00..... 6/2/24
H-60.10-01 ..... 7/3/08
H-60.20-01 ..... 7/3/08

1

I-10.10-01 ..... 8/11/09
I-30.10-02 ..... 3/22/13
I-30.15-02 ..... 3/22/13
I-30.16-01 ..... 7/11/19
I-30.17-01 ..... 6/12/19
I-30.20-00..... 9/20/07
I-30.30-02..... 6/12/19
I-30.40-02..... 6/12/19
I-30.60-02..... 6/12/19
I-40.10-00..... 9/20/07
I-40.20-00..... 9/20/07
I-50.20-02..... 7/6/22
I-60.10-01..... 6/10/13
I-60.20-01..... 6/10/13
I-80.10-02..... 7/15/16

2

J-05.50-00 ..... 8/30/22
J-10 ..... 7/18/97
J-10.10-04 ..... 9/16/20
J-10.12-00 ..... 9/16/20
J-10.14-00 ..... 9/16/20
J-10.15-01 ..... 6/11/14
J-10.16-02 ..... 8/18/21
J-10.17-02 ..... 8/18/21
J-10.18-02 ..... 8/18/21
J-10.20-04 ..... 8/18/21
J-10.21-02 ..... 8/18/21
J-10.22-03 ..... 10/4/23
J-10.25-01 ..... 6/21/24
J-10.26-00 ..... 8/30/22
J-12.15-00 ..... 6/28/18
J-12.16-00 ..... 6/28/18
J-15.10-01 ..... 6/11/14
J-15.15-02 ..... 7/10/15
J-20.01-01 ..... 6/21/24
J-20.05-00 ..... 6/21/24
J-20.10-05 ..... 10/4/23
J-20.11-03..... 7/31/19
J-20.15-04 ..... 6/21/24
J-20.16-02 ..... 6/30/14
J-20.20-02 ..... 5/20/13
J-20.26-01 ..... 7/12/12
J-21.10-05 ..... 6/21/24
J-21.15-01 ..... 6/10/13
J-21.16-02 ..... 6/21/24
J-21.17-01 ..... 6/10/13
J-21.20-01 ..... 6/10/13
J-22.15-03 ..... 6/21/24
J-22.16-03 ..... 7/10/15
J-22.17-00 ..... 6/21/24
J-26.10-03..... 7/21/16
J-26.15-01..... 5/17/12
J-26.20-01..... 6/28/18
J-27.10-01..... 7/21/16
J-27.15-00..... 3/15/12
J-28.01-00..... 8/30/22
J-28.10-02..... 8/7/19
J-28.22-00..... 8/07/07
J-28.24-02..... 9/16/20
J-28.26-01..... 12/02/08
J-28.30-04..... 6/18/24
J-28.40-02..... 6/11/14
J-28.42-01..... 6/11/14
J-28.43-01..... 6/28/18
J-28.45-03..... 7/21/16
J-28.50-03..... 7/21/16
J-28.60-03..... 8/27/21
J-28.70-04..... 8/30/22
J-29.10-02..... 8/26/22
J-29.15-01..... 7/21/16
J-29.16-02..... 7/21/16
J-30.10-01..... 8/26/22
J-40.01-00..... 8/30/22
J-40.05-00..... 7/21/16
J-40.10-04..... 4/28/16
J-40.20-03..... 4/28/16
J-40.30-04..... 4/28/16
J-40.35-01..... 5/29/13
J-40.36-02..... 7/21/17
J-40.37-02..... 7/21/17
J-40.38-01..... 5/20/13
J-40.39-00..... 5/20/13
J-40.40-02..... 7/31/19
J-45.36-00..... 7/21/17
J-50.05-00..... 7/21/17
J-50.10-01..... .7/31/19
J-50.11-02..... 7/31/19
J-50.12-02..... 8/7/19
J-50.13-01..... 8/30/22
J-50.15-01..... 7/21/17
J-50.16-01..... 3/22/13
J-50.18-00..... 8/7/19
J-50.19-00..... 8/7/19
J-50.20-00..... 6/3/11
J-50.25-00..... 6/3/11
J-50.30-00..... 6/3/11
J-60.05-01..... 7/21/16
J-60.11-00..... 5/20/13
J-60.12-00..... 5/20/13
J-60.13-00..... 6/16/10
J-60.14-01..... 7/31/19
J-75.10-02..... 7/10/15
J-75.20-01..... 7/10/15
J-75.30-02..... 7/10/15
J-75.50-00..... 8/30/22
J-75.55-00..... 8/30/22
J-80.05-00..... 8/30/22
J-80.10-01..... 8/18/21
J-80.12-00..... 8/18/21
J-80.15-00..... 6/28/18
J-81.10-02..... 8/18/21
J-81.12-00..... 9/3/21
J-84.05-00..... 8/30/22
J-86.10-00..... 6/28/18
J-90.10-03..... 6/28/18
J-90.20-03..... 6/28/18
J-90.21-02..... 6/28/18
J-90.50-00..... 6/28/18

3

K-70.20-01..... 6/1/16
K-80.10-02..... 9/25/20
K-80.32-00 ..... 8/17/21
K-80.34-00 ..... 8/17/21
K-80.35-01 ..... 9/16/20
K-80.37-01 ..... 9/16/20

4

L-5.10-02 ..... 6/5/24
L-5.15-00 ..... 9/19/22
L-10.10-02 ..... 6/21/12
L-20.10-03..... 7/14/15
L-30.10-02..... 6/11/14
L-40.15-01..... 6/16/11
L-40.20-02..... 6/21/12
L-70.10-01..... 5/21/08
L-70.20-01..... 5/21/08

5

M-1.20-04 ..... 9/25/20
M-9.60-00..... 2/10/09
M-24.66-00..... 7/11/17

M-1.40-03 .....9/25/20
M-1.60-03 .....9/25/20
M-1.80-03 .....6/3/11
M-2.20-03 .....7/10/15
M-2.21-00 .....7/10/15
M-3.10-04 .....9/25/20
M-3.20-04 ..... 8/2/22
M-3.30-04 .....9/25/20
M-3.40-04 .....9/25/20
M-3.50-03 .....9/25/20
M-5.10-03 .....9/25/20
M-7.50-01 .....1/30/07
M-9.50-02 .....6/24/14
M-11.10-04 ..... 8/2/22
M-12.10-04..... 6/28/24
M-15.10-02..... 7/17/23
M-17.10-02..... 7/3/08
M-20.10-04..... 8/2/22
M-20.20-02..... 4/20/15
M-20.30-05..... 6/28/24
M-20.40-03..... 6/24/14
M-20.50-02..... 6/3/11
M-24.20-02..... 4/20/15
M-24.40-02..... 4/20/15
M-24.60-04..... 6/24/14
M-24.65-00..... 7/11/17
M-40.10-04..... 10/17/23
M-40.20-00..... 10/12/07
M-40.30-01..... 7/11/17
M-40.40-00..... 9/20/07
M-40.50-00..... 9/20/07
M-40.60-00..... 9/20/07
M-60.10-01..... 6/3/11
M-60.20-03..... 8/17/21
M-65.10-03..... 8/17/21
M-80.10-01..... 6/3/11
M-80.20-00..... 6/10/08
M-80.30-00..... 6/10/08

APPENDIX A

Standard Plans

Link to WSDOT Standard Plans

https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/standard-plans

APPENDIX B

Wage Rates

Washington State Prevailing Wage Rates

Skagit County Public Works
Prevailing Wage Rates for Public Works Projects

Prevailing Wage Rates shall apply in accordance with RCW 39.12.030, WAC 296-127-011(5)

Project Name:	Stevens Creek Fish Passage Improvement Project
Project Number:	ES07000-15
Bid Opening Date & Time:	February 23, 2026 @ 1:00 P.M.
Effective Date for Washington State Prevailing Wage Rates: ***Note: The contractor shall be responsible for obtaining the correct rates if the rates are modified prior to bid opening, or the bid opening is rescheduled.***	February 23, 2026
County in which public works project is located: ***Note: For off-site work, use rates for the county in which off-site work will be performed.***	Skagit County

Washington State Prevailing wage rates can be found at:

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

Apprentice: https://secure.lni.wa.gov/wagelookup/rates/apprentice-rates

Benefit Key Code and Supplemental to wages pdf can be found at:

https://wsdot.wa.gov/business-wsdot/contracts/about-public-works-contracts/payments-reporting/wage-rates

APPENDIX C

Construction Contract and Contract Bond-Informational Only

CONSTRUCTION CONTRACT AGREEMENT

THIS AGREEMENT, effective upon the date of mutual execution, is made and entered into between Skagit County, Washington, and _____, hereinafter called the Contractor.

WITNESSETH:
That in consideration of the terms and conditions contained herein and attached and made a part of this agreement, the parties hereto covenant and agree as follows:

I. The Contractor shall do all work and furnish all tools, materials, equipment, and transportation required for the construction of **Stevens Creek Fish Passage Improvement Project #ES07000-15** in accordance with and as described in the attached plans and specifications and the Washington State Department of Transportation *Standard Specifications for Road, Bridge, and Municipal Construction M 41-10 2025 edition*, which are by this reference incorporated herein and made a part hereof, and shall perform any changes to the work in accord with the Contract Documents.

II. The Contractor shall provide and bear the expense of all equipment, work, and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work provided for in this contract and every part thereof and shall guarantee said materials and work for a period of one year after substantial completion of this contract, except as may be modified by the plans, specifications and/or contract documents.

III. Skagit County, Washington, hereby promises and agrees with the Contractor to retain and does retain the Contractor to provide the materials and to do and cause to be done the above-described work and to complete and finish the same according to the attached plans and specifications and the terms and conditions herein contained, and hereby contracts to pay for the same according to the attached specifications and the schedule of prices bid and hereto attached, at the time and in the manner and upon the conditions provided for in this contract.

IV. The Contractor for himself/herself, and for his/her heirs, executors, administrators, successors, and assigns, does hereby agree to full performance of all covenants required of the Contractor in the contract.

V. It is further provided that no liability shall attach to Skagit County by reason of entering into this contract, except as provided herein.

IN WITNESS WHEREOF the Contractor has executed this instrument on the day and year first below written, and the Authorized Official has caused this instrument to be executed by and in the name of Skagit County the day and year first above written.

CONTRACTOR

Signature _____ Mailing Address:

Printed _____

Title _____

Date _____ Telephone No. (___) ____-____

DATED this _____ day of _____, 2026.

BOARD OF COUNTY COMMISSIONERS
SKAGIT COUNTY, WASHINGTON

_____
Ron Wesen, Chair

_____
Peter Browning, Commissioner

_____
Joe Burns, Commissioner

Attest:

_____
Clerk of the Board

For contracts under $5,000:
Authorization per Resolution R20030146

_____
County Administrator

Recommended:

_____
Department Head

Approved as to form:

_____
Civil Deputy Prosecuting Attorney

Approved as to indemnification:

_____
Risk Manager

Approved as to budget:

_____
Budget & Finance Director

CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS, that Skagit County, a Municipal Corporation of Washington, has awarded _____ of _____, as Principal, and _____as Surety, are jointly and severally held and bound unto the County of Skagit in the penal sum of _____ ($_____), dollars, for the payment of which we jointly and severely bind ourselves, our heirs, executors, administrators, and assigns, and successors and assigns, firmly by these presents.

THE CONDITION of this bond is such that whereas, on the _____ day of _____ A.D., 2026, the said Principal, herein, executed a certain contract with the County of Skagit by the items, conditions and provisions of which contract the said _____, Principal, herein agree to furnish all material and do certain work, to wit: That _____ will undertake and complete the construction of

Stevens Creek Fish Passage Improvement Project
#ES07000-15

according to the maps, plans and specifications made a part of said contract, which contract as so executed, is hereunto attached, is now referred to and by reference is incorporated herein and made a part hereof as fully for all purposes as if here set forth at length. The bond shall cover all approved change orders as if they were in the original contract.

NOW, THEREFORE, if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of said contract in all respects and shall well and truly and fully do and perform all matters and things by _____ (principal) undertaken to be performed under said contract, upon the terms proposed therein, and within the time prescribed therein, and until the same is accepted, and shall pay all laborers, mechanics, subcontractors and material men, and all persons who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and shall in all respects faithfully perform said contract according to law, then this obligation to be void, otherwise to remain in full force and effect.

WITNESS our hands this _____ day of _____, 2026.

_____

_____

_____
(Principal)

_____

_____

_____
Attorney-in-Fact, Surety

_____
Name and Address
Local Office of Agent

APPROVED AS TO FORM
RICH WEYRICH
Skagit County Prosecuting Attorney

APPROVED AS TO FORM
BONNIE BEDDALL
Skagit County Risk Manager

BY: _____
Approving Authority

DATE: _____, 2026

_____
SURETY BOND NUMBER

_____
CONTRACT NUMBER

_____

_____

APPENDIX D

Proposal Forms-Informational Only

Proposal for Bidding Purposes

For Construction of:

Stevens Creek Fish Passage Improvement Project #ES07000-15

SKAGIT COUNTY PUBLIC WORKS

SKAGIT COUNTY
Public Works Department
1800 Continental Place
Mount Vernon, WA 98273

PROPOSAL

Stevens Creek Fish Passage Improvement Project #ES07000-15

ENTIRE PROPOSAL SHALL BE RETURNED AS YOUR BID PACKAGE
FAILURE TO RETURN ENTIRE PROPOSAL MAY RESULT IN REJECTION OF BID PER PROJECT SPECIAL PROVISIONS

All bid envelopes must be plainly marked on the outside, **"Sealed Bid, Stevens Creek Fish Passage Improvement Project #ES07000-15"**

Sealed Bids will be received at the following location before the specified time:

Bids may be hand delivered to: The Reception Desk of Skagit County Commissioners Office, located at 1800 Continental Place, Mount Vernon, WA.

Bids may be mailed to: Skagit County Commissioners
1800 Continental Place, Suite 100
Mount Vernon, Washington, 98273

The bid opening date for this project will be **Monday, February 23, 2026.** The bids will be publicly opened and read after **1:00 p.m.** on this date.

Bid Advertisement: Skagit Valley Herald – January 29, February 5, and February 12, 2026
Daily Journal of Commerce - January 29, February 5, and February 12, 2026

Posted: Washington State Office of Minority & Women's Business Enterprises (OMWBE) – Bids & Contracting Opportunities webpage – January 29, 2026
https://omwbe.wa.gov/small-business-assistance/bids-contracting-opportunities

Skagit County Website – January 29, 2026
www.skagitcounty.net/rfp

FAILURE TO SIGN OR COMPLETE ALL INFORMATION ON THE FORMS PROVIDED MAY RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE

PROPOSAL

BOARD OF SKAGIT COUNTY COMMISSIONERS
MOUNT VERNON, WASHINGTON 98273

Attention:

This certifies that the undersigned has examined the locations of:

Stevens Creek Fish Passage Improvement Project #ES07000-15

and that the plans, specifications and contract governing the work embraced in this improvement, and the method by which payment will be made for said work is understood. The undersigned hereby proposes to undertake and complete the work embraced in this improvement, or as much thereof as can be completed with the money available in accordance with the said plans, specifications, and contract, and the following schedule of rates and prices:

Note: for work performed on this project the contractor should refer to Section 1-07.2(1) of the contract provisions and Department of Revenue Rule #171.

Note: Unit prices for all items, all extensions, and total amount of bid shall be shown. All entries must be typed or entered in ink.

Stevens Creek Fish Passage Improvement Project #ES07000-15

Item No.	Description	Spec	QTY	Unit of Measure	Unit Price	Extended Price
1	MOBILIZATION	1-09	1.00	L.S.	$_____ .___	$_____ .___
2	CLEARING AND GRUBBING	2-01	0.32	AC	$_____ .___	$_____ .___
3	ARCHAEOLOGICAL AND HISTORICAL SALVAGE	1-07	1.00	EST.	$ 1 .00	$ 25,000 .00
4	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	2-02	1.00	L.S.	$_____ .___	$_____ .___
5	ROADWAY EXCAVATION INCL. HAUL	2-03	190.00	C.Y.	$_____ .___	$_____ .___
6	GRAVEL BORROW INCL. HAUL	9-03	2500.00	TON	$_____ .___	$_____ .___

7	STREAMBED SEDIMENT	8-30	230.00	TON	$_____ .___	$_____ .___
8	STREAMBED COBBLES 6 IN.	8-30	90.00	TON	$_____ .___	$_____ .___
9	STREAMBED COBBLES 8 IN.	8-30	27.00	TON	$_____ .___	$_____ .___
10	STREAMBED BOULDER TYPE TWO	8-30	50.00	EA	$_____ .___	$_____ .___
11	STREAMBED BOULDER TYPE THREE	8-30	14.00	EA	$_____ .___	$_____ .___
12	LARGE WOODY MATERIAL-LOG WITHOUT ROOTWAD DIA 18 IN DBH	8-30	2.00	EA	$_____ .___	$_____ .___
13	LARGE WOODY MATERIAL-LOG WITH ROOTWAD DIA 24 IN. DBH	8-30	4.00	EA	$_____ .___	$_____ .___
14	SLASH	8-30	15.00	C.Y.	$_____ .___	$_____ .___
15	QUARRY SPALLS	8-15	60.00	TON	$_____ .___	$_____ .___
16	STREAMBED ORGANIC MATERIAL	-	12.00	C.Y.	$_____ .___	$_____ .___
17	TEMPORARY STREAM DIVERSION AND DEWATERING	8-31	1.00	L.S.	$_____ .___	$_____ .___
18	UNANTICIPATED DEWATERING	SP8-31	1.00	EST.	$ 1 .00	$ 15,000 .00
19	FISH EXCLUSION ASSISTANCE	8-31	1.00	EST.	$ 1 .00	$ 10,000 .00
20	FISH BLOCK NET MAINTENANCE	8-31	1.00	EST.	$ 1 .00	$ 6,000 .00

21	STRUCTURE EXCAVATION CLASS A INCL. HAUL	2-09	650.00	C.Y.	$_____ .___	$_____ .___
22	SHORING OR EXTRA EXCAVATION CL. A	2-09	1.00	L.S.	$_____ .___	$_____ .___
23	GRAVEL BACKFILL FOR WALL	9-03	365.00	C.Y.	$_____ .___	$_____ .___
24	CONTRACTOR DESIGNED BURIED STRUCTURE NO. 1	6-20	1.00	L.S.	$_____ .___	$_____ .___
25	CRUSHED SURFACING BASE COURSE	4-04	881.00	TON	$_____ .___	$_____ .___
26	HMA CL. 1/2 IN PG 64H-22	5-04	284.00	TON	$_____ .___	$_____ .___
27	STABILIZED CONSTRUCTION ENTRANCE	8-01	170.00	S.Y.	$_____ .___	$_____ .___
28	EROSION/WATER POLUTION CONTROL	8-02	1.00	EST.	$ 1 .00	$ 25,000 .00
29	SEEDING AND FERTILIZING BY HAND	8-02	382.00	S.Y.	$_____ .___	$_____ .___
30	TOPSOIL TYPE A	8-02	0.23	AC	$_____ .___	$_____ .___
31	PSIPE VINE MAPLE	8-02	62.00	EA	$_____ .___	$_____ .___
32	PSIPE RED-OSIER DOGWOOD	8-02	21.00	EA	$_____ .___	$_____ .___
33	PSIPE THIMBLEBERRY	8-02	21.00	EA	$_____ .___	$_____ .___
34	PSIPE SALMONBERRY	8-02	62.00	EA	$_____ .___	$_____ .___

35	PSIPE SNOWBERRY	8-02	41.00	EA	$_____ .___	$_____ .___
36	LIVE STAKE ROW	8-02	76.00	L.F.	$_____ .___	$_____ .___
37	MEDIUM COMPOST	8-02	0.23	AC	$_____ .___	$_____ .___
38	BARK OR WOOD CHIP MULCH	8-02	0.15	AC	$_____ .___	$_____ .___
39	HIGH VISIBILITY SILT FENCE	8-01	800.00	L.F.	$_____ .___	$_____ .___
40	BOX CULVERT GUARDRAIL STREET POST TYPE 31	8-11	8.00	EA	$_____ .___	$_____ .___
41	ADDITIONAL BOX CULVERT GUARDRAIL STEEL POST ASSEMBLIES	8-11	1.00	L.S.	$_____ .___	$_____ .___
42	BEAM GUARDRAIL TYPE 31	8-11	445.00	L.F.	$_____ .___	$_____ .___
43	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	8-11	4.00	EA	$_____ .___	$_____ .___
44	PAINT LINE	8-22	1460.00	L.F.	$_____ .___	$_____ .___
45	RAISED PAVEMENT MARKER TYYPE 2YY	8-09	0.05	HUND	$_____ .___	$_____ .___
46	PERMANENT SIGNING	8-21	1.00	L.S.	$_____ .___	$_____ .___
47	OTHER TEMPORARY TRAFFIC CONTROL DEVICES	1-10	1.00	L.S.	$_____ .___	$_____ .___
48	FLAGGERS	1-10	160.00	HR	$_____ .___	$_____ .___

49	TRAFFIC CONTROL SUPERVISOR	1-10	1.00	L.S.	$_____ .___	$_____ .___
50	PORTABLE CHANGEABLE MESSAGE SIGN	1-10	1010.00	HR	$_____ .___	$_____ .___
51	WORK ZONE SAFETY CONTINGENCY	1-10	1.00	EST.	$ 1 .00	$ 25,000 .00
52	CONSTRUCTION SIGNS CLASS A	1-10	366.50	S.F.	$_____ .___	$_____ .___
53	PATROL AND MAINTAIN TRAFFIC CONTROL MEASURES	1-10	100.00	HR	$_____ .___	$_____ .___
54	STRUCTURE SURVEYING	6-08	1.00	L.S.	$_____ .___	$_____ .___
55	ROADWAY SURVEYING	1-05	1.00	L.S.	$_____ .___	$_____ .___
56	CABLE FENCE	9-16	85.00	L.F.	$_____ .___	$_____ .___
57	MINOR CHANGE	1-04	1.00	EST.	$ 1 .00	$ 25,000 .00
58	SPCC PLAN	1-07	1.00	L.S.	$_____ .___	$_____ .___
59	CONSTRUCTION GEOTEXTILE FOR SOIL STABILIZATION	2-12	650.00	S.Y.	$_____ .___	$_____ .___
60	GEOSYNTHETIC REINFORCEMENT	-	250.00	S.Y.	$_____ .___	$_____ .___
61	RECORD DRAWINGS (MINIMUM BID $2,500)	1-05	1.00	L.S.	$_____ .___	$_____ .___
					TOTAL BID	**$_____ .___**

FOR WORK PERFORMED ON THIS PROJECT THE CONTRACTOR SHOULD REFER TO SECTION 1-07.2(1) OF THE CONTRACT PROVISIONS AND DEPARTMENT OF REVENUE RULE #171.

PROPOSAL – Signature Page

The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

The undersigned hereby agrees to pay labor not less than the prevailing rates of wages in accordance with the requirements of the special provisions for this project.

A proposal guaranty in an amount of five percent (5%) of the total bid based upon the approximate estimate of quantities at the above prices and in the form as indicated below is attached hereto:

☐	CASHIER'S CHECK	In the amount of $_____Dollars
☐	CERTIFIED CHECK (Payable to Skagit County)	In the amount of $_____Dollars
☐	PROPOSAL BOND	In the amount five percent (5%) of the total bid.

Receipt is hereby acknowledged of Addendum(s) No. (s) _____, _____, & _____
FAILURE TO ACKNOWLEDGE ALL ADDENDA MAY RESULT IN REJECTION OF BID PROPOSAL PER PROJECT SPECIAL PROVISIONS

Signature of Authorized Officials(s):

Proposal Must Be Signed →

_____

_____
PRINT NAME

Firm Name: _____

Address: _____

_____

_____

Telephone No.: _____

State of Washington Contractor's License No._____

UBI No._____

Employment Security Department No. _____

Project Contact – Name & Phone#: _____

Note:
(1) This proposal form is not transferable, and any alteration of the firm's name entered hereon without prior permission from the Skagit County will be cause for considering the proposal irregular and subsequent rejection of the bid.
(2) Please refer to Section 1-02.6 of the Standard Specifications, "Preparation of Proposal", or "Article 4" of the Instruction to Bidders for building construction jobs.

BID PROPOSAL MUST BE SIGNED.

FAILURE TO SIGN OR COMPLETE ALL INFORMATION MAY RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE.

SUBMIT THE ENCLOSED PROPOSAL BOND FORM WITH YOUR PROPOSAL

USE OF OTHER FORMS MAY SUBJECT YOUR BID TO REJECTION

PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we, _____
_____
of _____ as principal, and the _____ a corporation duly organized under the laws of the State of _____, and authorized to do business in the State of Washington, as surety, are held and firmly bound unto Skagit County in the full and penal sum of five (5) percent of the total amount of the bid proposal of said principal for the work hereinafter described for the payment of which, well and truly to be made, we bind our heirs, executors, administrators and assigns, and successors and assigns, firmly by these presents.

The condition of this bond is such, that whereas the principal herein is herewith submitting his or its sealed proposal for the following highway construction, to wit:

Stevens Creek Fish Passage Improvement Project #ES07000-15

said bid and proposal, by reference thereto, being made a part hereof.

NOW THEREFORE, If the said proposal bid by said principal be accepted, and the contract be awarded to said principal, and if said principal shall duly make and enter into and execute said contract and shall furnish bond as required by Skagit County within a period of twenty (20) days from and after said award, exclusive of the day of such award, then this obligation shall be null and void, otherwise it shall remain and be in full force and effect.

IN TESTIMONY WHEREOF, The principal and surety have caused these presents to be signed and sealed this _____ day of _____, 2024.

_____

_____
(Principal)

_____ _____
(Surety) (Attorney-in-fact)

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

NON-COLLUSION DECLARATION

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.

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: _____

Washington State Department of Transportation

Recycled Materials Reporting

Contract Number		Contract Title					
Contractor			Engineer				
		Reclaimed Hot Mix Asphalt	Recycled Concrete Aggregate	Recycled Glass	Steel Furnace Slag	Other Recycled Aggregates	Contract Total Quantity
Fine Aggregate for Portland Cement Concrete	9-03.1(2)						
Coarse Aggregate for Portland Cement Concrete	9-03.1(4)						
Coarse Aggregate for Commercial Concrete	9-03.1(4)						
Aggregates for Hot Mix Asphalt	9-03.8	see below					
Ballast	9-03.9(1)						
Permeable Ballast	9-03.9(2)						
Crushed Surfacing	9-03.9(3)						
Aggregate for Gravel Base	9-03.10						
Gravel Backfill for Foundations	9-03.12(1)						
Gravel Backfill for Walls	9-03.12(2)						
Gravel Backfill for Pipe Zone Bedding	9-03.12(3)						
Gravel Backfill for Drains	9-03.12(4)						
Gravel Backfill for Drywells	9-03.12(5)						
Backfill for Sand Drains	9-03.13						
Sand Drainage Blanket	9-03.13(1)						
Gravel Borrow	9-03.14(1)						
Select Borrow	9-03.14(2)						
Common Borrow	9-03.14(3)						
Foundation Material Class A and Class B	9-03.17						
Foundation Material Class C	9-03.18						
Bank Run Gravel for Trench Backfill	9-03.19						
Other Aggregate Materials (total quantity not required)	9-03						
TOTAL (recycled materials and contract total quantity)		0	0	0	0	0	0
		Reclaimed Hot Mix Asphalt	Reclaimed Asphalt Shingles		Steel Furnace Slag	Other Recycled Materials	Total Quantity
Hot Mix Asphalt	5-04.2						

I declare that the statements made in this document, including attachments, are complete, true and accurate.
Signed by an authorized representative of the Contractor

Contractor Representative Name	Signature	Title	Date

INSTRUCTIONS:

The Contractor shall report the quantity in ***tons*** for each type of recycled material that was used for each of the listed materials. If the Contract did not include the listed material or recycled materials were not used for this material a "0" shall be entered in the box. The Standard Specifications in Section 9-03.21 do not allow the use of recycled materials in the boxes that are shaded. If the Contract Provisions allowed and the Contractor utilized recycled materials for any of these items the amount of recycled material shall be entered in the box. The contract total quantity for each aggregate material (e.g., Fine Aggregate for Portland Cement Concrete) is the total weight in tons and includes both recycled and natural occurring materials. The total quantity for hot mix asphalt (HMA) is the total HMA weight in tons and includes recycled asphalt pavement (RAP) and new HMA materials.

Other recycled aggregates include other material sources that are utilized on a project. These sources include on-site recycling and aggregates from returned (uncured) concrete. Roadway excavation and embankment are not allowed in the quantity for other aggregate materials or other recycled aggregates.

Attach cost estimates as required in Section 1-06.6 of the Standard Specifications when the total percentage of recycled aggregate and concrete is less than 25 percent of the required amount for the entire Contract.

DOT Form 350-075
Revised 06/2016

Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (January 29, 2026), 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.*

Washington State Department of Transportation

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.

If RCW 39.30.060 requires a proof of license, the license number of that Subcontractor is required. 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
(and License Number if required) _____

Work to be performed _____

Subcontractor Name
(and License Number if required) _____

Work to be performed _____

Subcontractor Name
(and License Number if required) _____

Work to be performed _____

Subcontractor Name
(and License Number if required) _____

Work to be performed _____

Subcontractor Name
(and License Number if required) _____

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.

DOT Form 271-015 Revised 06/2025
● **Previous Versions Obsolete** ●

Washington State Department of Transportation

Bidder Questionnaire

Agency Name	Federal Aid Number
Prime Contractor Name	Contract Number
Contract Name	

Firm/Subcontractor Name	Address (incl. Zipcode)	DBE Status	NAICS Codes	Scope of Work	Firm Age	Firm Gross Receipts

If you have additional Firms or Subcontractors that submitted Bids, please complete additional forms.

Prime Contractor Representative _____ Title _____ Date _____

Form Instructions

The following information on each firm that submitted a bid is required as part of part of 49 CFR 26.11(c)(2):

Firm/Subcontractor Name: Enter the name of each firm or subcontractor who submitted a quote or a bid on the contract.

Address: Enter the date the main address of the firm/subcontractor. Include the zip code.

DBE Status: Enter the DBE status. *Options are DBE and Non-DBE.*

NAICS Codes: Enter the appropriate NAICS Codes for the work the bid was submitted.

Scope of Work: Enter the scope of the work the bid was submitted for.

Firm Age: Enter the age of the Firm.

Firm Gross Receipts: Enter the annual gross receipts. *Options are "Less than $1 million", "$1-$3 million", "$3-$6 million", "$6-$10 million", "$10-$20 million ", "$20-$30.72 million ", "Greater than $30.72 million ".*

APPENDIX E

Permits

Army Corps of Engineers Nationwide Permit 27

Department of Fish & Wildlife Hydraulic Project Approval

US Army Corps of Engineers
Seattle District

NATIONWIDE PERMIT 27
Terms and Conditions

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

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

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

27. Aquatic Habitat Restoration, Enhancement, and Establishment Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.

To be authorized by this NWP, the aquatic habitat restoration, enhancement, or establishment activity must be planned, designed, and implemented so that it results in aquatic habitat that resembles an ecological reference. An ecological reference may be based on the characteristics of one or more intact aquatic habitats or riparian areas of the same type that exist in the region. An ecological reference may be based on a conceptual model developed from regional ecological knowledge of the target aquatic habitat type or riparian area.

To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to the removal of accumulated sediments; releases of sediment from reservoirs to maintain sediment transport continuity to restore downstream habitats; the installation, removal, and maintenance of small water control structures, dikes, and berms, as well as discharges of dredged or fill material to restore appropriate stream channel configurations after small water control structures, dikes, and berms are removed; the installation of current deflectors; the enhancement, rehabilitation, or re-establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to enhance, rehabilitate, or re-establish stream meanders; the removal of stream barriers, such as undersized culverts, fords, and grade control structures; the backfilling of artificial channels; the removal of existing drainage structures, such as drain tiles, and the filling, blocking, or reshaping of drainage ditches to restore wetland hydrology; the installation of structures or fills necessary to restore or enhance wetland or stream hydrology; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; coral restoration or relocation activities; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; re-establishment of submerged aquatic vegetation in areas where those plant communities previously existed; re-establishment of tidal wetlands in tidal waters where those wetlands previously existed; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services.

Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., the conversion of a stream to wetland or vice versa) or uplands. Changes in wetland plant communities that occur when wetland hydrology is more fully restored during wetland rehabilitation activities are not considered a conversion to another aquatic habitat type. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Compensatory mitigation is not required for activities authorized by this NWP since these activities must result in net increases in aquatic resource functions and services.

Reversion. For enhancement, restoration, and establishment activities conducted: (1) In accordance with the terms and conditions of a binding stream or wetland enhancement or restoration agreement, or a wetland establishment agreement, between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), U.S. Forest Service (USFS), or their designated state cooperating agencies; (2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the Office of Surface Mining Reclamation and Enforcement (OSMRE) or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these circumstances even if the discharge of dredged or fill material occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity, the permittee or the appropriate Federal or state agency must notify the district engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The requirement that the activity results in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion.

Reporting. For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of: (1) the binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map; (2) the NRCS or USDA Technical Service Provider documentation for the voluntary stream enhancement or restoration action or wetland restoration, enhancement, or establishment action; or (3) the SMCRA permit issued by OSMRE or the applicable state agency. The report must also include information on baseline ecological conditions on the project site, such as a delineation of wetlands, streams, and/or other aquatic habitats. These documents must be submitted to the district engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing any activity (see general condition 32), except for the following activities:

(1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS or their designated state cooperating agencies;

(2) Activities conducted in accordance with the terms and conditions of a binding coral restoration or relocation agreement between the project proponent and the NMFS or any of its designated state cooperating agencies;

(3) Voluntary stream or wetland restoration or enhancement action, or wetland establishment action, documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or

(4) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSMRE or the applicable state agency.

However, the permittee must submit a copy of the appropriate documentation to the district engineer to fulfill the reporting requirement. (Authorities: Sections 10 and 404)

Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee projects. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

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

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

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be

used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant

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

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will

verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal,

and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the

required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already

meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

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

_____
(Transferee)

_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

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

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

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or

other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

C. SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to the 2021 NWPs - Final 41 NWPs for the Seattle District in Washington State, as applicable.

RGC 1, Project Drawings

Drawings must be submitted with pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the United States will be affected. Drawings

must be originals and not reduced copies of large-scale plans. Engineering drawings are not required. Existing and proposed site conditions (manmade and landscape features) must be drawn to scale.

RGC 2, Aquatic Resources Requiring Special Protection
A PCN is required for activities resulting in a loss of waters of the United States in wetlands in dunal systems along the Washington coast, mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, and wetlands in coastal lagoons.

RGC 3, New Bank Stabilization in Tidal Waters of Puget Sound
Activities involving new bank stabilization in tidal waters in Water Resource Inventory Areas (WRIAs) 8, 9, 10, 11 and 12 (within the areas identified on Figures 1a through 1e) cannot be authorized by NWP.

RGC 4, Commencement Bay
No permanent losses of wetlands or mudflats within the Commencement Bay Study Area may be authorized by any NWP (see Figure 2).

RGC 5, Bank Stabilization
All projects including new or maintenance bank stabilization activities in waters of the United States where salmonid species are present or could be present, requires PCN to the U.S. Army Corps of Engineers (Corps) (see NWP general condition 32).
For new bank stabilization projects only, the following must be submitted to the Corps:

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

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

RGC 6, Crossings of Waters of the United States
Any project including installing, replacing, or modifying crossings of waters of the United States, such as culverts or bridges, requires submittal of a PCN to the U.S. Army Corps of Engineers (see NWP general condition 32).
If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, the project must apply the stream simulation design method from the Washington Department of Fish and Wildlife located in the *Water Crossing Design Guidelines* (2013), or a design method which provides passage at all life stages at all flows where the salmonid species would naturally seek passage. If the stream simulation design method is not applied for a culvert where salmonid species are present or could be present, the project proponent must provide a rationale in the PCN sufficient to establish one of the following:

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

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

RGC 7, Stream Loss
A PCN is required for all activities that result in the loss of any linear feet of streams.

RGC 8, Construction Boundaries
Permittees must clearly mark all construction area boundaries within waters of the United States before beginning work on projects that involve grading or placement of fill. Boundary markers and/or construction fencing must be maintained and clearly visible for the duration of construction. Permittees

should avoid and minimize removal of native vegetation (including submerged aquatic vegetation) to the maximum extent possible.

RGC 9, ESA Reporting to NMFS
For any nationwide permit that may affect threatened or endangered species;
Incidents where any individuals of fish species, marine mammals and/or sea turtles listed by National Oceanic and Atmospheric Administration Fisheries, National Marine Fisheries Service (NMFS) under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this Nationwide Permit verification shall be reported to NMFS, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Seattle District of the U.S. Army Corps of Engineers at (206) 764-3495. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by the NMFS to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

D. SEATTLE DISTRICT REGIONAL SPECIFIC CONDITIONS FOR THIS NWP:

NWP 27 Specific Regional Conditions:
1. A pre-construction notification (PCN) must be submitted to the district engineer (see NWP general condition 32) for any proposed project located in a Department of the Army permit compensatory mitigation site, Comprehensive Environmental Response, Compensation and Liability Act (Superfund) site, Resource Conservation and Recovery Act hazardous waste clean-up site, Washington State Department of Ecology compensatory mitigation site, or Washington State Model Toxics Control Act clean-up site.

2. For projects subject to PCN, if there is a loss of waters of the U.S. the project proponent must explain in the PCN why the loss is necessary. The project proponent must also demonstrate how despite the loss of waters the overall project would result in a net increase in aquatic/ecological functions .

3. The PCN must contain a description of pre-project site conditions including presence of wetlands (including photographs) and aquatic/ecological functions the site provides within the watershed.

4. For projects that would result in a loss of waters of the U.S., the project proponent must include maintenance and monitoring plans with the PCN.

5. Restoration projects involving shellfish seeding must use shellfish native to the watershed.

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

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

A. State General Conditions for all Nationwide Permits

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

Due to the lack of site specific information on the discharge types, quantities, and specific locations, as well as the condition of receiving waters and the quantity of waters (including wetlands) that may be lost,

Ecology may need to review the project if one of the following stategeneral conditions is triggered.

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

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

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

2. **Projects or Activities Discharging to Impaired Waters**. Ecology WQC review is required for projects or activities that will occur in a 303(d) listed segment of a waterbody or upstream of a listed segment and may result in further exceedances of the specific listedparameter to determine if the project meets this programmatic WQC or will require individual WQC.

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

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

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

a. Activities in or affecting the following aquatic resources:
    i. Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publications #14-06-029 and #14-06-030):
        - Estuarine wetlands.
        - Wetlands of High Conservation Value.
        - Bogs.
        - Old-growth forested wetlands and mature forested wetlands.
        - Wetlands in coastal lagoons.
        - Wetlands in dunal systems along the Washington coast.
        - Vernal pools.
        - Alkali wetlands.

    ii. Fens, aspen-dominated wetlands, camas prairie wetlands.

    iii. Category I wetlands.

    iv. Category II wetlands with a habitat score ≥ 8 points.

b. Activities in or resulting in a loss of eelgrass (Zostera marina) beds.

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

NWP 20 – Response Operations for Oil and Hazardous Substances
NWP 32 – Completed Enforcement Actions
NWP 48 – Commercial Shellfish Mariculture Activities

4. **Loss of More than 300 Linear Feet of Streambed.** For any project that results in the lossof more than 300 linear feet of streambed Ecology WQC review is required to determineif the project meets this programmatic WQC or will require individual WQC.

5. **Temporary Fills.** For any project or activity with temporary fill in wetlands or other waters for more than six months Ecology WQC review is required to determine if theproject meets this programmatic WQC or will require individual WQC.

6. **Mitigation.** Project proponents are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resourceswherever practicable. For projects requiring Ecology WQC review or an individual WQC with unavoidable impacts to aquatics resources, a mitigation plan must be provided.

    a. Wetland mitigation plans submitted for Ecology review and approval shall be based on the most current guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (available on Ecology's website) and shall, at aminimum, include the following:

        i. A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.

        ii. The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded).

        iii. The rationale for the mitigation site that was selected.

        iv. The goals and objectives of the compensatory mitigation project.

        v. How the mitigation project will be accomplished, including construction sequencing, best management practices to protect water quality, proposed performance standards for measuring success and the proposed buffer widths.

        vi. How it will be maintained and monitored to assess progress toward goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.

        vii. How the compensatory mitigation site will be legally protected for the long term.

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

Ecology encourages the use of alternative mitigation approaches, includingcredit/debit methodology, advance mitigation, and other programmatic approaches such as mitigation banks and in-lieu fee programs. If you are interested in proposing use of an alternative mitigation approach, consult with the

appropriate Ecology regional staff person. Information on alternative mitigation approaches is available on Ecology's website.

b. Mitigation for other aquatic resource impacts will be determined on a case-by-case basis.

7. **Stormwater Pollution Prevention**. All projects involving land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoiddischarge of pollutants in stormwater runoff to waters.

a. For land disturbances during construction, the applicant must obtain and implement permits (e.g., Construction Stormwater General Permit) where required and follow Ecology's current stormwater manual.

b. Following construction, prevention or treatment of on-going stormwater runofffrom impervious surfaces shall be provided.

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

8. **Application**. For projects or activities that will require Ecology WQC review, or anindividual WQC, project proponents must provide Ecology with a JARPA or the equivalent information, along with the documentation provided to the Corps, as described in national general condition 32, Pre-Construction Notification (PCN), including, where applicable:

a. A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project discharge(s) would cause, best management practices (BMPs), and proposed means to monitor the discharge(s).

b. List of all federal, state or local agency authorizations required to be used for anypart of the proposed project or any related activity.

c. Drawings indicating the OHWM, delineation of special aquatic sites, and other waters of the state. Wetland delineations must be prepared in accordance with thecurrent method required by the Corps and shall include Ecology's Wetland Rating form. Wetland Rating forms are subject to review and verification by Ecology staff.

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

d. A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See stategeneral condition 5.

e. Other applicable requirements of Corps NWP general condition 32, Corps regional conditions, or notification conditions of the applicable NWP.

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

Ecology Section 401 Water Quality Certification – Granted with conditions.

1. Ecology WQC review is required if the project or activity is in a known contaminatedor cleanup site to determine if an individual WQC is required or the project meets the programmatic WQC for this NWP.

2. Ecology individual WQC is required for projects or activities authorized under thisNWP if:
    a. The project or activity directly impacts ½ acre or more of tidal waters; or
    b. The project or activity affects ½ acre or more of wetlands; or
    c. The project or activity is a mitigation bank or an advance mitigation site.

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

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

General Conditions:

EPA General Condition 1 – Aquatic Resources of Special Concern

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

EPA General Condition 2 – Soil Erosion and Sediment Controls

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

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

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

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

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

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

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

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

EPA General Condition 4 – Projects or Activities Discharging to Impaired Waters

Projects or activities are not authorized under the NWPs if the project will involve point source discharges into an active channel (e.g., flowing or open waters) of a water of the U.S. listed as impaired under CWA Section 303(d) and/or if the waterbody has an approved Total Maximum Daily Load (TMDL) and the discharge may result in further exceedance of a specific parameter (e.g., total suspended solids, dissolved oxygen, temperature) for which the waterbody is listed or has an approved TMDL. The current lists of impaired waters of the U.S. under CWA Section 303(d) and waters of the U.S. for which a TMDL has been approved are available on EPA Region 10's web site at: https://www.epa.gov/tmdl/impaired-waters-and-tmdls-region-10.

EPA General Condition 5 – Notice to EPA

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

EPA General Condition 6 – Unsuitable Materials

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

1. Wood preservatives and their application shall be in compliance with EPA label requirements and criteria of approved EPA Registration Documents under the Federal Insecticide, Fungicide, and Rodenticide Act;
2. Use of chemically treated wood products shall follow the Western Wood Preservatives Institute (WWPI) guidelines and BMPs to minimize the preservative migrating from treated wood into the aquatic environment;
3. For new or replacement wood structures, the wood shall be sealed with non-toxic

products such as water-based silica or soy-based water repellants or sealers to prevent or limit leaching. Acceptable alternatives to chemically treated wood include untreated wood, steel (painted, unpainted or coated with epoxy petroleum compound or plastic), concrete and plastic lumber; and

4. All removal of chemically treated wood products (including pilings) shall follow the most recent "EPA Region 10 Best Management Practices for Piling Removal and Placement in Washington State."

EPA NWP Specific Conditions:
NWP 27 is conditionally certified, subject to the general conditions listed above, except that an individual project-specific WQC is required when the project:

1. Involves dam removal; or
2. Involves greater than 1 acre of impacts to waters of the U.S.; or
3. Would impact greater than 500 linear feet of waters of the U.S.; or
4. Involves greater than 1/2 acre of impacts to tidal wetlands or waters.

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

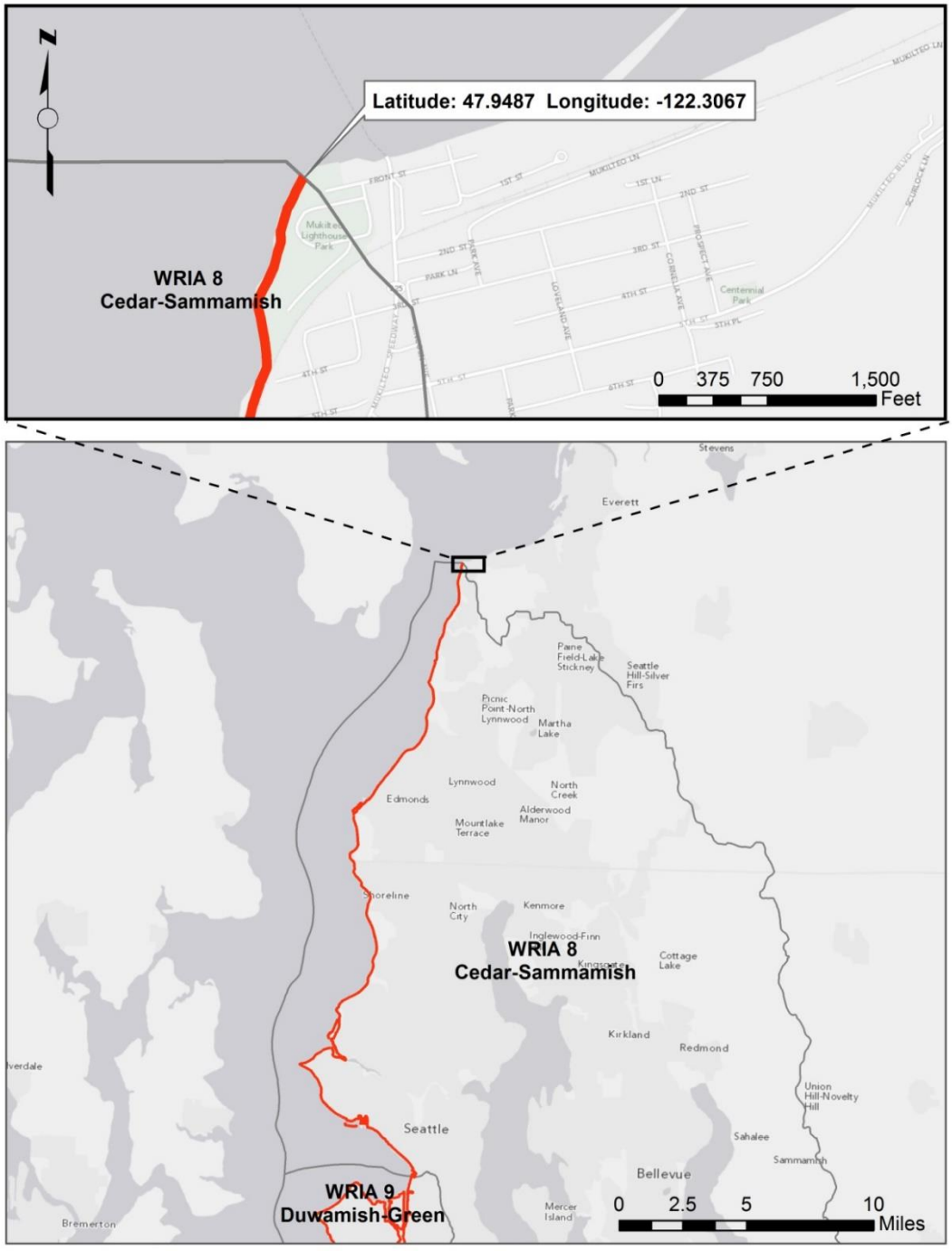
F. COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY RESPONSE FOR THIS NWP:

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

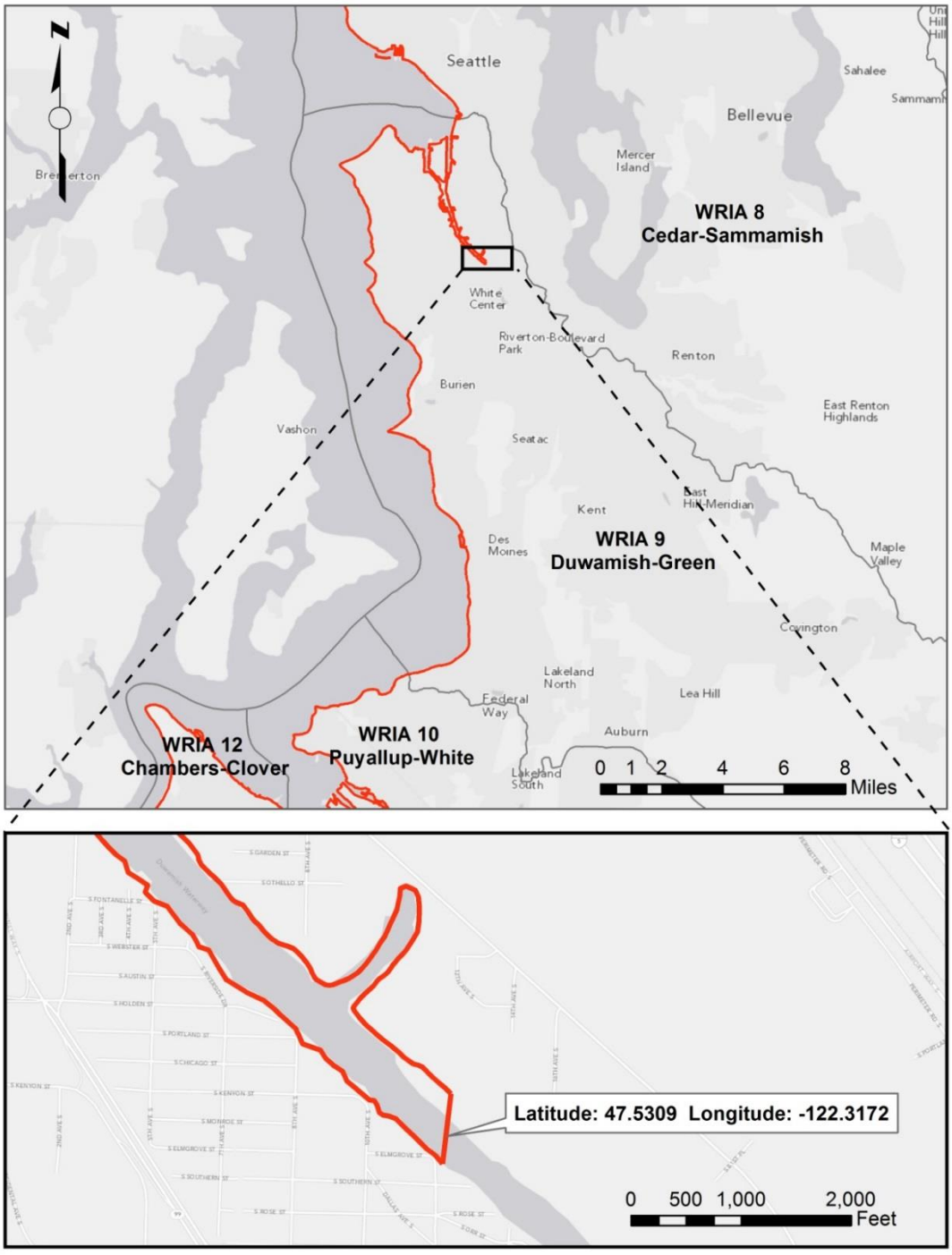
CZM Federal Consistency Response – Concur with Conditions.

1. A CZM Federal Consistency Decision is required for projects or activities under this NWP if a State 401 Water Quality Certification is required.

Seattle District Regional General Conditions - Figures
Figure 1: RGC 3 - WRIAs 8, 9, 10, 11, and 12
a. WRIA 8



b. WRIA 9


N
Seattle
Bellevue
Sahalee
Mercer Island
WRIA 8
Cedar-Sammamish
White Center
Riverton-Boulevard Park
Renton
Burien
East Renton Highlands
Vashon
Seatac
Kent
East Hill-Meridian
Des Moines
WRIA 9
Duwamish-Green
Maple Valley
Covington
Lakeland North
Lea Hill
Federal Way
Auburn
WRIA 12
Chambers-Clover
WRIA 10
Puyallup-White
Lakeland South
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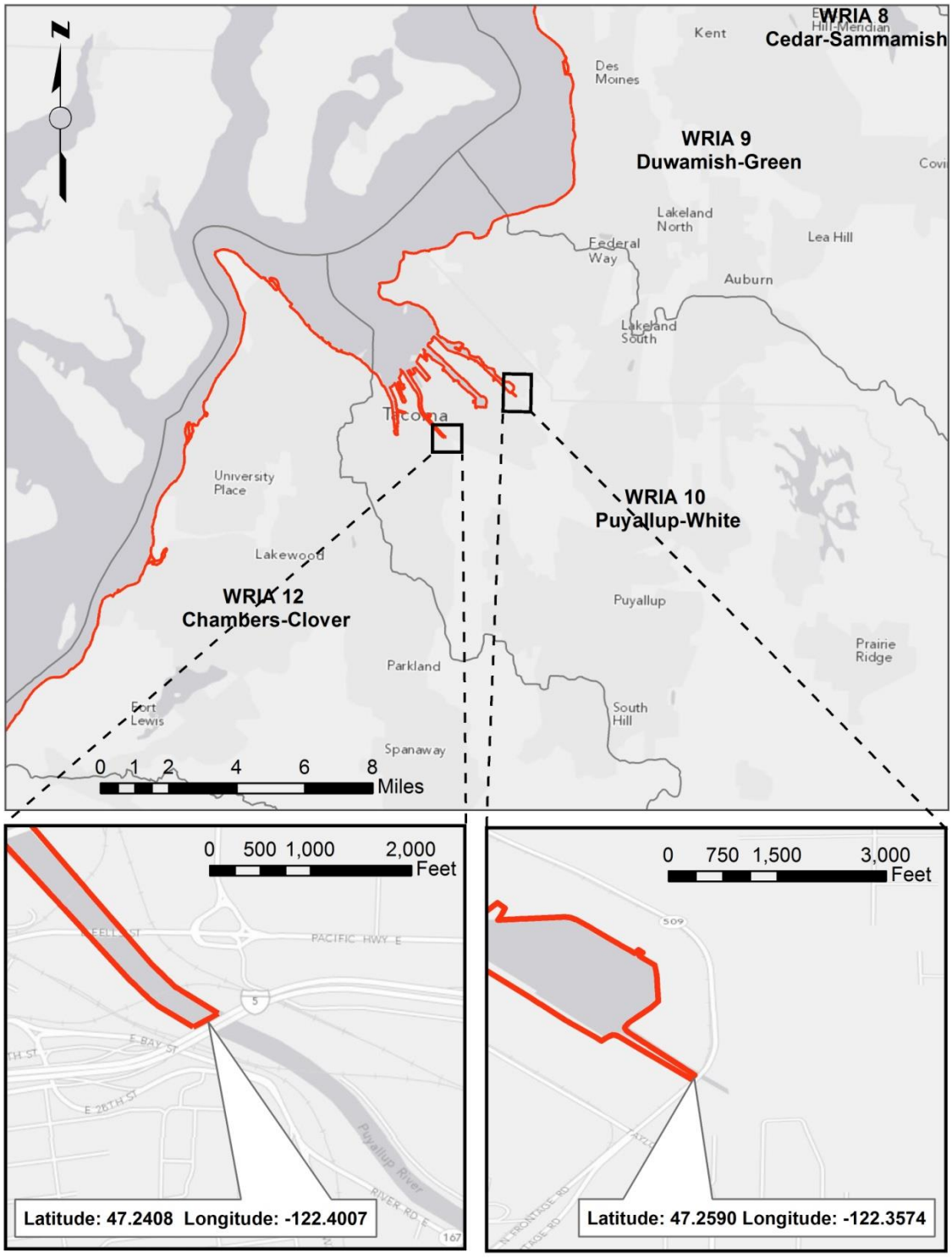
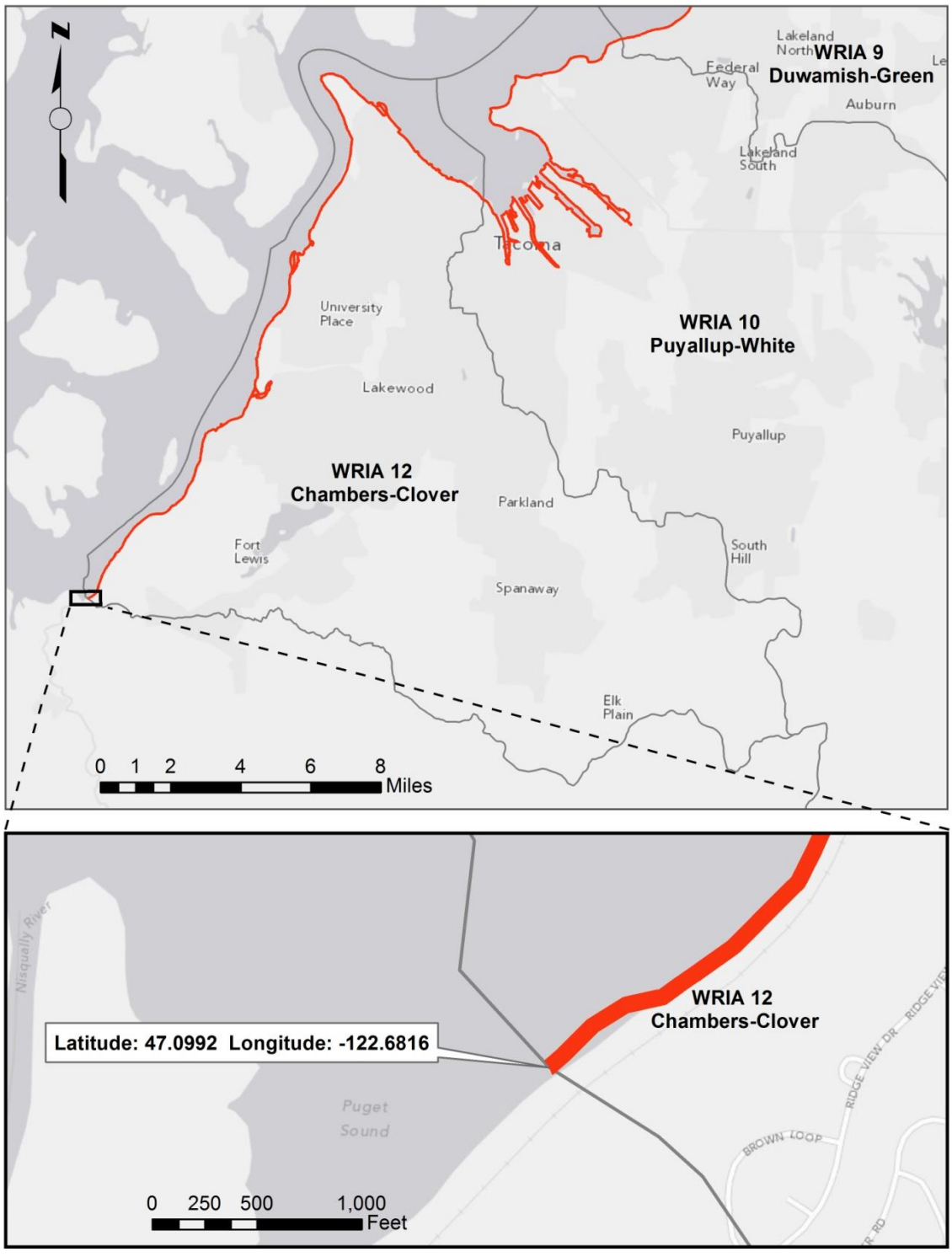
Miles
Latitude: 47.5309 Longitude: -122.3172
0 500 1,000 2,000
Feet

c. WRIA 10


WRIA 8
Cedar-Sammamish
WRIA 9
Duwamish-Green
WRIA 10
Puyallup-White
WRIA 12
Chambers-Clover
Kent
Des Moines
Federal Way
Lakeland North
Lea Hill
Auburn
Lakeland South
Tacoma
University Place
Lakewood
Puyallup
Parkland
Prairie Ridge
South Hill
Spanaway
Fort Lewis
0 1 2 4 6 8 Miles
0 500 1,000 2,000 Feet
PACIFIC HWY E
E BAY ST
E 26TH ST
Puyallup River
RIVER RD E
Latitude: 47.2408 Longitude: -122.4007
0 750 1,500 3,000 Feet
Latitude: 47.2590 Longitude: -122.3574

d. WRIA 12


N
Lakeland North
WRIA 9
Duwamish-Green
Federal Way
Auburn
Lakeland South
Tacoma
University Place
WRIA 10
Puyallup-White
Lakewood
Puyallup
WRIA 12
Chambers-Clover
Parkland
Fort Lewis
South Hill
Spanaway
Elk Plain
0 1 2 4 6 8
Miles
Nisqually River
WRIA 12
Chambers-Clover
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Puget Sound
BROWN LOOP
RIDGE VIEW DR
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Feet

e. WRIA 11

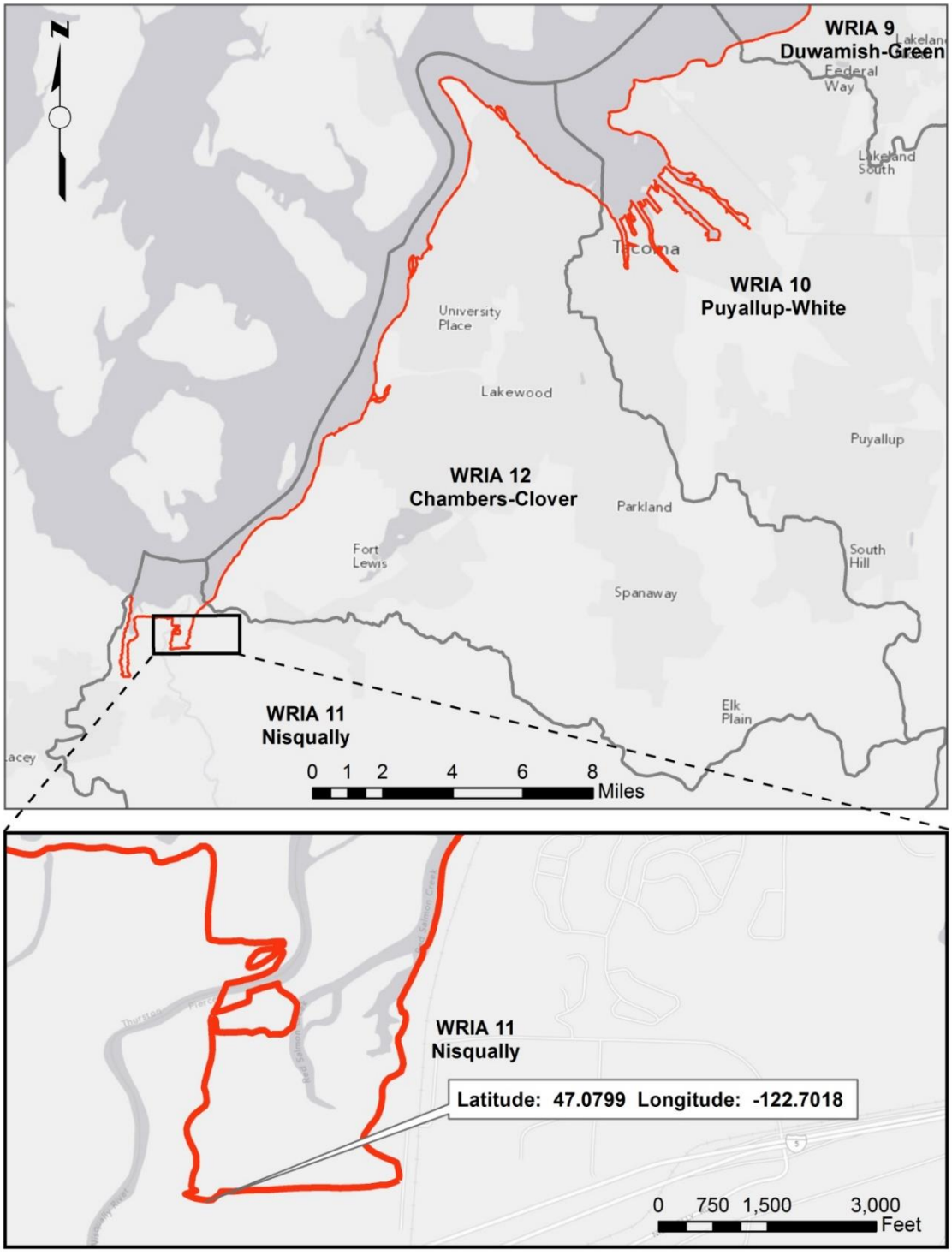
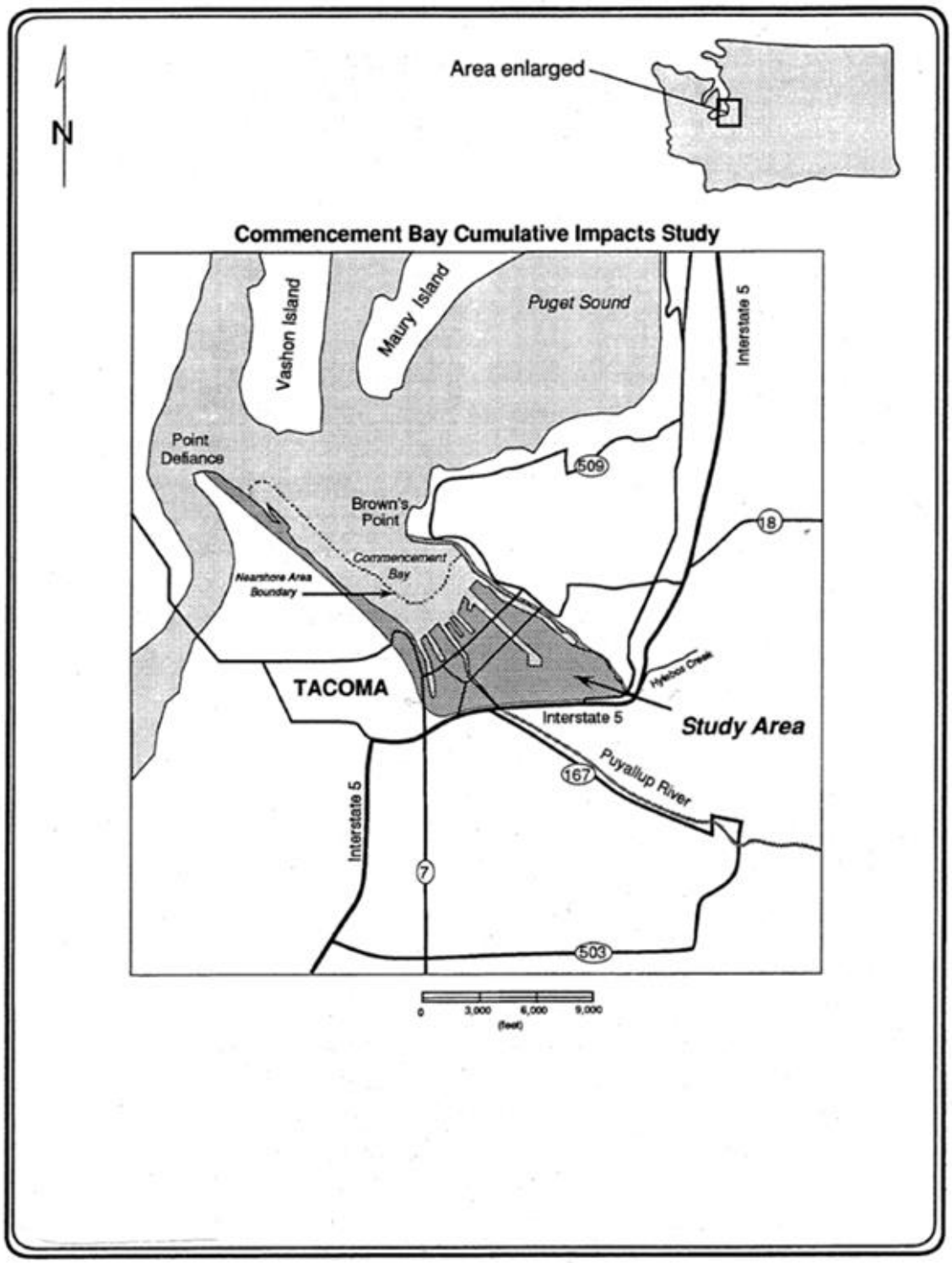

WRIA 9
Duwamish-Green
Federal Way
Lakeland South
Tacoma
WRIA 10
Puyallup-White
University Place
Lakewood
Puyallup
WRIA 12
Chambers-Clover
Parkland
Fort Lewis
South Hill
Spanaway
Elk Plain
WRIA 11
Nisqually
0 1 2 4 6 8
Miles
WRIA 11
Nisqually
Latitude: 47.0799 Longitude: -122.7018
0 750 1,500 3,000
Feet

Figure 2. RGC 4 - Commencement Bay Study Area



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Modification Date: 1/14/2025

Permit Number: 2024-4-297+02

Project End Date: 9/30/2028

Application ID: 0042094

PERMITTEE	AUTHORIZED AGENT
Joel Shroyer 1800 Continental Place Mount Vernon, Washington 98273	Chris Soncarty 146 N Canal St, #111 Seattle, Washington 98103-8691

Project Name: Stevens Creek Culvert Replacement Project

Project Description: The existing 48-inch culvert that conveys Stevens Creek beneath the South Skagit Highway is a fish passage barrier (WDFW Inventory ID GN19). The project will replace this existing barrier culvert with a fish passable culvert, improving access to potential habitat upstream for salmonids that occur in the Skagit River and Stevens Creek.

PROVISIONS

AUTHORIZED WORK TIMES:

1. TIMING LIMITATION: Work below the ordinary high water line and work that may cause sedimentation or other impacts to waters of the state must only occur between July 15 and September 30 of any permitted year. This work must be completed by September 30, 2028.

PROJECT APPROVALS:

2. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, entitled "1024_0510_StevensCr_JARPA_APP_A_PlanSheets_2024-0605.pdf ", pages 1-21 of 21, dated 6/12/2024, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

INVASIVE SPECIES CONTROL:

3. Follow Method 1 for low risk locations (i.e. clean/drain/dry). Thoroughly remove visible dirt and debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets, and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. For contaminated or high risk sites please refer to the Method 2 Decontamination protocol. Properly dispose of any water and chemicals used to clean gear and equipment. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at https://wdfw.wa.gov/species-habitats/invasive/prevention.

NOTIFICATION REQUIREMENTS:

4. PRE- AND POST-CONSTRUCTION NOTIFICATION: You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail

to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least three business days before starting work, and again within seven days after completing the work. The notification must include the permittee's name, project location, starting date for work or date the work was completed, and the permit number. The Washington Department of Fish and Wildlife may conduct inspections during and after construction; however, the Washington Department of Fish and Wildlife will notify you or your agent before conducting the inspection.

5. 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.
6. 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:

7. Establish staging areas (used for equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.
8. Use existing roadways or travel paths.
9. Clearly mark boundaries to establish the limit of work associated with site access and construction.
10. This Hydraulic Project Approval authorizes only the removal of the large woody vegetation shown in the approved plan. Clearly mark all large woody vegetation authorized for removal before starting work.
11. Retain all natural habitat features on the bed or banks including large woody material and boulders. You may move these natural habitat features during construction but you must place them near the preproject location before leaving the job site.
12. Confine the use of equipment to the specific access and work corridor shown in the approved plans.
13. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.
14. This Hydraulic Project Approval does not authorize equipment crossings of the stream.
15. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.

16. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.
17. Conduct all fueling activities a minimum of 50 feet away from any stream channel or place equipment in a secondary containment unit (i.e. pumps) to prevent the spillage of petro-chemicals. A petroleum spill kit is required to be present at the construction site for the duration of the project.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT:

18. Work in the dry watercourse (when no natural flow is occurring in the channel, or when flow is diverted around the job site).
19. Protect all disturbed areas from erosion. Maintain erosion and sediment control until all work and cleanup of the job site is complete.
20. All erosion control materials that will remain onsite must be composed of 100% biodegradable materials.
21. Straw used for erosion and sediment control, must be certified free of noxious weeds and their seeds.
22. Stop all hydraulic project activities except those needed to control erosion and siltation, if flow conditions arise that will result in erosion or siltation of waters of the state.
23. Prevent project contaminants, such as petroleum products, hydraulic fluid, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.
24. Route construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.
25. Deposit waste material from the project, such as construction debris, silt, excess dirt, or overburden, in an upland area above the limits of anticipated floodwater unless the material is approved by the Washington Department of Fish and Wildlife for reuse in the project.

IN-WATER WORK AREA ISOLATION USING A TEMPORARY BYPASS:

26. Install the temporary bypass before starting construction work in the wetted perimeter.
27. Isolate fish from the work area by using either a total or partial bypass to reroute the stream through a temporary channel or pipe.
28. Sequence the work to minimize the duration of dewatering.
29. Use the least-impacting feasible method to temporarily bypass water from the work area. Consider the physical characteristics of the site and the anticipated volume of water flowing through the work area.
30. The hydraulic capacity of the stream bypass must be equal to or greater than the peak flow event expected when the bypass will be operated.
31. Design the temporary bypass to minimize the length of the dewatered stream channel.
32. During all phases of bypass installation and decommissioning, maintain flows downstream of the project site to ensure survival of all downstream fish.

33. Install a cofferdam or similar device at the upstream and downstream end of the bypass to prevent backwater from entering the work area.
34. Return diverted water to the channel immediately downstream of the work area. Dissipate flow energy from the diversion to prevent scour or erosion of the channel and bank.
35. If the bypass is a pumped diversion, once started it must run continuously until it is no longer necessary to bypass flows. This requires back-up pumps on-site and twenty-four-hour monitoring for overnight operation.
36. If the diversion inlet is a pump diversion in a fish-bearing stream, the pump intake structure must have a fish screen installed, operated, and maintained in accordance with RCW 77.57.010 and 77.57.070. Screen the pump intake with one of the following:a) Perforated plate: 0.094 inch (maximum opening diameter);b) Profile bar: 0.069 inch (maximum width opening); orc) Woven wire: 0.087 inch (maximum opening in the narrow direction).The minimum open area for all types of fish screens is twenty-seven percent. The screened intake facility must have enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. Maintain fish screens to prevent injury or entrapment of fish.
37. The fish screen must remain in place whenever water is withdrawn from the stream through the pump intake.
38. Remove fish screens on dewatering pumps in the isolated work area only after all fish are safe and excluded from the work area.
39. Lamprey are expected to be present at the site and in the streambed. To ensure they have time to migrate out of the work area, wait at least one hour after dewatering to begin ground disturbing activity in the isolated area.

FISH LIFE REMOVAL:

40. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of fish life.
41. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.
42. Place block nets upstream and downstream of the in-water work area before capturing and removing fish life. Install block nets at an angle to the direction of flow (not perpendicular to the flow) to avoid entrapping fish in the nets.
43. Capture and safely move fish life from the work area to the nearest suitable free-flowing water. Lamprey may be present in the work area and in any disturbed streambed sediment. If so, recover and place them downstream of the isolation area.

CULVERT:

44. Install and maintain the culvert to ensure unimpeded fish passage and debris flow expected in the area.
45. Establish the culvert invert elevation with reference point(s) or benchmark(s) created before to starting work on this project. Clearly mark and preserve the reference point(s) for post-project compliance. Before backfilling, confirm the invert elevation, as stated on the plans, relative to the reference points with at least a construction-grade leveling device (such as an optical auto-level or laser level).

46. The authorized culvert is a stream simulation design.
47. The length of the culvert must not exceed 48 feet.
48. The width of the channel-bed inside a stream simulation culvert at the elevation of the stream bed must be equal to or greater than 15 feet which is 1.2 times the average channel bed width plus two feet.
49. Set the stream simulation culvert at the same gradient as the prevailing stream gradient of 2.3 percent.
50. Countersink the stream simulation culvert a minimum of thirty percent and a maximum of fifty percent of the culvert rise, but not less than two feet. This criterion applies through the full length of the culvert.
51. Size streambed material to mimic the stream's natural gradation as found in nearby reference channel reaches. Place clean, rounded and well-graded (includes all size classes) material sized as shown in the approved plans and notes. Angular rock is not permitted within the channel or culvert.
52. The streambed must include a sinuous low-flow channel expected under common conditions in the reach and a high-flow bench on both sides of the culvert.
53. Protect structural fill associated with the culvert installation from erosion to the 100-year peak flow.
54. Roadway approach material must be structurally stable and composed of material that if eroded into the water will not harm fish life.
55. The owner(s) must maintain the culvert to ensure it provides continued, unimpeded fish passage. If the culvert becomes a hindrance to fish passage, the owner must obtain an Hydraulic Project Approval and provide prompt repair.

LARGE WOODY MATERIAL:

56. Do not drag large woody material. Suspend large woody material during placement, repositioning, or removal so it does not damage the bed or banks. A yarding corridor or full suspension is required to protect riparian zone vegetation. Full suspension can be achieved with hand-operated or heavy equipment or aerial log yarding towers.
57. When you cannot suspend large woody material above the bed and banks, use skid logs or similar methods to avoid bank damage. Avoid damage to stream banks and vegetation when removing skid logs after completing the yarding operation, and restore the bank to preproject condition.

DEMOBILIZATION AND CLEANUP:

58. Do not relocate removed or replaced structures within waters of the state. Remove and dispose of these structures in an upland area above the limits of anticipated floodwater.
59. Upon completion of the project, restore the disturbed bed, banks, and riparian zone to preproject condition to the extent possible.
60. To minimize sediment delivery to the stream or stream channel, do not return in-stream flows to the work area until all in-channel work is completed and the bed and banks are stabilized.

61. Return water flow slowly to the in-water work area to prevent the downstream release of sediment laden water. If necessary, install silt fencing above the bypass outlet to capture sediment during re-watering of the channel.
62. Seed areas disturbed by construction activities with a native seed mix suitable for the site that has at least one quick-establishing plant species.
63. Replace native riparian zone and aquatic vegetation, and wetland vascular plants (except noxious weeds) damaged or destroyed by construction using a proven methodology.
64. Complete replanting of riparian vegetation during the first dormant season (late fall through late winter) after project completion per the approved plan. Maintain plantings for at least three years to ensure at least eighty percent of the plantings survive. Failure to achieve the eighty percent survival in year three will require you to submit a plan with follow-up measures to achieve requirements or reasons to modify requirements.
65. Replant the job site with the plant species composition and planting densities as shown in the approved plans.
66. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.
67. Remove temporary erosion and sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.

PROJECT LOCATION(S)

#1

Location		
Stevens Creek culvert beneath South Skagit Hwy Public ROW Sedro-Woolley, WA 98284		
Latitude	**Longitude**	**County**
48.484431000000000	-122.138818000000000	Skagit
WRIA	**Waterbody**	**Tributary to**
3		

APPLIES TO ALL HYDRAULIC PROJECT APPROVALS

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Modification Date: 1/14/2025

Permit Number: 2024-4-297+02

Project End Date: 9/30/2028

Application ID: 0042094

This Hydraulic Project Approval (HPA) 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 HPA 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 (HPA) shall be available on the job site at all times and all its provisions followed by the person(s) to whom this HPA 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 (HPA) 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 HPA.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a 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 a fine and/or imprisonment.

All Hydraulic Project Approvals (HPA) issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Washington Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this HPA is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HYDRAULIC PROJECT APPROVAL (HPA): You may request approval of minor modifications to the required work timing or 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 the 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 do not alter the project's impact to fish life or habitat and do 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 https://hpa.wdfw.wa.gov/s. If you did not use APPS you must submit a written request for a minor modification to an existing HPA. Written requests must include the name of the permittee, the name of the authorized agent if applicable, the APP ID or HPA number, 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 email to HPAapplications@dfw.wa.gov, or by mail to Washington Department of Fish and Wildlife, PO Box 43234,

Olympia, Washington 98504-3234. You should allow up to 45 days for the Department to process your request.

MAJOR MODIFICATIONS TO THIS HYDRUALIC PROJECT APPROVAL (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 the 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 https://hpa.wdfw.wa.gov/s. If you did not use APPS you must submit a written request for a major modification to an existing HPA. Written requests must include the name of the permittee, the name of the authorized agent if applicable, the APP ID or HPA number, 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 email to HPAapplications@dfw.wa.gov or by mail to Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. 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), the Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the WDFW employee who issued, denied, or conditioned 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 WDFW 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.

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 WDFW Habitat Program, Natural Resources Building, 1111 Washington St SE, Olympia, Washington 98501. 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 Habitat Program Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule:

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Habitat Program, Natural Resources Building, 1111 Washington St SE, Olympia, Washington 98501. 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 Habitat Program 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.

Alex Richard
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(360) 791-3517
alexander.richard@dfw.wa.gov

For Director
DFW

APPENDIX F

Geotechnical Engineering Report

GEOTECHNICAL ENGINEERING REPORT

Stevens Creek Culvert Replacement
Skagit County, Washington

Prepared for: Exeltech Consulting, Inc.

Project No. AS220354-01 • February 7, 2025 FINAL

Aspect
A Geosyntec Company

earth + water

GEOTECHNICAL ENGINEERING REPORT

Stevens Creek Culvert Replacement

Prepared for: Exeltech Consulting, Inc.

Project No. AS220354-01 • February 7, 2025 FINAL

Aspect Consulting

2/7/2025

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1 Introduction

This report presents the results of Aspect Consulting's (Aspect)[1] geotechnical engineering evaluation performed for the Stevens Creek Culvert Replacement Project (Project). Our services were provided in support of engineering studies led by Exeltech Consulting, Inc. (Exeltech) for the Skagit County Public Works Department (County). Our services were performed in accordance with our contract signed on February 6, 2023.

1.1 Project Description

The Project area is at the undercrossing of Stevens Creek and the South Skagit Highway, at milepost (MP) 5.3, in Skagit County, Washington (Site; Figure 1). The existing undersized concrete pipe culvert will be replaced with a fish-passable structure that also provides safe driving conditions on the highway while not affecting the stream characteristics of Stevens Creek (Exeltech, 2025a).

The proposed replacement culvert will be a four-sided precast concrete split box culvert with a hydraulic opening of 15 feet (width, parallel to roadway) by 8 feet (height), and a length of 48 feet (perpendicular to roadway) (Exeltech, 2025b). Wing walls will extend off all four corners of the box culvert. The design for the new culvert and wing walls will be completed by the contractor and will generally follow Washington State Department of Transportation (WSDOT) and American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor (LRFD) methodologies. Construction will be in accordance with the most current edition of the WSDOT Standard Specifications and Skagit County Road Standards.

This report summarizes the results of Aspect's completed field exploration and presents our geotechnical engineering conclusions and design recommendations for the proposed culvert.

[1] Aspect Consulting, a Geosyntec company

2 Site Description

We reviewed available published data, including geologic maps, aerial and light detection and ranging (LiDAR) imagery, topographic maps, and information provided by Exeltech and the County. The following sections describe the surface conditions observed during the Site reconnaissance, topography, geologic setting and local seismic conditions, and the subsurface conditions encountered in our exploration.

2.1 Site Conditions

The Site is located along South Skagit Highway (roadway), a two-lane paved road with gravel shoulders on each side (Photograph 1). The road is lined with grasses, shrubs, and small and large trees. The roadway is relatively flat at the Site, varying from Elevation 101[2] to Elevation 100 in the vicinity of the existing culvert. The roadway is a fill embankment that is built up about 3 to 8 feet above the surrounding area. The embankment is generally inclined from about 1.75H:1V (hortizontal:vertical) to 2.5H:1V in the vicinity of the existing culvert, with some locally oversteepened areas near the inlet and outlet.

The existing culvert is a 4-foot-diameter concrete culvert about 60 feet in length that carries Stevens Creek from north to south underneath the roadway (Photograph 2.). The upstream and downstream culvert invert Elevations are 93.04 and 91.73, respectively. The existing culvert is considered by Washington Department of Fish and Wildlife (WDFW) to be a barrier to fish migration (Exeltech, 2025a).

Photograph 1. *South Skagit Highway at Stevens Creek crossing (view to the northeast; photo by Exeltech on September 22, 2022).*

[2] Elevations in this report reference the North American Vertical Datum of 1988 (NAVD88)

Photograph 2. *Existing culvert outlet at Stevens Creek (View to the south-southeast, photo by Exeltech on February 22, 2023).*

2.2 Geologic Setting

Local geologic mapping indicates that the Site is located at the contact of recessional outwash (Qvr/Qvrf) and older nonglacial sediments (Qo; Whetten et. al, 1980). Also mapped near the Site is alluvium (Qal). The alluvium unit is described as gravel and isolated silt deposits along the modern Skagit River and its former course. The recessional outwash unit is described as poorly to well sorted, stratified gravel containing areas of fine sand and silt. The older nonglacial sediments are described as similar to Skagit alluvium, consisting of stratified sand, silt, cobbles, and minor amounts of clay and peat. The older nonglacial sediments are older than those left by the most recent glaciation in the area (Vashon) and have been glacially overridden.

2.2.1 Faults and Seismicity

The Site is located within the Puget Lowland physiographic province, an area of active seismicity that is subject to earthquakes on shallow crustal faults and deeper subduction zone earthquakes. The Site lies about 10.4 miles north of the Darrington-Devils Mountain Fault Zone, which consists of shallow crustal tectonic structures that are considered active (evidence for movement within the Holocene [since about 15,000 years ago]; Johnson et al., 2016). The recurrence interval of earthquakes on this fault zone is believed to be on the order of 6,000 years or more. There are also several other shallow crustal faults in the region capable of producing earthquakes and strong ground shaking.

The Site also lies within the zone of strong ground shaking from earthquakes associated with the Cascadia Subduction Zone (CSZ). Subduction-zone earthquakes occur due to rupture between the subducting oceanic plate and the overlying continental plate. The CSZ can produce earthquakes up to magnitude 9.3, and the recurrence interval is thought to be on the order of about 500 years. A recent study estimates the most recent subduction zone earthquake occurred on January 26, 1700 (Atwater et al., 2015).

Deep intraslab earthquakes that occur from tensional rupture of the sinking oceanic plate are also associated with the CSZ. An example of this type of seismicity is the 2001 Nisqually earthquake. Deep intraslab earthquakes typically are magnitude 7.5 or less and occur approximately every 10 to 30 years.

2.3 Subsurface Conditions

Subsurface conditions at the Site were inferred from the field explorations, laboratory testing on the collected soil samples, review of applicable geologic literature, and our experience with the local geology. The locations of our field explorations are presented on Figure 2.

Detailed descriptions of our field explorations, geologic units, laboratory testing, groundwater observations, and generalized engineering properties are presented in the following sections and on subsurface exploration logs in Appendix A.

2.3.1 Subsurface Explorations

On March 31, 2023, Western States Soil Conservation, under subcontract to Aspect, completed one boring, designated AB-01, at the Site with a truck-mounted drill rig using mud rotary drilling techniques. Disturbed soil samples were obtained from 2.5- to 5-foot intervals using the Standard Penetration Test (SPT) in general accordance with the ASTM International (ASTM) D1586, *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils* (ASTM, 2022).

Soil observations and classification tests were performed in general accordance with ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).* The terminology used in the soil classifications and other modifiers are defined and presented on the attached Figure A-1 included in Appendix A.

2.3.2 Geotechnical Laboratory Testing

Geotechnical laboratory testing of selected soil samples was performed by Materials Testing & Consulting, Inc., under subcontract to Aspect. Tests included grain-size

distribution, Atterberg limits, moisture content, and fines-content testing. Further description of the laboratory test methods and results are presented in Appendix B.

2.3.3 Stratigraphy

The soil units observed in the explorations, presented in stratigraphic order from top to bottom, include roadway pavement, fill, Quaternary alluvium (alluvium; Qal), and Quaternary Nonglacial Sediments (older nonglacial sediments; Qo). The summary of the subsurface units encountered in the explorations are as follows:

Roadway Pavement

We observed approximately 5 inches of bituminous surface treatment (BST) chipseal overlying embankment fill, as described below.

Fill

Below the paved roadway, we observed embankment fill extending to 10 feet below ground surface (bgs). The fill generally consisted of medium dense, moist, gray, silty sand with gravel (SM), gravel with silt and sand (GW-GM) and gravel with sand (GW). We observed trace amounts of organics within the fill; however, the fill may contain larger woody debris, buried logs, and other potential obstructions and deleterious materials elsewhere across the Site.

The fill has moderate shear strength, low to moderate compressibility, and moderate moisture sensitivity.

Alluvium

Below the embankment fill, we observed alluvium extending to 40 feet bgs. The alluvium consisted of about 2.5 feet of granular material: loose, wet, gray sand with silt and gravel (SP-SM) that graded into fine-grained loose to very loose, wet, gray, non-plastic sandy silt (ML) and silty sand (SM) extending to 40 feet bgs. While not observed in our boring, alluvium may contain larger woody debris and buried logs.

The alluvium has low shear strength, high compressibility, and high moisture sensitivity.

Older Nonglacial Sediments

Below the alluvium, we observed older nonglacial sediments extending to the bottom of our exploration at 61.5 feet bgs. The older nonglacial sediments generally consisted of medium dense to very dense, wet, gray to green gray, silty gravel with sand (GM), gravel with silt and sand (GW-GM), and sand with gravel (SP).

The older nonglacial sediments have high shear strength, low compressibility, and low to moderate moisture sensitivity.

2.3.4 Groundwater

The drilling method used (mud rotary) did not allow us to measure groundwater levels in the boring during drilling; however, groundwater depth was inferred at about 10 feet bgs (Elevation 90) from the soil sample moisture and Stevens Creek Elevation. We expect groundwater levels at the Site to generally correspond to the water surface elevation of Stevens Creek.

Groundwater levels at the Site will fluctuate seasonally with precipitation, Stevens Creek flow conditions, and any changes in Site and near-Site usage.

3 Conclusions and Recommendations

Our key findings and conclusions include:

- The Site is underlain by compressible alluvium that is prone to settlement when subjected to new or increased surcharge loads, such as those from new embankment fill or structure foundations. The saturated alluvium, encountered from 10 to 40 feet bgs, is also susceptible to liquefaction under a design earthquake that may result in vertical settlements on the order of 1 foot. Based upon the Site topography, liquefaction-triggered lateral spreading is not expected to occur.
- Based on the compressible alluvium at the Site, we recommend that the replacement culvert be designed such that there is no net increase in surcharge load/pressure. This is best accomplished by using a four-sided box culvert that will require removal of existing embankment fill (removal of load) and distribute and disperse the new structure loads over the entire bottom of the box culvert. The four-sided (closed bottom) precast concrete box culvert that Exeltech has selected is the best replacement option from a geotechnical perspective.
- With the four-sided box culvert, we expect some elastic recompression settlement. Elastic recompression settlement will occur as the structure is placed and backfilled. We conservatively estimate elastic recompression settlement in the range of 1 to 2 inches.
- We anticipate some consolidation settlement will occur after construction is complete. We conservatively estimate consolidation settlement on the order of 1 inch. In our opinion, this magnitude of settlement will be acceptable for the roadway and this Site. One practical strategy to mitigate post-construction settlement would be to delay final surfacing and paving as long as is practical.
- To help mitigate potential static and seismic settlement, reduce differential settlement, and to provide a uniform bearing surface for the new culvert and wing walls, the foundations should be placed on a 3-foot-thick geosynthetic-reinforced crushed-rock fill pad (reinforced fill pad) overlying the native alluvium subgrade.
- We anticipate the culvert replacement along this section of roadway can be completed with a full roadway closure and a traffic detour route. This will allow for construction using traditional cut-and-cover methods, which will save money and time compared to other methods (such as staged construction, or temporary shoo-fly).
- Traditional sloped open-cut excavation of the unconsolidated deposits with conventional equipment is feasible at the Site; however, the contractor will need to consider how to manage the very loose/soft native soils and shallow groundwater. For planning purposes, we recommend temporary excavations be sloped at 1.5H:1V.

3.1 Seismic Design Considerations

AASHTO standards state that box culverts and buried structures do not need to be designed for seismic effects unless they cross an active fault; however, the potential for soil liquefaction and slope movements shall be considered (AASHTO, 2020). As discussed in Section 2.2.1, there are no known active faults at the Site. At the preliminary design phase, and when the draft version of this report was issued (May 8, 2023), WSDOT policy was to exempt all buried culverts with a span width less than 20 feet (called Class 1 buried structures) from seismic design (WSDOT, 2022a). Since issuing the draft version of this report, WSDOT updated their Bridge Design Manual (BDM; initially in September 2023 and most recently in July 2024; WSDOT, 2024) and changed their policy for seismic design of culverts (Section 8.3.3.H of the BDM). Current policy is that all buried structures (culverts) shall be evaluated and designed for the Extreme Event I Limit State, including the effects of seismic loading and all geotechnical seismic hazards (WSDOT, 2024). Class 1 buried structures are exempt from internal structural design (racking), so this update is primarily relevant with regards to geotechnical seismic hazards for this Project, as discussed in the following sections.

3.1.1 Liquefaction

Liquefaction occurs when loose, saturated, and relatively cohesionless soil deposits temporarily lose strength and stiffness as a result of earthquake shaking. Potential effects of soil liquefaction include temporary loss of shallow foundation bearing capacity, loss of deep foundation axial and lateral capacity, vertical ground settlement, and lateral ground movement towards riverbanks or slopes—any of which could result in structural damage.

The Washington Department of Natural Resources (DNR) maps the Site as having very low liquefaction susceptibility; however, moderate to high and high liquefaction susceptibility zones are mapped directly to the north, east and south of the Site (DNR, 2007).

We evaluated soil liquefaction using the subsurface data collected from our boring advanced at the Site (AB-01) with the aid of WSliq, a liquefaction analysis software program that was created as part of an extended research project supported by WSDOT (WSDOT, 2009). To evaluate liquefaction, we examined a design earthquake with a 7 percent probability of exceedance in 75 years, or an approximate return period of 1,000 years in accordance with the AASHTO BDS (AASHTO, 2020) and WSDOT BDM (WSDOT, 2024). Based upon the SPT data collected in our boring (AB-01), we classify the Site soil profile as Site Class E and determined the site-adjusted peak ground acceleration for evaluating liquefaction was 0.476g. Based upon a United States Geological Survey (USGS) deaggregation (USGS, 2014), we evaluated liquefaction assuming an earthquake magnitude of 7.1. We assumed a groundwater level at 10 feet bgs based upon groundwater conditions observed in our boring.

Our analyses show that the saturated alluvium from 10 to 40 feet bgs is susceptible to liquefaction during a design earthquake. The consequences of soil liquefaction at this Site are in the form of vertical settlement which is expected to be on the order of 1 foot. Based upon the Site topography, lateral spreading is not expected to occur. Our recommendations to design against this hazard are presented in Section 3.2.1.

3.1.2 Fault Rupture

Due to the suspected long recurrence interval and distance of active faults to the Site (see Section 2.2.1), the risk of surficial ground rupture is considered to be low during the expected life of the replacement structure and does not need to be considered for design.

3.2 Four-Sided Box Culvert Foundations

The proposed replacement culvert will be a 15-foot-wide, 8-foot-high (interior dimensions), 48-foot-long precast concrete split box culvert. The bottom of the culvert will be at Elevation 88.34 and 87.24 feet at the culvert inlet and outlet, respectively (Exeltech, 2025b). Based on our exploration, foundation subgrade at this elevation will consist of loose non-plastic silt alluvium.

Based on the proposed replacement culvert geometry (Exeltech, 2025b), we calculate that the four-sided box culvert with streambed gravel inside of it will, on average across the width of the culvert, weigh less than the embankment fill that is excavated; therefore, Strength Limit State Bearing Resistance will not control the design of the structure.

For the purposes of evaluation and design, we recommend using a Service Limit State Bearing Resistance of 1,000 pounds per square foot (psf) for the four-sided box culvert. Provided the culvert is designed and constructed per the recommendations herein, we estimate post-construction consolidation settlement on the order of 1 inch total, and half an inch differential over the culvert length and span. We conservatively estimate elastic compression settlement, which will occur instantaneously as the culvert is placed and backfilled, of the order of 1 to 2 inches total and a half to 1 inch differential over the culvert length and span. Elastic compression settlement will not be noticed without a precise optical survey monitoring program. A bearing resistance factor (φ_b) of 1.0 may be used for the Service Limit State.

3.2.1 Reinforced Fill Pad

To help mitigate potential static and seismic settlement, reduce differential settlement, and provide a uniform bearing surface for the new culvert, we recommend the new culvert be placed on a 3-foot-thick geosynthetic-reinforced crushed-rock fill pad (reinforced fill pad) overlying the alluvium. We recognize that more robust and expensive liquefaction mitigation options, such as deep foundations and ground improvement exist, and we considered those for this Project. In our opinion, a reinforced fill pad is a cost-effective and pragmatic approach for the proposed short-span box culvert. The stiff, geogrid-reinforced, granular bearing pad will reduce differential culvert movement during the design level earthquake event to satisfy AASHTO/WSDOT performance objectives of noncollapse so that loss of life and serious injury due to structure collapse are minimized.

We recommend constructing the reinforced fill pad as follows:

- Sub-excavate below the planned culvert base by 3 feet and prepare foundation subgrade in accordance with the recommendations outlined in Section 4.3.1.

- Place a woven geotextile at the base of the excavation. The geotextile should meet the requirements of WSDOT Standard Specification 9-33.2(1), Table 3, for Soil Stabilization and high survivability (WSDOT, 2025).
- Place and compact at least 12 inches of angular Quarry Spalls (WSDOT Standard Specification 9-13.1(5) (WSDOT, 2025) atop the geotextile in 6-inch lifts with excavator bucket (tamping) or other compaction equipment. Quarry spalls may be placed in the wet conditions.
- Place and compact a total of 2 feet of crushed surfacing base course (CSBC) (WSDOT Standard Specification 9-03.9(3); WSDOT, 2025) with interbedded horizontal geosynthetic reinforcement atop the Quarry Spalls. The horizontal geosynthetic reinforcement should consist of a triaxial-pattern geosynthetic grid, such as Triax-TX-140 by Tensar, or equivalent.
- At least three layers of interbedded geosynthetic reinforcement should be placed; one at the Quarry Spalls-CSBC interface (interface); a second 8 inches above the interface, and the third 16 inches above the interface. CSBC and reinforcement should be placed in relatively dry conditions.

The Quarry Spalls and CSBC should be compacted to a relatively firm condition as specified in Sections 4.3.1 and 4.5. Placement and compaction methods should avoid excessive vibration to avoid 'pumping' of the loose/soft native subgrade soils beneath the geotextile.

The reinforced fill pad should extend outward from the outer edges of the culvert foundations (overbuilt) by at least 2 feet in all directions.

3.3 Culvert Wing Wall Design

The proposed culvert will have wing walls extending off all four corners. The wing walls will be 10 feet long on the inlet side and 15 feet long on the outlet side. The wing walls will be contractor-designed precast concrete walls supported on spread footings. We provide the following recommendations for the design and construction of the culvert wing walls.

To avoid potential differential movement between the wing wall and box culvert that may occur due to the expected subgrade, we recommend the same 3-foot-thick reinforced fill pad as specified for the culvert (see Section 3.2.1 above) be placed under each wing wall footing. The reinforced fill pad should extend the full width of the footing under all the wing walls. To avoid such aesthetic issues with differential wing wall movement, we recommend the wing wall panels be structurally connected (to the culvert and individual segments to one another) using epoxy-doweled anchors and structural steel clips, or other methods determined to be appropriate by the culvert designer.

We recommend wing wall foundations ranging from 4 to 8 feet wide (effective width) be designed for a maximum Nominal (unfactored) Bearing Resistance of 5,000 psf and Service Limit State Bearing Resistance of 2,000 psf. These values assume foundations may be submerged at times and are embedded at least 2 feet below the design scour level.

LRFD Resistance Factors are provided in Section 3.5. The Service Limit State Bearing Resistance of 2,000 psf corresponds to about 2 inches of total settlement. Differential

settlement over the footing lengths are estimated to be on the order of one-half the total settlement. About half of the settlement is anticipated to occur as loads are applied with possible total post-construction settlement on the order of 1 inch total and half an inch differential over the wall length.

Lateral earth pressure and base friction design recommendations are provided below in Section 3.4.

3.3.1 Global Stability

We evaluated the global stability for typical wing walls with exposed heights ranging from about 1 to 7 feet using the Site grading and topography (Exeltech, 2025b) and subsurface data we collected in our boring. To evaluate global stability, we used the two-dimensional limit equilibrium computer program Slide2 (Rocscience, 2023), and guidance from AASHTO BDS (AASHTO, 2020) and WSDOT Geotechnical Design Manual (GDM; WSDOT, 2022b).

The relative global stability of a wall or slope can be expressed in terms of Factor of Safety (FOS) against slope failure, defined as the ratio of soil shear resistance to driving forces and moments from gravity or earthquake loading along a potential failure surface. A "just-stable" condition would result in a FOS of 1.0, while an unstable condition would result in a FOS less than 1.0, implying failure is imminent or is already occurring.

Section 7.4 of the WSDOT GDM recommends a minimum slope stability FOS for walls and slopes adjacent to, but not directly supporting structures (such as a culvert foundations) of 1.30 for static conditions and 1.05 for seismic conditions.

For static conditions, we analyzed stability with and without a uniform vertical surcharge pressure of 250 psf atop the walls to represent transient traffic/truck loading on the road above. The results show FOS of 1.30 or greater, indicating sufficiently stable wall configurations for static conditions.

For seismic nonliquefied conditions, the traffic vertical surcharge above the wall was removed and a lateral uniform horizontal seismic coefficient (k_h) equal to one-half of the peak ground acceleration (see Section 3.1.1) of 0.24g (where g is the acceleration of gravity) was applied to the wall. The results show FOS of 1.05, indicating sufficiently stable wall configurations for seismic nonliquefied conditions.

Similar to the culvert, the saturated native soils underlying the wing wall foundations are susceptible to liquefaction during a design earthquake. Inclusion of the reinforced fill pad is expected to limit differential settlement to satisfy the noncollapse intents of the WSDOT and AASHTO design methodologies, as discussed for the culvert in Section 3.2.1. Furthermore, based on guidance from WSDOT GDM Section 6-1.2.1, the potential for resulting life safety issues from wall deformation is low because the walls are less than 10 feet in height.

3.4 Lateral Earth Pressures and Base Friction

The sides of the box culvert, wing walls, and head walls will be subject to lateral earth pressures from the backfill material. Because the box culvert will be rigid, at-rest earth pressures will develop.

Depending on how the wing walls are designed and connected to the box culvert, wing walls that extend out and away from the culvert may tend to be unrestrained, such that active earth pressures will develop behind them. Head walls are expected to yield such that active earth pressures will develop. To invoke active earth pressure conditions, a wall must be capable of yielding laterally at least 0.001 to 0.002H, where H is the exposed height of the wall; otherwise, at-rest conditions should be assumed.

Recommended lateral earth pressures are presented in Table 1. The earth pressures provided assume structural fill material described in Section 4.5 will be used as backfill, and that drainage will be installed behind the culvert walls to prevent the buildup of hydrostatic pressures, as shown on design plans (Exeltech, 2025b).

Table 1. Lateral Earth Pressure Parameters

Earth Pressure Condition	Backslope Condition	Equivalent Fluid Weight (pcf)[1,3]	Surcharge Pressure (psf)[1,3]
Active[2]	Level	31	0.24*S
	2H:1V	42	See Note 4
At-Rest	Level	50	See Note 4
	2H:1V	72	
Passive[5]	Level	546	See Note 4

Notes:

1. psf = pounds per square foot; pcf = pounds per cubic foot.
2. To invoke active earth pressure conditions, the wall must be capable of yielding laterally at least 0.001 to 0.002H (where H is the exposed height of the wall); otherwise, at-rest earth pressure condition shall be assumed.
3. The equivalent fluid densities provided above are distributed triangularly along the exposed height of the wall. The uniform lateral surcharge is distributed uniformly (rectangularly) along the exposed height of the wall.
4. S is the surcharge pressure at the ground surface immediately above/behind the wall with level backfill/backslope. If surcharge pressures are not immediately above/behind the wall or backfill is sloped, Aspect should be consulted to evaluate/revise surcharge pressure recommendations working in tandem with the project structural engineer.
5. Ultimate passive pressures are presented; a Strength Limit State resistance factor (ϕ_{ep}-) of 0.50 should be applied for design. Passive pressure contribution should be ignored within 2 feet of the ground surface, or to scour depth in front of wall location.

Sliding resistance is developed from the friction occurring between the bottom of the foundation and the subgrade soil, and the passive resistance developed from the soil around the foundation. For passive resistance against the sides of foundations, the nominal passive values provided in Table 1 may be used for design. For frictional resistance along the bottoms of precast concrete footings placed atop CSBC, an unfactored sliding coefficient of 0.5 may be used. LRFD Resistance Factors for determining limit state sliding and passive resistance are provided in Table 2.

3.5 Load and Resistance Factors

The recommended LRFD resistance factors required to calculate Service, Strength, and Extreme Limit States based upon the nominal or ultimate (unfactored) values are provided in Table 2 below.

Table 2. LRFD Resistance Factors for Shallow Foundations

Limit State	Bearing Resistance, ϕ_b	Shear Resistance to Sliding, ϕ_τ	Passive Pressure Resistance to Sliding, ϕ_{ep}
Service	1.0	-	-
Strength	0.45	0.9[1]	0.5
Extreme	0.9	0.9	0.9

Notes:
1. Assumes precast concrete foundations.

3.6 Pavement Restoration and Permanent Slopes

We anticipate new pavement will consist of hot-mix-asphalt (HMA), and the subgrade will be properly compacted structural fill as detailed in Section 4.5. As requested by the County, we examined pavement design in detail for the Project using traffic data provided by the County. Based upon the traffic loading and subgrade conditions we calculate that a design pavement section consisting of 4 inches of new HMA overtop a minimum of 8 inches of Crushed Surfacing (per WSDOT Standard Specification 9-03.9(3), combined base course and top course; CSBC and CSTC) is sufficient from a structural standpoint. We understand that the County prefers 12 inches of Crushed Surfacing (2 inches of CSTC and 10 inches of CSBC) based upon their roadway standards and experience. We consider HMA Class 0.5 inches and Performance Grade binder of PG 64-22 to be appropriate for the Project.

To reduce potential serviceability issues associated with post-construction consolidation settlement, we recommend delaying final surfacing and paving of the roadway as much as practical (a minimum of 2 weeks following backfill of the culvert excavation). Pavement subgrade should be prepared in accordance with Section 4.3.

Based upon input from the County, permanent slopes for the Project should have a maximum inclination of 3H:1V.

Details on our pavement design calculations are in the sections below.

3.6.1 Pavement Evaluation

We developed the following assumptions and parameters for our pavement evaluation and recommended design section.

3.6.2 Expected Traffic Loading

As provided by the County, we assumed the following design inputs:

- Average Annual Daily Traffic (AADT): 2,500 vehicles per lane (assumed half of 5,000 AADT for roadway provided by the County)
- Truck Volume Percentage: 2.5 percent

Using this traffic data provided by the County, we made the following assumptions to inform our pavement design.

- Load equivalency factors (LEFs) of 0.0007 for light vehicles (0.0007 equivalent 18-kip single axle loads [ESALs] per vehicle), and 2.5 for trucks to calculate the total number of ESALs over the pavement design life.
- Annual AADT growth rate for light vehicles and trucks: 2.0 percent
- Pavement design life: 20 years

Based upon the expected traffic loading and design assumptions above, we calculate 1,333,173 ESALs over the pavement design life.

3.6.3 Pavement Design Parameters

To inform design of the new pavement we utilized the 1993 AASHTO *Guide for Design of Pavement Structures* methodology for flexible pavements (AASHTO, 1993) and followed general guidance provided by the Washington Department of Transportation (WSDOT) Pavement Policy (WSDOT, 2018).

We used the design parameters presented in Table 3 for our evaluation.

Table 3. Pavement Design Parameters

Parameter	Value
Reliability, R	85%
Combined Standard Error, S_o	0.45
Initial Serviceability, p_i	4.5
Terminal Serviceability, p_t	3
Drainage Coefficient, m	1.0
Layer Coefficients, a New Hot Mix Asphalt Crushed Surfacing (Base Course and Top Course)	 0.40 0.13
Subgrade Resilient Modulus, Mr	20,000 psi

3.6.4 Pavement Evaluation Results

Based upon the expected traffic loading and assumed pavement design parameters in Table 3, we calculate a required structural number of 2.55. Using the drainage and layer coefficients in Table 3, we calculate that a design pavement section consisting of 4 inches

of new HMA overtop of a minimum of 8 inches of crushed surfacing (combined base course and top course; CSBC and CSTC) will provide a structural number of 2.64 and thus is sufficient for the expected traffic loading and assumed design life. The County's preferred roadway section consisting of 4 inches of HMA overtop 12 inches of crushed surfacing will provide a structural number of 3.16.

4 Construction Considerations

In our opinion, excavation can generally be accomplished using standard excavation equipment. Construction and earthwork are typically most economical when performed under dry-weather conditions. Appropriate erosion control measures should be implemented prior to beginning earthwork activities in accordance with the local regulations. While not directly observed in significant quantities in our subsurface exploration, the presence of potential obstructions, such as small boulders, buried logs, or other debris, should be anticipated.

4.1 Temporary Excavation Slopes

Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. All temporary cuts in excess of 4 feet in height that are not protected by trench boxes or otherwise shored should be sloped in accordance with Part N of Washington Administrative Code (WAC) 296-155 for worker safety (WSL, 2022).

The fill and native alluvium soils across the Site classify as Occupational Safety and Health Administration (OSHA) Soil Classification Type C. Temporary excavation side slopes are anticipated to stand as steep as 1.5H:1V. The cut-slope inclinations estimated above are for planning purposes only and should be evaluated in the field by a geotechnical engineer. Flatter slopes are required where groundwater seepage exists, if traffic or construction surcharges are present, or where less stable soils are present. The contractor should monitor the stability of the temporary cut-slopes and adjust the construction schedule and slope inclination accordingly.

4.2 Construction Dewatering

We expect a bypass for Stevens Creek will be installed during construction. Groundwater is influenced by the flow of the creek and the time of year. Diverting the stream will bring down the water level somewhat; however, construction dewatering will likely be necessary as well. Ideally, construction should be completed during the late summer or early fall months, when the creek flow will be at its seasonal low level.

We anticipate that, after the temporary stream bypass pumping system is in place and operational, temporary excavations down to the base of excavation, (approximate Elevation 84 to 85 feet) can be accomplished with aid of strategically placed sumps and submersible pumps. However, the contractor should be responsible for assessing conditions, and designing and operating a construction dewatering system that enables the work to be completed in a dry excavation.

4.3 Subgrade Preparation

Exposed subgrades should be evaluated either by proof rolling or another method of subgrade verification. Proof-rolls should be performed with a fully loaded dump truck or similar heavy, rubber-tire construction equipment to identify unsuitable areas. If subgrade evaluation occurs during wet conditions, or if proof rolling the subgrades will result in excessive disturbance, subgrades should be evaluated by a qualified geotechnical

engineer using a steel foundation probe. We recommend that Aspect be retained for these construction inspections. Unsuitable areas identified during the field evaluation should be compacted to a firm condition or be excavated and replaced with structural fill.

4.3.1 Foundations

All foundations should be constructed atop a stabilized subgrade (via construction of a reinforced fill pad; see Section 3.2.1). An Aspect engineer should observe the native subgrade prior to the stabilization measures being implemented to verify they have been prepared in conformance with our recommendations. Subgrades should be clear of all construction debris and loose or disturbed soil. Appreciable soft or disturbed foundation subgrade areas identified during evaluation should be sub excavated and replaced with quarry spalls or CSBC.

Aspect should also be present during placement of the fill pad materials to verify the recommended fill pad thickness is sufficient to establish a firm base for the foundations. Quarry spalls should be aggressively tamped with an excavator bucket into a firm and unyielding condition. Aggregates should be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM D1557 using mechanical methods (i.e., vibratory plate compactor or an excavator mounted compactor [ho-pac]).

4.4 Wet Weather Conditions

If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is above optimum and difficult to control, the following recommendations apply:

- Earthwork should be performed in small areas to minimize exposure.
- Structural fill placed during wet weather should consist of material that is not moisture sensitive and can meet the various structural fill requirements for the Project.
- Excavation or removal of unsuitable soils should be followed promptly by placement and compaction of the specified structural fill.
- The size, type, and access of construction equipment used may have to be limited to prevent soil disturbance, including using long-reach excavators and/or wide-tracked and low-pressure equipment.
- The ground surface within the construction area should be graded to promote runoff of surface water away from the slopes and prevent water ponding.
- The ground surface within the construction area should be properly covered and under no circumstances left uncompacted and/or exposed to moisture. Soils that become too wet for compaction should be removed and replaced with specified structural fill.
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed prior to placement, compaction requirements are met, and Site drainage is appropriate.
- On-Site soil considered for reuse as structural fill should be covered and/or protected from becoming excessively wet.

4.5 Structural Fill Material and Compaction

The suitability of excavated Site soils for use as structural fill depends on the gradation and moisture content of the soil when it is placed. As the amount of fines (the portion passing through a U.S. Standard No. 200 sieve) increases, the soil becomes increasingly sensitive to small changes in moisture content and adequate compaction becomes more difficult to achieve. Soil containing more than about 5 percent fines cannot be consistently compacted to a dense nonyielding condition when the moisture content is greater than about 3 to 4 percent above or below optimum.

The excavation for placement of the new culvert will primarily excavate the existing embankment fill that generally consists of sand and gravel with varying amounts of fines (see Section 2.3.3). Portions of the on-Site embankment fill soils contain a significant amount of fines; however, they may be selectively reused as structural fill in place of Gravel Backfill for Walls (see Table 3 below) when placed outside of 2 feet from culvert walls, if they can be properly moisture conditioned and deleterious materials (such as organics or other fill debris) is removed.

Below the existing embankment, the on-Site native soils that will be excavated are too wet and contain too high of a fines content to be reused as structural fill. This material should be planned to be exported from the site and disposed of at a suitable facility.

Recommendations for structural fill are described in appropriate sections of the report and summarized below in Table 4.

Table 4. Fill Type and Compaction Requirements

Material Type and WSDOT Specification[1]	Material Usage	Compaction[2]
Crushed Surfacing Base Course (CSBC), as specified in Section 9-03.9(3)	Bearing pad below culvert foundation Pavement base course, below top course	95 percent
Crushed Surfacing Top Course (CSTC), as specified in Section 9-03.9(3)	Pavement top course, below HMA pavement	95 percent
Gravel Backfill for Walls, as specified in Section 9-03.12(2)	Primary culvert excavation backfill except where materials listed above are specified	95 percent, except within 2 feet of culvert walls, where small compaction equipment should be utilized and backfill compacted to 90 percent to avoid overstressing walls.
Quarry Spalls, as specified in Section 9-13.1(5)	Lower 12 inches of bearing pad below culvert foundation	Quarry spalls should be aggressively tamped into place with the bucket of a large excavator in lifts not exceeding 6 inches thick

Notes:
1 - Per WSDOT Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT, 2023)
2. Compaction percentage specified as percent of maximum dry density, as determined by ASTM D1557

5 Additional Design and Consultation Services

As the plans, specifications, and estimates (PS&E) documents are finalized, Aspect will be available to collaborate with the design team to finalize geotechnical and structural elements of the Project. Before construction begins, we recommend that:

Aspect continue to meet with the design team, as needed, to address geotechnical questions that may arise throughout the remainder of the design process.

Aspect review the geotechnical elements of the Project plans to see that the geotechnical engineering recommendations are properly interpreted and incorporated into the design.

We will be available to provide geotechnical engineering and monitoring services during construction. The integrity of the geotechnical elements depends on proper Site preparation and construction procedures. In addition, engineering decisions may have to be made in the field if variations in subsurface conditions become apparent.

During the construction phase of the Project, we recommend that Aspect be retained to perform the following tasks:

- Observe and evaluate temporary excavations
- Observe and evaluate subgrade prior to placement of geotextiles and structural fill
- Observe and evaluate subgrade for all walls, culvert foundations, and pavements
- Observe reinforced fill pad construction and structural fill placement
- Attend meetings by telephone or on-Site, as needed
- Advise on other geotechnical engineering considerations that may arise during construction

The purpose of our observations is to verify compliance with design concepts and recommendations, and to allow design changes or evaluation of appropriate construction methods if subsurface conditions differ from those anticipated prior to the start of construction.

6 References

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7 Limitations

Work for this project was performed for Exeltech Consulting Inc. (Client), and this report was prepared consistent with recognized standards of professionals in the same locality and involving similar conditions, at the time the work was performed. No other warranty, expressed or implied, is made by Aspect Consulting (Aspect).

Recommendations presented herein are based on our interpretation of site conditions, geotechnical engineering calculations, and judgment in accordance with our mutually agreed-upon scope of work. Our recommendations are unique and specific to the project, site, and Client. Application of this report for any purpose other than the project should be done only after consultation with Aspect.

Variations may exist between the soil and groundwater conditions reported and those actually underlying the site. The nature and extent of such soil variations may change over time and may not be evident before construction begins. If any soil conditions are encountered at the site that are different from those described in this report, Aspect should be notified immediately to review the applicability of our recommendations.

It is the Client's responsibility to see that all parties to this project, including the designer, contractor, subcontractors, and agents, are made aware of this report in its entirety.

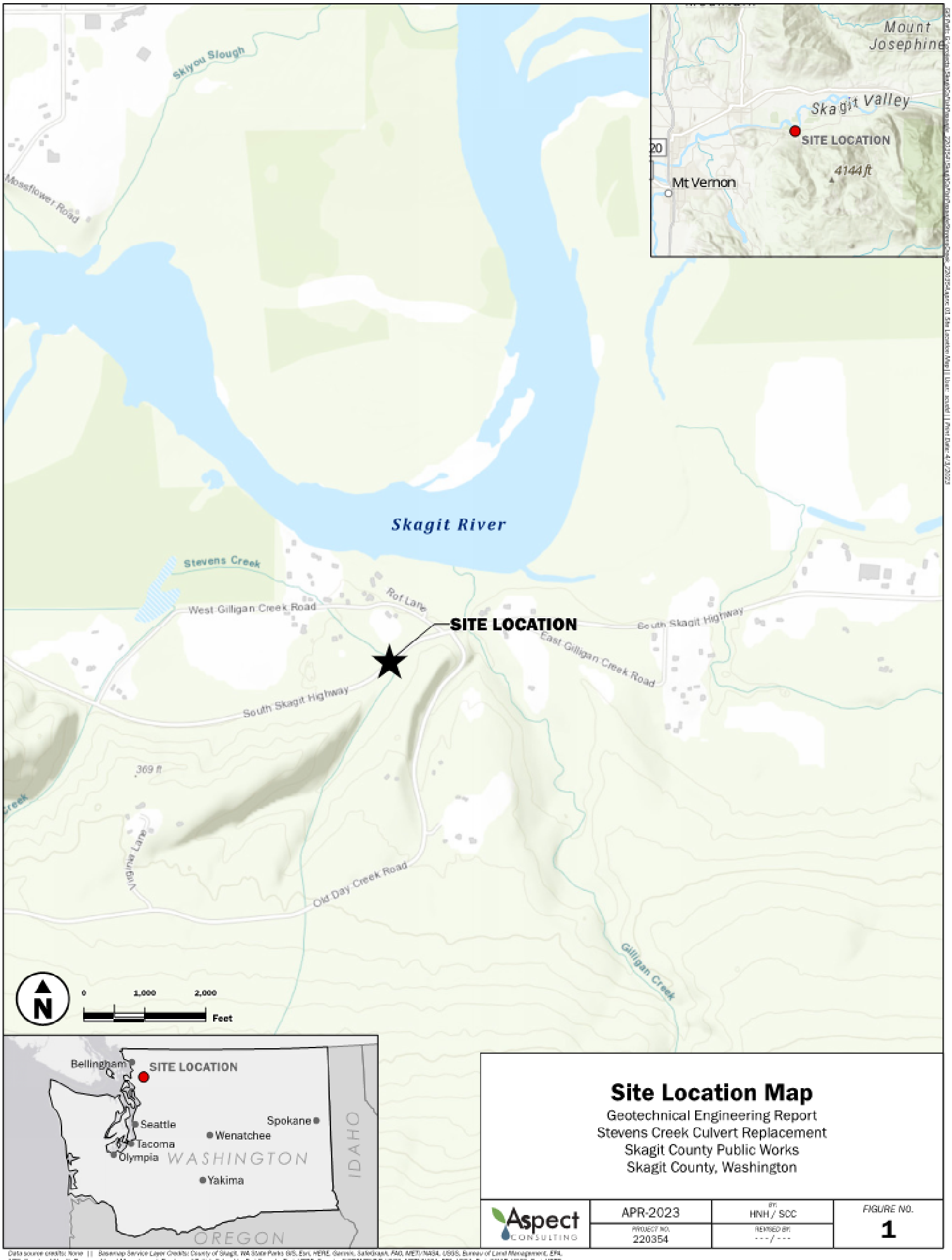
The scope of work does not include services related to construction safety precautions. Site safety is typically the responsibility of the contractor, and our recommendations are not intended to direct the contractor’s site safety methods, techniques, sequences, or procedures. The scope of our work also does not include the assessment of environmental characteristics, particularly those involving potentially hazardous substances in soil or groundwater.

All reports prepared by Aspect for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect. Aspect’s original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Appendix C titled “Report Limitations and Guidelines for Use” for additional information governing the use of this report.

We appreciate the opportunity to perform these services. If you have any questions, please call Henry N. Haselton, PE, Project Geotechnical Engineer, at 360.483.0664, or Erik Andersen, PE, Senior Principal Geotechnical Engineer, at 360.746.8964.

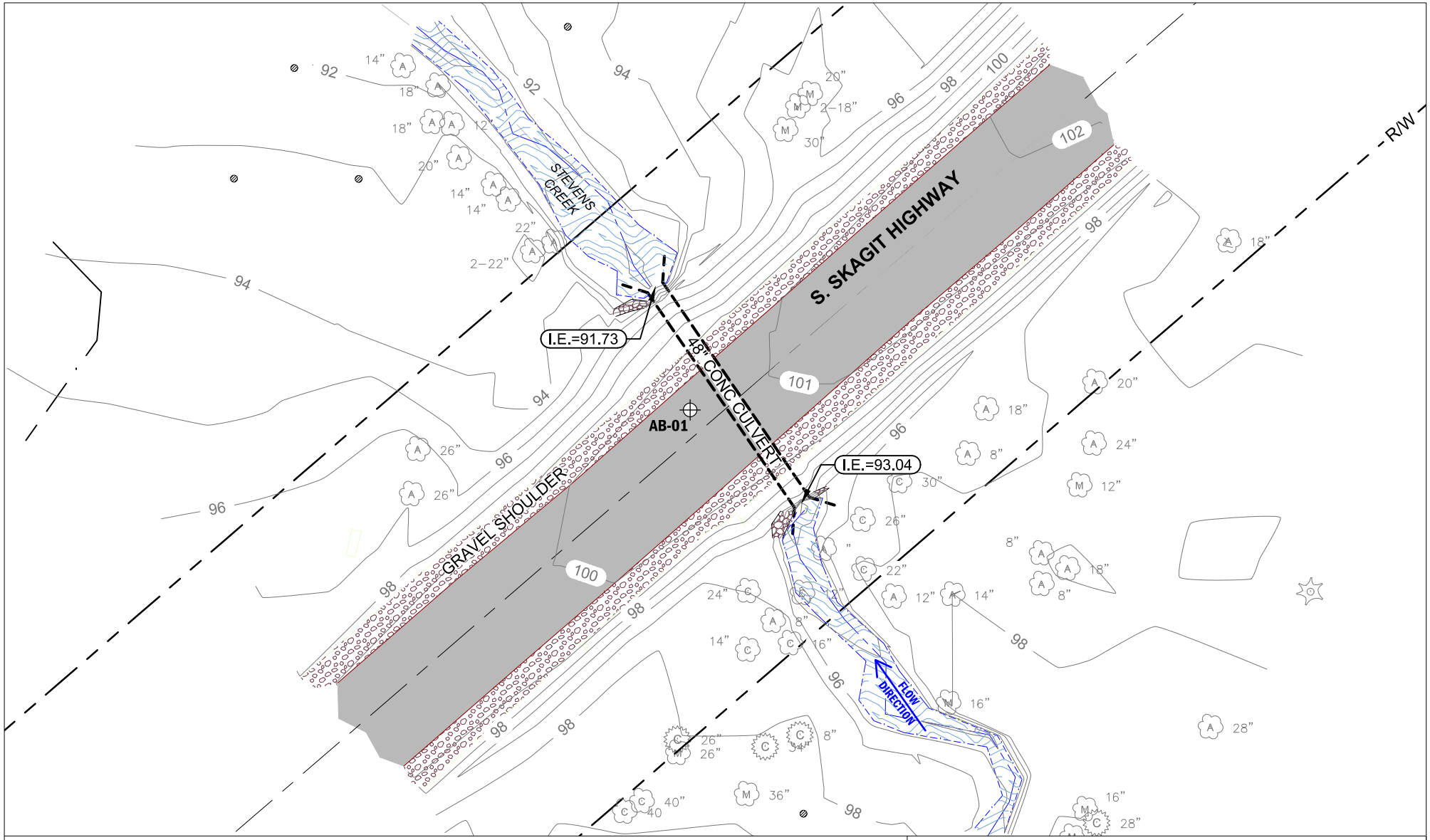
FIGURES



Site Location Map

Geotechnical Engineering Report
Stevens Creek Culvert Replacement
Skagit County Public Works
Skagit County, Washington

Aspect Consulting	APR-2023	BY: HNH / SCC	FIGURE NO. 1
	PROJECT NO. 220354	REVISED BY: ---/---	



Source: Base map provided by Harmsen Engineers, Surveyors, dated 2/28/2023.

Legend

- Boring Location (Aspect, 2023)
- OHW Ordinary High Water (determined by others)

VERTICAL DATUM NAVD88

0 30 60 Feet

Site and Exploration Map

Geotechnical Engineering Report
Stevens Creek Culvert Replacement
Skagit County Public Works
Skagit County, Washington

Aspect CONSULTING	May-2023	BY: HNH/SCC	FIGURE NO. 2
	PROJECT NO. 220354	REVISED BY: -	

CAD Path: Q:\Skagit County Public Works\220354 Stevens Creek\220354-02 (22-361 S.SKAGIT HWY CREEK CROSSINGS).dwg 02 Site and Exploration Map || Date Saved: May 04, 2023 12:34pm || User: scudd

APPENDIX A

Subsurface Exploration Logs

A. Subsurface Explorations

On March 31, 2023, Western States Soil Conservation drilled one boring, designated AB-01, to a total exploration depth of 61.5 feet bgs. The boring location is shown on Figure 2. The boring was advanced with a CME 75 truck-mounted drill rig using mud rotary drilling methods.

Soil sampling was completed at selected depth intervals using the Standard Penetration Test (SPT) in general accordance with ASTM International (ASTM) D1586. The test typically involves driving a 2-inch-outside-diameter split-barrel sampler a distance of 18 inches into the soil with a 140-pound automatic-trip hammer free falling from a distance of 30 inches. The number of blows for each 6-inch interval is recorded, and the number of blows required to drive the sampler the final 12 inches is known as the Standard Penetration Resistance ("N") or blow count. The resistance, or N-value, provides a measure of the relative density of granular soils or the relative consistency of cohesive soils.

An Aspect representative was present throughout the field exploration program to observe the drilling procedure, collect soil samples, and prepare descriptive logs of each boring. Soils were classified in general accordance with ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. The summary exploration logs represent our interpretation of the contents of the field logs. The stratigraphic contacts shown on the summary log represent the approximate boundaries between soil types; actual transitions may be more gradual. The subsurface conditions depicted are only for the specific date and location reported, and therefore, are not necessarily representative of other locations and times.

Coarse-Grained Soils - More than 50%[1] Retained on No. 200 Sieve	Gravels - More than 50%[1] of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines	GW	Well-graded GRAVEL Well-graded GRAVEL WITH SAND
			GP	Poorly-graded GRAVEL Poorly-graded GRAVEL WITH SAND
		≥15% Fines	GM	SILTY GRAVEL SILTY GRAVEL WITH SAND
			GC	CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND
	Sands - 50%[1] or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines	SW	Well-graded SAND Well-graded SAND WITH GRAVEL
			SP	Poorly-graded SAND Poorly-graded SAND WITH GRAVEL
		≥15% Fines	SM	SILTY SAND SILTY SAND WITH GRAVEL
			SC	CLAYEY SAND CLAYEY SAND WITH GRAVEL
Fine-Grained Soils - 50%[1] or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50%		ML	SILT SANDY or GRAVELLY SILT SILT WITH SAND SILT WITH GRAVEL
			CL	LEAN CLAY SANDY or GRAVELLY LEAN CLAY LEAN CLAY WITH SAND LEAN CLAY WITH GRAVEL
			OL	ORGANIC SILT SANDY or GRAVELLY ORGANIC SILT ORGANIC SILT WITH SAND ORGANIC SILT WITH GRAVEL
	Silts and Clays Liquid Limit 50% or More		MH	ELASTIC SILT SANDY or GRAVELLY ELASTIC SILT ELASTIC SILT WITH SAND ELASTIC SILT WITH GRAVEL
			CH	FAT CLAY SANDY or GRAVELLY FAT CLAY FAT CLAY WITH SAND FAT CLAY WITH GRAVEL
			OH	ORGANIC CLAY SANDY or GRAVELLY ORGANIC CLAY ORGANIC CLAY WITH SAND ORGANIC CLAY WITH GRAVEL
Highly Organic Soils			PT	PEAT and other mostly organic soils

"WITH SILT" or "WITH CLAY" means 5 to 15% silt and clay, denoted by a "-" in the group name; e.g., SP-SM • "SILTY" or "CLAYEY" means >15% silt and clay • "WITH SAND" or "WITH GRAVEL" means 15 to 30% sand and gravel. • "SANDY" or "GRAVELLY" means >30% sand and gravel. • "Well-graded" means approximately equal amounts of fine to coarse grain sizes • "Poorly graded" means unequal amounts of grain sizes • Group names separated by "/" means soil contains layers of the two soil types; e.g., SM/ML.

Soils were described and identified in the field in general accordance with the methods described in ASTM D2488. Where indicated in the log, soils were classified using ASTM D2487 or other laboratory tests as appropriate. Refer to the report accompanying these exploration logs for details.

1. Estimated or measured percentage by dry weight
2. (SPT) Standard Penetration Test (ASTM D1586)
3. Determined by SPT, DCPT (ASTM STP399) or other field methods. See report text for details.

GEOTECHNICAL LAB TESTS

MC	=	Natural Moisture Content
PS	=	Particle Size Distribution
FC	=	Fines Content (% < 0.075 mm)
GH	=	Hydrometer Test
AL	=	Atterberg Limits
C	=	Consolidation Test
Str	=	Strength Test
OC	=	Organic Content (% Loss by Ignition)
Comp	=	Proctor Test
K	=	Hydraulic Conductivity Test
SG	=	Specific Gravity Test

CHEMICAL LAB TESTS

Organic Chemicals

BTEX	=	Benzene, Toluene, Ethylbenzene, Xylenes
TPH-Dx	=	Diesel and Oil-Range Petroleum Hydrocarbons
TPH-G	=	Gasoline-Range Petroleum Hydrocarbons
VOCs	=	Volatile Organic Compounds
SVOCs	=	Semi-Volatile Organic Compounds
PAHs	=	Polycyclic Aromatic Hydrocarbon Compounds
PCBs	=	Polychlorinated Biphenyls

Metals

RCRA8	=	As, Ba, Cd, Cr, Pb, Hg, Se, Ag, (d = dissolved, t = total)
MTCA5	=	As, Cd, Cr, Hg, Pb (d = dissolved, t = total)
PP-13	=	Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, Zn (d=dissolved, t=total)

FIELD TESTS

PID	=	Photoionization Detector
Sheen	=	Oil Sheen Test
SPT[2]	=	Standard Penetration Test
NSPT	=	Non-Standard Penetration Test
DCPT	=	Dynamic Cone Penetration Test

COMPONENT DEFINITIONS

Descriptive Term		*Size Range and Sieve Number*
Boulders	=	Larger than 12 inches
Cobbles	=	3 inches to 12 inches
Coarse Gravel	=	3 inches to 3/4 inches
Fine Gravel	=	3/4 inches to No. 4 (4.75 mm)
Coarse Sand	=	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	=	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	=	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	=	Smaller than No. 200 (0.075 mm)

ESTIMATED[1] PERCENTAGE

% by Weight		*Modifier*	*% by Weight*		*Modifier*
<1	=	Subtrace	15 to 25	=	Little
1 to <5	=	Trace	30 to 45	=	Some
5 to 10	=	Few	>50	=	Mostly

MOISTURE CONTENT

Dry	=	Absence of moisture, dusty, dry to the touch
Slightly Moist	=	Perceptible moisture
Moist	=	Damp but no visible water
Very Moist	=	Water visible but not free draining
Wet	=	Visible free water, usually from below water table

RELATIVE DENSITY

Non-Cohesive or Coarse-Grained Soils

Density[3]		*SPT*[2] *Blows/Foot*	*Penetration with 1/2" Diameter Rod*
Very Loose	=	0 to 4	≥ 2'
Loose	=	5 to 10	1' to 2'
Medium Dense	=	11 to 30	3" to 1'
Dense	=	31 to 50	1" to 3"
Very Dense	=	> 50	< 1"

CONSISTENCY

Cohesive or Fine-Grained Soils

Consistency[3]		*SPT*[2] *Blows/Foot*	*Manual Test*
Very Soft	=	0 to 1	Penetrated >1" easily by thumb. Extrudes between thumb & fingers.
Soft	=	2 to 4	Penetrated 1/4" to 1" easily by thumb. Easily molded.
Medium Stiff	=	5 to 8	Penetrated >1/4" with effort by thumb. Molded with strong pressure.
Stiff	=	9 to 15	Indented ~1/4" with effort by thumb.
Very Stiff	=	16 to 30	Indented easily by thumbnail.
Hard	=	> 30	Indented with difficulty by thumbnail.

GEOLOGIC CONTACTS

Observed and Distinct ——— Observed and Gradual ——— Inferred - - - -

Aspect CONSULTING

Exploration Log Key

Aspect CONSULTING	Stevens Creek - 220354		Geotechnical Exploration Log	
	Project Address & Site Specific Location Skagit County, WA, S. Skagit Hwy, Approximately 7 feet SW of existing culvert		*Coordinates (Lat,Lon WGS84)* 48.4844, -122.1389	*Exploration Number* **AB-01**
Contractor Western States Soil Conservation	*Equipment* CME 75 Truck Rig	*Sampling Method* Autohammer; 140 lb hammer; 30" drop	*Ground Surface Elev. (NAVD88)* 100'	
Operator Lucas Randall	*Exploration Method(s)* Mud rotary	*Work Start/Completion Dates* 3/31/2023	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%) ● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	99							ASPHALT; approximately 5-inches of chipseal	1
								FILL	
2	98	Capped with gravel and 1-foot-thick layer of cold patch asphalt.						SILTY SAND WITH GRAVEL (SM); medium dense, moist, gray; fine to coarse sand; fine to coarse, subangular to subrounded gravel; trace organics.	2
3	97		S-1	12.6	9 9 6	PS FC=16.6%			3
4	96								4
5	95		S-2		7 6 6			GRAVEL WITH SILT AND SAND (GW-GM); medium dense, moist, gray; fine to coarse, angular to subrounded gravel; fine to coarse sand; trace organics.	5
6	94								6
7	93								7
8	92	Boring backfilled with 3/8-inch bentonite chips to 3 feet bgs.	S-3		4 9 7			GRAVEL WITH SAND (GW); medium dense, moist, gray; fine to coarse, angular to rounded gravel; fine to coarse sand; subtrace organics.	8
9	91								9
10	90	▽ 3/31/3023 Infered from soil sample moisture.	S-4	20.9	8 5 4	PS FC=14.3%		**ALLUVIUM (Qal)** SAND WITH SILT AND GRAVEL (SP-SM); loose, wet, gray; fine to coarse sand; fine to coarse, subrounded to rounded gravel; trace organics.	10
11	89	Boring backfilled with bentonite grout to 10 feet bgs.							11
12	88								12
13	87		S-5	29.8	1 1 2	MC		SANDY SILT (ML); very loose, wet, gray; non-plastic; fine to medium sand.	13
14	86								14
15	85		S-6	28.4	2 1 1	AL			15
16	84								16
17	83								17
18	82								18
19	81								19
20	80		S-7		2 3 4			Becomes loose.	20
21	79								21
22	78								22
23	77								23
24	76								24

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◪ Split Barrel 2" X 1.375" (SPT)

Plastic Limit ⊢⊣ Liquid Limit

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: BW
Approved by: HNH, 4/28/2023

Exploration Log AB-01
Sheet 1 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE P:\GINT\PROJECTS\220354 - STEVENS CREEK.GPJ July 15, 2024

Aspect CONSULTING	Stevens Creek - 220354		Geotechnical Exploration Log	
	Project Address & Site Specific Location Skagit County, WA, S. Skagit Hwy, Approximately 7 feet SW of existing culvert		*Coordinates (Lat,Lon WGS84)* 48.4844, -122.1389	*Exploration Number* **AB-01**
Contractor Western States Soil Conservation	*Equipment* CME 75 Truck Rig	*Sampling Method* Autohammer; 140 lb hammer; 30" drop	*Ground Surface Elev. (NAVD88)* 100'	
Operator Lucas Randall	*Exploration Method(s)* Mud rotary	*Work Start/Completion Dates* 3/31/2023	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%) ● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
26	74		S-8	28.3 ●	2 2 3	FC FC=53.7%		SANDY SILT (ML); very loose, wet, gray; non-plastic; fine to medium sand. (continued)	26
27	73								27
28	72								28
29	71								29
30	70				6				30
31	69		S-9		3 3				31
32	68								32
33	67								33
34	66								34
35	65		S-10	37.8 ●	10 2 2	FC FC=43.1%		SILTY SAND (SM); very loose, wet, gray brown; fine sand.	35
36	64								36
37	63								37
38	62								38
39	61								39
40	60		S-11	9.8 ●	39 45 38	PS FC=15.9%		**NONGLACIAL SEDIMENTS (Qo)** SILTY GRAVEL WITH SAND (GM); very dense, wet, green gray; fine to coarse, angular to subrounded gravel; fine to coarse sand.	40
41	59								41
42	58	Drill chatter observed.							42
43	57								43
44	56								44
45	55		S-12		1 13 18			Becomes dense.	45
46	54								46
47	53								47
48	52	Drill chatter observed.							48
49	51								49

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◪ Split Barrel 2" X 1.375" (SPT)

Plastic Limit ⊢ Liquid Limit

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: BW
Approved by: HNH, 4/28/2023

Exploration Log AB-01
Sheet 2 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE P:\GINT\WPROJECTS\220354 - STEVENS CREEK.GPJ July 15, 2024

Aspect CONSULTING	Stevens Creek - 220354		Geotechnical Exploration Log	
	Project Address & Site Specific Location Skagit County, WA, S. Skagit Hwy, Approximately 7 feet SW of existing culvert		*Coordinates (Lat,Lon WGS84)* 48.4844, -122.1389	*Exploration Number* **AB-01**
Contractor Western States Soil Conservation	*Equipment* CME 75 Truck Rig	*Sampling Method* Autohammer; 140 lb hammer; 30" drop	*Ground Surface Elev. (NAVD88)* 100'	
Operator Lucas Randall	*Exploration Method(s)* Mud rotary	*Work Start/Completion Dates* 3/31/2023	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
51	49	Drill chatter observed.	S-13	12.2 ● ▲	18 9 12	PS FC=14.2%		GRAVEL WITH SILT AND SAND (GW-GM); medium dense, wet, green gray; fine to coarse, angular to subrounded gravel; fine to coarse sand.	51
52	48								52
53	47								53
54	46								54
55	45								55
56	44								56
57	43								57
58	42								58
59	41								59
60	40				32			SAND WITH GRAVEL (SP); very dense, wet, gray; fine to coarse sand; fine to coarse, subangular to rounded gravel.	60
61	39		S-14	▲	26 33			1-inch-thick clay (CL) stratification.	61
62	38							Bottom of exploration at 61.5 ft. bgs.	62
63	37								63
64	36								64
65	35								65
66	34								66
67	33								67
68	32								68
69	31								69
70	30								70
71	29								71
72	28								72
73	27								73
74	26								74

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◪ Split Barrel 2" X 1.375" (SPT)

Plastic Limit ⊢⊣ Liquid Limit

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: BW
Approved by: HNH, 4/28/2023

Exploration Log AB-01
Sheet 3 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE P:\GINT\WPROJECTS\220354 - STEVENS CREEK.GPJ July 15, 2024

APPENDIX B

Geotechnical Laboratory Testing

B. Geotechnical Laboratory Testing

Geotechnical laboratory tests were conducted on selected soil samples collected during the field exploration program. The tests performed, and the procedures followed, are outlined below. The laboratory tests were conducted in general accordance with appropriate ASTM International (ASTM) test methods and were conducted by Materials Testing & Consulting, Inc. (MTC) under subcontract to Aspect.

B.1. Moisture Content Determination, MC

Selected soil samples were submitted for analysis of water content by the ASTM D 2216 test method. This test method allows for the laboratory determination of the moisture (water) content of a soil sample by measuring and recording the mass of a sample before and then after drying. Test results are illustrated graphically on the boring logs in Appendix A and tabulated in this appendix.

B.2. Plasticity Index (Atterberg Limits) Determination, AL

Select subsurface soil samples were submitted for analysis of plasticity index by the ASTM D4318 test method. This test method allows for the laboratory determination of the liquid limit (LL) and the plastic limit (PL) of the fines in a soil sample.

B.3. Fines Content (minus No. 200 wash), FC

Selected soil samples were submitted for fines-content determination by the ASTM D1140 method. This test method allows for the laboratory determination of the percent of fines in a soil sample. The results of the tests are presented in this appendix on particle-size testing sheets.

B.4. Particle-Size Analyses, PS

A particle-size analysis was performed on selected soil samples in general accordance with ASTM D 6913. This test method allows for the laboratory determination of the percent of the size fractions (by weight) of coarse-grained soil and the percent of fines in a soil sample. The result of the test is presented in this appendix as curves depicting the percent finer by weight versus grain size.

Client:	Aspect Consulting, LLC.	**Date:**	April 20, 2023
Address:	710 2nd Avenue, Suite 550	**Project:**	Q.C. - Stevens Creek - 220354-01B
	Seattle, WA 98104	**Project #:**	23B002-04
Attn:	Henry N. Haselton	**Sample #:**	B23-0225
Revised on:		**Date sampled:**	March 31, 2023

As requested MTC, Inc. has performed the following test(s) on the sample referenced above. The testing was performed in accordance with current applicable AASHTO or ASTM standards as indicated below. The results obtained in our laboratory were as follows below or on the attached pages:

	Test(s) Performed:	Test Results		Test(s) Performed:	Test Results
X	Sieve Analysis	See Attached Reports		Sulfate Soundness	
	Proctor			Bulk Density & Voids	
	Sand Equivalent			WSDOT Degradation	
	Fracture Count			LA Abrasion	
X	Moisture Content	See Attached Report	**X**	Minus #200 Wash	See Attached Report
	Specific Gravity, Coarse				
	Specific Gravity, Fine				
	Hydrometer Analysis				
X	Atterberg Limits	See Attached Report			

If you have any questions concerning the test results, the procedures used, or if we can be of any further assistance please call on us at the number below.

Alex Eifrig

Respectfully Submitted,
Alex Eifrig
WABO Supervising Laboratory Technician

MATERIALS TESTING & CONSULTING, INC.

Moisture Content - ASTM C566, ASTM D2216

Project: Q.C. - Stevens Creek - 220354-01B
Project #: 23B002-04
Date Received: April 14, 2023
Date Tested: April 17, 2023

Client: Aspect Consulting, LLC.
Sampled by: Client
Tested by: R. Bohler

Sample #	Location	Tare	Wet + Tare	Dry + Tare	Wgt. Of Moisture	Wgt. Of Soil	% Moisture
B23-0225	AB-01, S-1 @ 2.5 ft	685.3	1034.5	995.3	39.2	310.0	12.6%
B23-0226	AB-01, S-4 @ 10 ft	688.8	1035.2	975.3	59.9	286.5	20.9%
B23-0227	AB-01, S-5 @ 12.5 ft	415.3	565.2	530.8	34.4	115.5	29.8%
B23-0228	AB-01, S-6 @ 15 ft	417.6	631.1	583.9	47.2	166.3	28.4%
B23-0229	AB-01, S-8 @ 25 ft	720.4	1259.3	1140.5	118.8	420.1	28.3%
B23-0230	AB-01, S-10 @ 35 ft	688.5	1225.3	1078.1	147.2	389.6	37.8%
B23-0231	AB-01, S-11 @ 40 ft	706.7	1267.1	1217.2	49.9	510.5	9.8%
B23-0232	AB-01, S-13 @ 50 ft	731.4	1178.5	1129.9	48.6	398.5	12.2%

Reviewed by: Alex Eifrig

Alex Eifrig

MATERIALS TESTING & CONSULTING, INC.

Sieve Report

Project: Q.C. - Stevens Creek - 220354-01B
Project #: 23B002-04
Client: Aspect Consulting, LLC.
Source: AB-01, S-1 @ 2.5 ft
Sample#: B23-0225

Date Received: 14-Apr-23
Sampled By: Client
Date Tested: 19-Apr-23
Tested By: R. Bohler

Unified Soil Classification System, ASTM-2487
SM, Silty Sand with Gravel
Sample Color:
Gray

ACCREDITED
Certificate #: 1366.01

ASTM D2216, ASTM D2419, ASTM D4318, ASTM D5281

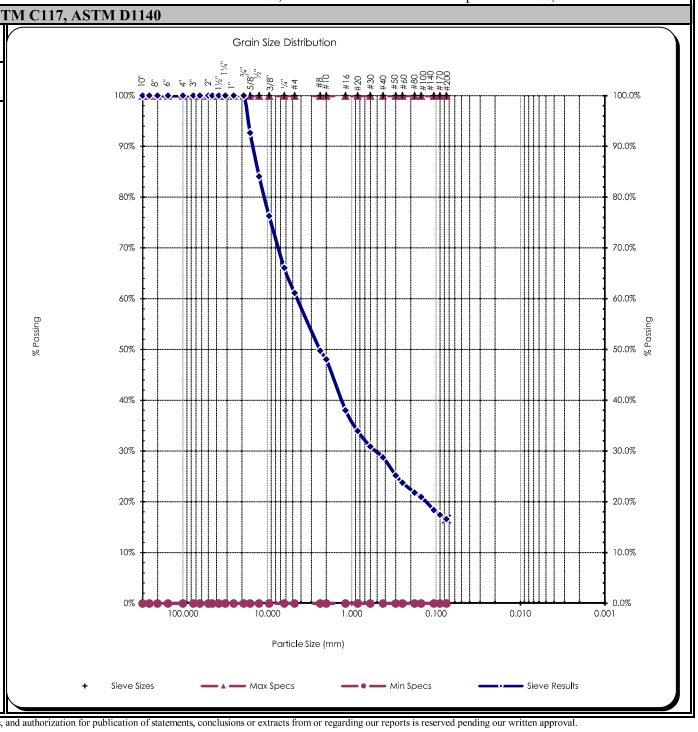
Specifications
No Specs

Sample Meets Specs ? N/A

$D_{(5)}$ =	0.023	mm	% Gravel =	38.9%	Coeff. of Curvature, C_C = 1.36
$D_{(10)}$ =	0.045	mm	% Sand =	44.5%	Coeff. of Uniformity, C_U = 99.76
$D_{(15)}$ =	0.068	mm	% Silt & Clay =	16.6%	Fineness Modulus = 3.98
$D_{(30)}$ =	0.528	mm	Liquid Limit =	n/a	Plastic Limit = n/a
$D_{(50)}$ =	2.407	mm	Plasticity Index =	n/a	Moisture %, as sampled = n/a
$D_{(60)}$ =	4.512	mm	Sand Equivalent =	n/a	Req'd Sand Equivalent =
$D_{(90)}$ =	14.913	mm	Fracture %, 1 Face =	n/a	Req'd Fracture %, 1 Face =
Dust Ratio =	15/26		Fracture %, 2+ Faces =	n/a	Req'd Fracture %, 2+ Faces =

ASTM C136, ASTM D6913, ASTM C117, ASTM D1140

Sieve Size US	Sieve Size Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
12.00"	300.00		100%	100.0%	0.0%
10.00"	250.00		100%	100.0%	0.0%
8.00"	200.00		100%	100.0%	0.0%
6.00"	150.00		100%	100.0%	0.0%
4.00"	100.00		100%	100.0%	0.0%
3.00"	75.00		100%	100.0%	0.0%
2.50"	63.00		100%	100.0%	0.0%
2.00"	50.00	100%	100%	100.0%	0.0%
1.75"	45.00		100%	100.0%	0.0%
1.50"	37.50		100%	100.0%	0.0%
1.25"	31.50		100%	100.0%	0.0%
1.00"	25.00	100%	100%	100.0%	0.0%
3/4"	19.00	100%	100%	100.0%	0.0%
5/8"	16.00		93%	100.0%	0.0%
1/2"	12.50	84%	84%	100.0%	0.0%
3/8"	9.50	76%	76%	100.0%	0.0%
1/4"	6.30		66%	100.0%	0.0%
#4	4.75	61%	61%	100.0%	0.0%
#8	2.36		50%	100.0%	0.0%
#10	2.00	48%	48%	100.0%	0.0%
#16	1.18		38%	100.0%	0.0%
#20	0.850		34%	100.0%	0.0%
#30	0.600		31%	100.0%	0.0%
#40	0.425	29%	29%	100.0%	0.0%
#50	0.300		25%	100.0%	0.0%
#60	0.250		24%	100.0%	0.0%
#80	0.180		22%	100.0%	0.0%
#100	0.150	21%	21%	100.0%	0.0%
#140	0.106		18%	100.0%	0.0%
#170	0.090		17%	100.0%	0.0%
#200	0.075	16.6%	16.6%	100.0%	0.0%



Comments:

Reviewed by: Alex Eifrig

Alex Eifrig

MATERIALS TESTING & CONSULTING, INC.

Sieve Report

Project: Q.C. - Stevens Creek - 220354-01B
Project #: 23B002-04
Client: Aspect Consulting, LLC.
Source: AB-01, S-4 @ 10 ft
Sample#: B23-0226

Date Received: 14-Apr-23
Sampled By: Client
Date Tested: 19-Apr-23
Tested By: R. Bohler

Unified Soil Classification System, ASTM-2487
SM, Silty Sand with Gravel
Sample Color:
Gray

ACCREDITED
Certificate #: 1366.01

ASTM D2216, ASTM D2419, ASTM D4318, ASTM D5281

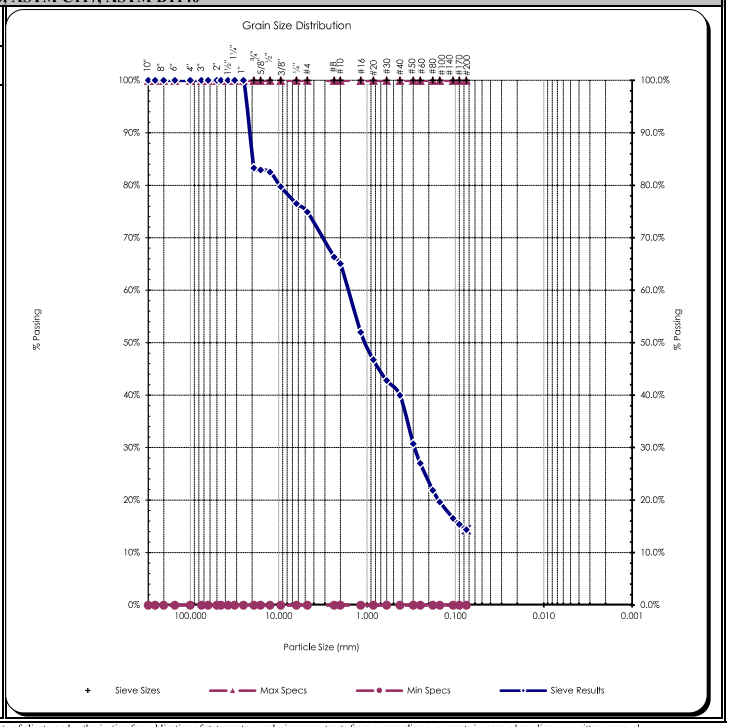
Specifications
No Specs

Sample Meets Specs ? N/A

$D_{(5)}$ =	0.026	mm	% Gravel =	25.1%	Coeff. of Curvature, C_C = 0.96
$D_{(10)}$ =	0.052	mm	% Sand =	60.6%	Coeff. of Uniformity, C_U = 32.17
$D_{(15)}$ =	0.084	mm	% Silt & Clay =	14.3%	Fineness Modulus = 3.50
$D_{(30)}$ =	0.290	mm	Liquid Limit =	n/a	Plastic Limit = n/a
$D_{(50)}$ =	1.053	mm	Plasticity Index =	n/a	Moisture %, as sampled = n/a
$D_{(60)}$ =	1.682	mm	Sand Equivalent =	n/a	Req'd Sand Equivalent =
$D_{(90)}$ =	21.411	mm	Fracture %, 1 Face =	n/a	Req'd Fracture %, 1 Face =
Dust Ratio =	33/92		Fracture %, 2+ Faces =	n/a	Req'd Fracture %, 2+ Faces =

ASTM C136, ASTM D6913, ASTM C117, ASTM D1140

Sieve Size US	Sieve Size Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
12.00"	300.00		100%	100.0%	0.0%
10.00"	250.00		100%	100.0%	0.0%
8.00"	200.00		100%	100.0%	0.0%
6.00"	150.00		100%	100.0%	0.0%
4.00"	100.00		100%	100.0%	0.0%
3.00"	75.00		100%	100.0%	0.0%
2.50"	63.00		100%	100.0%	0.0%
2.00"	50.00	100%	100%	100.0%	0.0%
1.75"	45.00		100%	100.0%	0.0%
1.50"	37.50		100%	100.0%	0.0%
1.25"	31.50		100%	100.0%	0.0%
1.00"	25.00	100%	100%	100.0%	0.0%
3/4"	19.00	83%	83%	100.0%	0.0%
5/8"	16.00		83%	100.0%	0.0%
1/2"	12.50	83%	83%	100.0%	0.0%
3/8"	9.50	80%	80%	100.0%	0.0%
1/4"	6.30		77%	100.0%	0.0%
#4	4.75	75%	75%	100.0%	0.0%
#8	2.36		66%	100.0%	0.0%
#10	2.00	65%	65%	100.0%	0.0%
#16	1.18		52%	100.0%	0.0%
#20	0.850		47%	100.0%	0.0%
#30	0.600		43%	100.0%	0.0%
#40	0.425	40%	40%	100.0%	0.0%
#50	0.300		31%	100.0%	0.0%
#60	0.250		27%	100.0%	0.0%
#80	0.180		22%	100.0%	0.0%
#100	0.150	20%	20%	100.0%	0.0%
#140	0.106		17%	100.0%	0.0%
#170	0.090		15%	100.0%	0.0%
#200	0.075	14.3%	14.3%	100.0%	0.0%



Comments: _____

Reviewed by: Alex Eifrig
Alex Eifrig

ASTM D4318 - Liquid Limit, Plastic Limit and Plasticity Index of Soils

Project:	Q.C. - Stevens Creek - 220354-01B	**Date Received:**	14-Apr-23
Project #:	23B002-04	**Sampled By:**	Client
Client:	Aspect Consulting, LLC.	**Date Tested:**	19-Apr-23
Source:	AB-01, S-6 @ 15 ft	**Tested By:**	R. Bohler
Sample #:	B23-0228		

Visual Soils Classification
Sandy Silt with Gravel, Uncrushed
Sample Color
Gray

Liquid Limit Determination

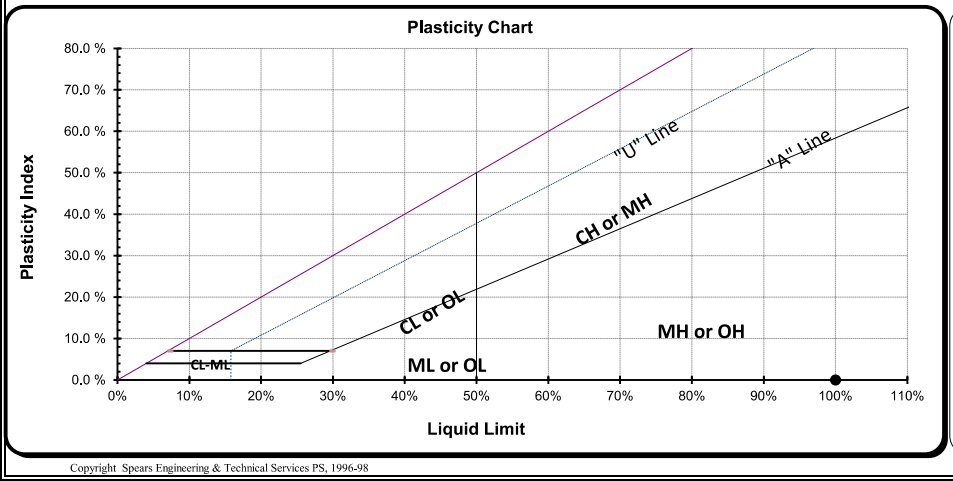
	#1	#2	#3	#4	#5	#6
Weight of Wet Soils + Pan:						
Weight of Dry Soils + Pan:			Unable to Establish			
Weight of Pan:						
Weight of Dry Soils:						
Weight of Moisture:						
% Moisture:						
Number of Blows:						

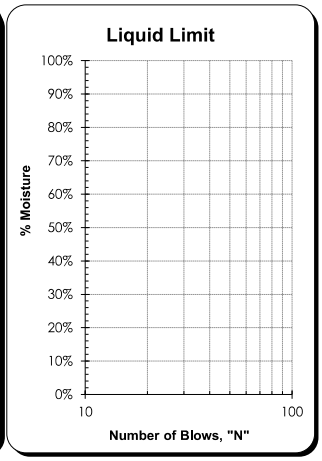
ACCREDITED
Certificate #: 1366.01

Liquid Limit @ 25 Blows: N/A
Plastic Limit: N/A
Plasticity Index, I_P: N/A

Plastic Limit Determination

	#1	#2	#3	#4	#5	#6
Weight of Wet Soils + Pan:						
Weight of Dry Soils + Pan:			Non-Plastic			
Weight of Pan:						
Weight of Dry Soils:						
Weight of Moisture:						
% Moisture:						





Comments: Unable to establish liquid limit due to the material displaying rapid dilation when subjected to blows in the cup, and not being able to spread smoothly into the cup. This material was then deemed to be non-plastic due to it not being workable down to 1/8" rolls/ribbons with the material breaking apart.

Reviewed by: Alex Eifrig
Alex Eifrig

MATERIALS TESTING & CONSULTING, INC.

Amount of Materials Finer Than #200 Sieve - ASTM C117, ASTM D1140

Project: Q.C. - Stevens Creek - 220354-01B

Project #: 23B002-04

Date Received: April 14, 2023

Date Tested: April 18, 2023

Client: Aspect Consulting, LLC.

Sampled by: Client

Tested by: R. Bohler

Sample #	Location	Tare	Before Wash + Tare	After Wash + Tare	Amount of Loss	% -#200
B23-0229	AB-01, S-8 @ 25 ft	720.4	1140.5	915.1	225.4	53.7%
B23-0230	AB-01, S-10 @ 35 ft	688.5	1078.1	910.1	168.0	43.1%
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
					0.0	#DIV/0!
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					0.0	#DIV/0!
					0.0	#DIV/0!

Reviewed by: Alex Eifrig

Alex Eifrig

MATERIALS TESTING & CONSULTING, INC.

Sieve Report

Project: Q.C. - Stevens Creek - 220354-01B
Project #: 23B002-04
Client: Aspect Consulting, LLC.
Source: AB-01, S-11 @ 40 ft
Sample#: B23-0231

Date Received: 14-Apr-23
Sampled By: Client
Date Tested: 19-Apr-23
Tested By: R. Bohler

Unified Soil Classification System, ASTM-2487
GM, Silty Gravel with Sand
Sample Color:
Gray

ACCREDITED
Certificate #: 1366.01

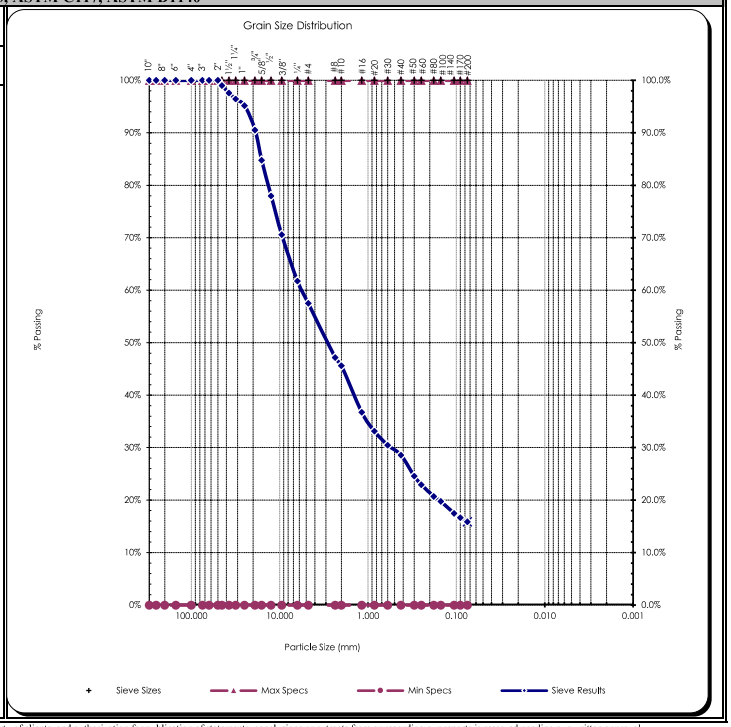
ASTM D2216, ASTM D2419, ASTM D4318, ASTM D5281

Specifications
No Specs
Sample Meets Specs ? N/A

$D_{(5)}$ =	0.024	mm	% Gravel =	42.5%	Coeff. of Curvature, C_C = 1.16
$D_{(10)}$ =	0.047	mm	% Sand =	41.6%	Coeff. of Uniformity, C_U = 119.75
$D_{(15)}$ =	0.071	mm	% Silt & Clay =	15.9%	Fineness Modulus = 4.23
$D_{(30)}$ =	0.556	mm	Liquid Limit =	n/a	Plastic Limit = n/a
$D_{(50)}$ =	3.014	mm	Plasticity Index =	n/a	Moisture %, as sampled = n/a
$D_{(60)}$ =	5.660	mm	Sand Equivalent =	n/a	Req'd Sand Equivalent =
$D_{(90)}$ =	18.721	mm	Fracture %, 1 Face =	n/a	Req'd Fracture %, 1 Face =
Dust Ratio =	5/9		Fracture %, 2+ Faces =	n/a	Req'd Fracture %, 2+ Faces =

ASTM C136, ASTM D6913, ASTM C117, ASTM D1140

Sieve Size US	Sieve Size Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
12.00"	300.00		100%	100.0%	0.0%
10.00"	250.00		100%	100.0%	0.0%
8.00"	200.00		100%	100.0%	0.0%
6.00"	150.00		100%	100.0%	0.0%
4.00"	100.00		100%	100.0%	0.0%
3.00"	75.00		100%	100.0%	0.0%
2.50"	63.00		100%	100.0%	0.0%
2.00"	50.00	100%	100%	100.0%	0.0%
1.75"	45.00		99%	100.0%	0.0%
1.50"	37.50		98%	100.0%	0.0%
1.25"	31.50		96%	100.0%	0.0%
1.00"	25.00	95%	95%	100.0%	0.0%
3/4"	19.00	91%	91%	100.0%	0.0%
5/8"	16.00		85%	100.0%	0.0%
1/2"	12.50	78%	78%	100.0%	0.0%
3/8"	9.50	71%	71%	100.0%	0.0%
1/4"	6.30		62%	100.0%	0.0%
#4	4.75	57%	57%	100.0%	0.0%
#8	2.36		47%	100.0%	0.0%
#10	2.00	46%	46%	100.0%	0.0%
#16	1.18		37%	100.0%	0.0%
#20	0.850		33%	100.0%	0.0%
#30	0.600		30%	100.0%	0.0%
#40	0.425	29%	29%	100.0%	0.0%
#50	0.300		25%	100.0%	0.0%
#60	0.250		23%	100.0%	0.0%
#80	0.180		21%	100.0%	0.0%
#100	0.150	20%	20%	100.0%	0.0%
#140	0.106		17%	100.0%	0.0%
#170	0.090		17%	100.0%	0.0%
#200	0.075	15.9%	15.9%	100.0%	0.0%



Comments: _____

Reviewed by: Alex Eifrig
Alex Eifrig

Sieve Report

Project: Q.C. - Stevens Creek - 220354-01B
Project #: 23B002-04
Client: Aspect Consulting, LLC.
Source: AB-01, S-13 @ 50 ft
Sample#: B23-0232

Date Received: 14-Apr-23
Sampled By: Client
Date Tested: 19-Apr-23
Tested By: R. Bohler

Unified Soil Classification System, ASTM-2487
GM, Silty Gravel with Sand
Sample Color:
Gray

ACCREDITED
Certificate #: 1366.01

ASTM D2216, ASTM D2419, ASTM D4318, ASTM D5281

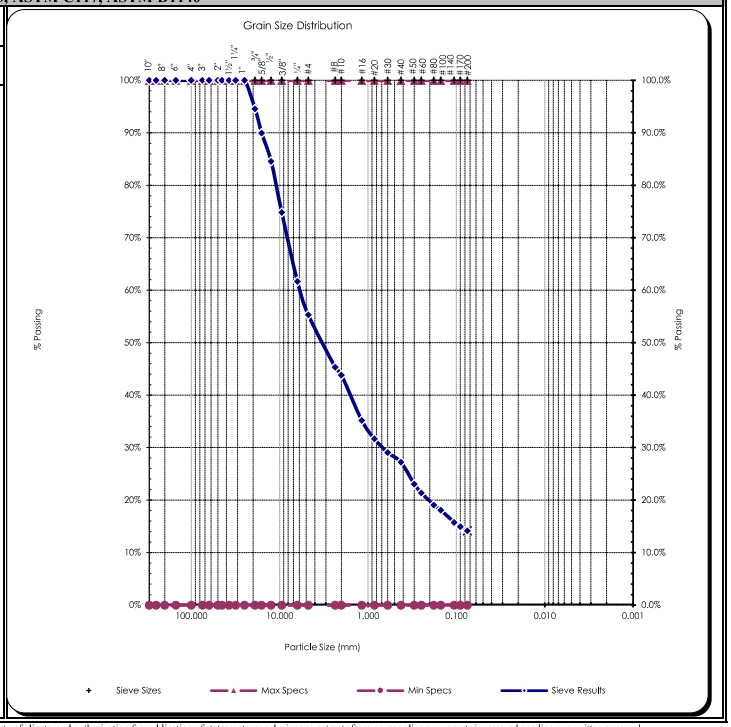
Specifications
No Specs

Sample Meets Specs ? N/A

$D_{(5)}$ =	0.026	mm	% Gravel =	44.7%	Coeff. of Curvature, C_C = 1.52
$D_{(10)}$ =	0.053	mm	% Sand =	41.2%	Coeff. of Uniformity, C_U = 111.15
$D_{(15)}$ =	0.091	mm	% Silt & Clay =	14.2%	Fineness Modulus = 4.25
$D_{(30)}$ =	0.688	mm	Liquid Limit =	n/a	Plastic Limit = n/a
$D_{(50)}$ =	3.477	mm	Plasticity Index =	n/a	Moisture %, as sampled = n/a
$D_{(60)}$ =	5.890	mm	Sand Equivalent =	n/a	Req'd Sand Equivalent =
$D_{(90)}$ =	16.034	mm	Fracture %, 1 Face =	n/a	Req'd Fracture %, 1 Face =
Dust Ratio =	13/25		Fracture %, 2+ Faces =	n/a	Req'd Fracture %, 2+ Faces =

ASTM C136, ASTM D6913, ASTM C117, ASTM D1140

Sieve Size US	Sieve Size Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
12.00"	300.00		100%	100.0%	0.0%
10.00"	250.00		100%	100.0%	0.0%
8.00"	200.00		100%	100.0%	0.0%
6.00"	150.00		100%	100.0%	0.0%
4.00"	100.00		100%	100.0%	0.0%
3.00"	75.00		100%	100.0%	0.0%
2.50"	63.00		100%	100.0%	0.0%
2.00"	50.00	100%	100%	100.0%	0.0%
1.75"	45.00		100%	100.0%	0.0%
1.50"	37.50		100%	100.0%	0.0%
1.25"	31.50		100%	100.0%	0.0%
1.00"	25.00	100%	100%	100.0%	0.0%
3/4"	19.00	95%	95%	100.0%	0.0%
5/8"	16.00		90%	100.0%	0.0%
1/2"	12.50	85%	85%	100.0%	0.0%
3/8"	9.50	75%	75%	100.0%	0.0%
1/4"	6.30		62%	100.0%	0.0%
#4	4.75	55%	55%	100.0%	0.0%
#8	2.36		45%	100.0%	0.0%
#10	2.00	44%	44%	100.0%	0.0%
#16	1.18		35%	100.0%	0.0%
#20	0.850		32%	100.0%	0.0%
#30	0.600		29%	100.0%	0.0%
#40	0.425	27%	27%	100.0%	0.0%
#50	0.300		23%	100.0%	0.0%
#60	0.250		21%	100.0%	0.0%
#80	0.180		19%	100.0%	0.0%
#100	0.150	18%	18%	100.0%	0.0%
#140	0.106		16%	100.0%	0.0%
#170	0.090		15%	100.0%	0.0%
#200	0.075	14.2%	14.2%	100.0%	0.0%



Comments: _____

Reviewed by: Alex Eifrig
Alex Eifrig

APPENDIX C

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND GUIDELINES FOR USE

Geoscience is Not Exact

The geoscience practices (geotechnical engineering, geology, and environmental science) are far less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or property, you should contact Aspect Consulting (Aspect).

This Report and Project-Specific Factors

Aspect's services are designed to meet the specific needs of our clients. Aspect has performed the services in general accordance with our agreement (the Agreement) with the Client (defined under the Limitations section of this project's work product). This report has been prepared for the exclusive use of the Client. This report should not be applied for any purpose or project except the purpose described in the Agreement.

Aspect considered many unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you;
- Not prepared for the specific purpose identified in the Agreement;
- Not prepared for the specific subject property assessed; or
- Completed before important changes occurred concerning the subject property, project, or governmental regulatory actions.

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual limitations. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with our Agreement with the Client and recognized geoscience practices in the same locality and involving similar conditions at the time this report was prepared

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by events such as a change in property use or occupancy, or by natural events, such as floods,

earthquakes, slope instability, or groundwater fluctuations. If any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Geotechnical, Geologic, and Environmental Reports Are Not Interchangeable

The equipment, techniques, and personnel used to perform a geotechnical or geologic study differ significantly from those used to perform an environmental study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions, or recommendations (e.g., about the likelihood of encountering underground storage tanks or regulated contaminants). Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

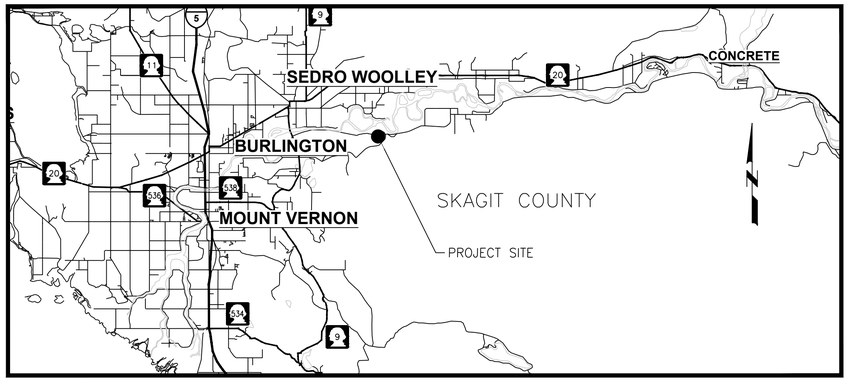
We appreciate the opportunity to perform these services. If you have any questions, please contact the Aspect Project Manager for this project.

APPENDIX G

Vicinity Map and Plans

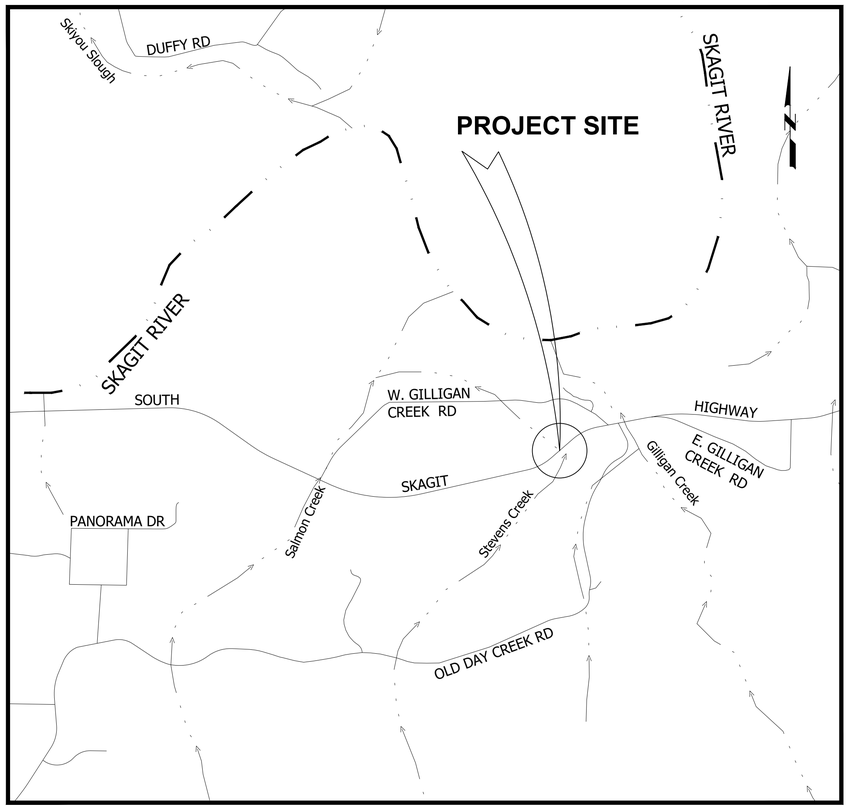
STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT

ES07000-15



AREA MAP NTS

SECTION 34, T 35N., R. 5E., W.M. SKAGIT COUNTY, WA



SITE MAP NTS

ITEM NO.	STD ITEM NO.	SPEC SEC.	ITEM DESCRIPTION	UNIT	QUANTITY
1	0001	1-09	MOBILIZATION	L.S.	1
2	0025	2-01	CLEARING AND GRUBBING	AC	0.32
3	0038	1-07	ARCHAEOLOGICAL AND HISTORICAL SALVAGE	F.A.	1
4	0050	2-02	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	1
5	0310	2-03	ROADWAY EXCAVATION INCL. HAUL	C.Y.	190
6	0431	9-03	GRAVEL BORROW INCL. HAUL	TON	2,500
7	1093	8-30	STREAMBED SEDIMENT	TON	230
8	0901	8-30	STREAMBED COBBLES 6 IN.	TON	90
9	0902	8-30	STREAMBED COBBLES 8 IN.	TON	27
10	0907	8-30	STREAMBED BOULDER TYPE TWO	EA	50
11	0908	8-30	STREAMBED BOULDER TYPE THREE	EA	14
12	0918	8-30	LARGE WOODY MATERIAL-LOG WITHOUT ROOTWAD DIA 18 IN. DBH	EA	2
13	0919	8-30	LARGE WOODY MATERIAL-LOG WITH ROOTWAD DIA 24" DBH	EA	4
14	0917	8-30	SLASH	C.Y.	15
15	1086	8-15	QUARRY SPALLS	TON	60
16	-	-	STREAMBED ORGANIC MATERIAL	C.Y.	12
17	3075	8-31	TEMPORARY STREAM DIVERSION AND DEWATERING	L.S.	1
18	-	SP8-31	UNANTICIPATED DEWATERING	F.A.	1
19	3077	8-31	FISH EXCLUSION ASSISTANCE	EST.	1
20	3078	8-31	FISH BLOCK NET MAINTENANCE	EST.	1
21	4006	2-09	STRUCTURE EXCAVATION CLASS A INCL. HAUL	C.Y.	650
22	4013	2-09	SHORING OR EXTRA EXCAVATION CL. A	L.S.	1
23	4025	9-03	GRAVEL BACKFILL FOR WALL	C.Y.	365
24	4335	6-20	CONTRACTOR DESIGNED BURIED STRUCTURE NO. 1	L.S.	1
25	5100	4-04	CRUSHED SURFACING BASE COURSE	TON	881
26	5767	5-04	HMA CL. 1/2 IN. PG 64H-22	TON	284
27	6468	8-01	STABILIZED CONSTRUCTION ENTRANCE	S.Y.	170
28	6490	8-02	EROSION/WATER POLLUTION CONTROL	EST	1
29	6419	8-02	SEEDING AND FERTILIZING BY HAND	S.Y.	382
30	6407	8-02	TOPSOIL TYPE A	AC	0.23
31	6552	8-02	PSIPE VINE MAPLE	EA	62.00
32	6552	8-02	PSIPE RED-OSIER DOGWOOD	EA	21
33	6552	8-02	PSIPE THIMBLEBERRY	EA	21
34	6552	8-02	PSIPE SALMONBERRY	EA	62
35	6552	8-02	PSIPE SNOWBERRY	EA	41
36	6556	8-02	LIVE STAKE ROW	L.F.	76
37	6481	8-02	MEDIUM COMPOST	AC	0.23
38	6579	8-02	BARK OR WOOD CHIP MULCH	AC	0.15
39	6635	8-01	HIGH VISIBILITY SILT FENCE	L.F.	800
40	6744	8-11	BOX CULVERT GUARDRAIL STEEL POST TYPE 31	EA	8
41	-	8-11	ADDITIONAL BOX CULVERT GUARDRAIL STEEL POST ASSEMBLIES	L.S.	1
42	6757	8-11	BEAM GUARDRAIL TYPE 31	L.F.	445
43	6719	8-11	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	EA	4
44	6806	8-22	PAINT LINE	L.F.	1,460
45	6884	8-09	RAISED PAVEMENT MARKER TYPE 2YY	HUND	0.05
46	6890	8-21	PERMANENT SIGNING	L.S.	1.00
47	6973	1-10	OTHER TEMPORARY TRAFFIC CONTROL DEVICES	L.S.	1
48	6980	1-10	FLAGGERS	HR	160
49	6974	1-10	TRAFFIC CONTROL SUPERVISOR	L.S.	1
50	6993	1-10	PORTABLE CHANGEABLE MESSAGE SIGN	HR	1,010
51	7572	1-10	WORK ZONE SAFETY CONTINGENCY	EST.	1
52	6982	1-10	CONSTRUCTION SIGNS CLASS A	S.F.	367
53	6976	1-10	PATROL AND MAINTAIN TRAFFIC CONTROL MEASURES	HR	100
54	7037	6-08	STRUCTURE SURVEYING	L.S.	1
55	7038	1-05	ROADWAY SURVEYING	L.S.	1
56	7080	9-16	CABLE FENCE	L.F.	85
57	7728	1-04	MINOR CHANGE	CALC	1
58	7736	1-07	SPCC PLAN	L.S.	1
59	7552	2-12	CONSTRUCTION GEOTEXTILE FOR SOIL STABILIZATION	S.Y.	650
60	-	-	GEOSYNTHETIC REINFORCEMENT	S.Y.	250
61	-	1-05	RECORD DRAWINGS (MINIMUM BID $2,500)	L.S.	1

SKAGIT COUNTY OFFICIALS

BOARD OF COMMISSIONERS
- LISA JANICKI, CHAIR
- RON WESEN, COMMISSIONER
- PETER BROWNING, COMMISSIONER

PUBLIC WORKS
- MICHAEL SEE, DIRECTOR

APPROVED FOR CONSTRUCTION

THOMAS M. WELLER, P.E., COUNTY ENGINEER — DATE 12/30/2025

PLAN SHEET INDEX

DESIGN TEAM

EXELTECH, A BOWMAN COMPANY:	LEAD, STRUCTURAL, CIVIL, WATER RESOURCES ENGINEERING, & LANDSCAPE ARCHITECTURE
HARMSEN:	SURVEY
ASPECT CONSULTING LLC:	GEOTECHNICAL ENGINEERING
CONFLUENCE ENVIRONMENTAL COMPANY:	CRITICAL AREA DELINEATION & ENVIRONMENTAL PERMITTING
AQUA TERRA CULTURAL RESOURCE CONSULTANTS:	CULTURAL RESOURCES

811 Know what's **below** **Call** before you dig.
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SURVEY NOTES:

HORIZONTAL DATUM: NAD83 WASHINGTON STATE PLANE NORTH ZONE
VERTICAL DATUM: NAVD88

exeltech
a Bowman company
8729 Commerce Pl. Dr. NE
Lacey, WA 98516
(360) 357-8289
www.xltech.com

SKAGIT COUNTY PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO. | REVISIONS | DATE

ENGINEER OF RECORD — SANTOSH J. KUKKILLAYA — STATE OF WASHINGTON — 27420 — PROFESSIONAL ENGINEER — 12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

PROJECT LOCATED NEAR: SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

CV01ES07000-15
COVER SHEET

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET 01 OF 20

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION AND SKAGIT COUNTY ROAD STANDARDS.

2. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND THE EXISTING SITE CONDITIONS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

3. ALL DIMENSIONS SHOWN ARE HORIZONTAL AND SHOULD BE ADJUSTED FOR GRADE AND SLOPE WHERE APPROPRIATE. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

4. DRAWING SCALES ARE FOR REFERENCE ONLY, THE DRAWINGS SHALL NOT BE SCALED TO FURNISH DIMENSIONAL INFORMATION NOT SHOWN. VERIFY ANY DISTANCE OR MEASUREMENT NOT SHOWN WITH THE ENGINEER.

5. UNDERGROUND UTILITES ARE KNOWN TO EXIST IN THE AREA OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ANY AND ALL UTILITIES IN THE AREA AND FIELD VERIFY THESE LOCATIONS PRIOR TO CONSTRUCTION. THE ONE-CALL NUMBER FOR UNDERGROUND UTILITIES IS: 811. ADDITIONALLY, THERE ARE KNOWN PRIVATE UTILITIES IN THE AREA OF WORK. SEE SPECIAL PROVISIONS 1-07.17 FOR CONTACT INFORMATION. CONTRACTOR TO COORDINATE WITH OWNER TO LOCATE AND PROTECT PRIVATE UTILITES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT.

6. A COPY OF THE APPROVED PLANS AND SPECIFICATIONS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

7. THE TEMPORARY EROSION/SEDIMENT CONTROL PLAN SHALL BE IMPLEMENTED PRIOR TO STARTING ANY WORK.

8. SKAGIT COUNTY SHALL BE NOTIFIED 72 HOURS BEFORE CONSTRUCTION IS STARTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION CONFERENCE WITH THE COUNTY. OTHER JURISDICTIONS, PROJECT ENGINEER, UTILITY COMPANIES, SUBCONTRACTORS AND OTHER NECESSARY PARTIES TO THE PROJECT SHALL BE PRESENT AT THE PRE-CONSTRUCTION CONFERENCE.

9. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE CONTRACTOR SHALL SAWCUT/PLANE THE EXISTING ASPHALT TO PROVIDE A NEAT VERTICAL EDGE. EXISTING PAVED SURFACES AND JOINTS SHALL BE PREPARED/SEALED IN ACCORDANCE WITH SECTION 5-04 OF THE SPECIAL PROVISIONS.

10. ALL UTILITY WORK WITHIN EXISTING PAVEMENT REQUIRES A MINIMUM ROADWAY RECONSTRUCTION FROM THE CENTERLINE, TO INCLUDE GRINDING THE EXISTING PAVEMENT AND REPLACING IT WITH A MINIMUM 0.33' PAVEMENT.

GENERAL STRUCTURAL NOTES:

1. THIS STRUCTURE TO BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS NINTH EDITION AND THE WSDOT BRIDGE DESIGN MANUAL (BDM) 2023. ALL STRUCTURAL ELEMENTS TO BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS FOR LOAD AND RESISTANCE FACTOR DESIGN. LIVE LOADING IS U-80.

2. DESIGN LOADS:

   DEAD LOAD:

   CONCRETE – 155 PCF

   LIVE LOAD:

   VEHICLE – AASHTO U-80 W/IMPACT & HL-93 W IMPACT WHICHEVER IS GREATER

   SURCHARGE – 250 PSF

   EARTH PRESSURE:

   LATERAL 31 PCF EQUIVALENT ACTIVE FLUID PRESSURE
   50 PCF EQUIVALENT AT-REST FLUID PRESSURE
   546 PCF EQUIVALENT PASSIVE FLUID PRESSURE

3. PRECAST CONCRETE ELEMENTS SHALL BE CLASS 7000. CAST-IN-PLACE CONCRETE ELEMENTS SHALL BE CLASS 4000.

4. UNLESS OTHERWISE SHOWN IN THE PLANS, THE CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING STEEL SHALL BE 3 INCHES WHEN AGAINST THE GROUND, AND 2 INCHES AT ALL OTHER LOCATIONS. ALL EXPOSED EDGES SHALL HAVE A ¾ INCH CHAMFER.

5. ALL STEEL REINFORCING BARS SHALL BE ASTM A706, GRADE 60 AND EPOXY COATED PER ASTM A775 WHERE NOTED.

811

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
SANTOSH J. KUNCHALA
STATE OF WASHINGTON
27430
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: RS/BL
CHECKED BY: HC/LS
DRAWN BY: BL
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

GN01ES07000-15
GENERAL NOTES

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
02 OF **20**

ABBREVIATIONS:

AC	ACRE
AP	ANGLE POINT
ASPH	ASPHALT
AVE	AVENUE
BLDG	BUILDING
BLVD	BOULEVARD
BVC	BEGIN VERTICAL CURVE
CALC	CALCULATED
CAT	CATEGORY
CB	CATCH BASIN
CIP	CAST IRON PIPE
CFS	CUBIC FEET PER SECOND
CL & ℄	CENTERLINE
CP	CONTROL POINT
CPCP	CORRUGATED POLYETHYLENE CULVERT PIPE
CPSSP	CORRUGATED POLYETHYLENE STORM SEWER PIPE
CONT'D	CONTINUED
CSBC	CRUSHED SURFACING BASE COURSE
CULV	CULVERT
CY	CUBIC YARD
DEG	DEGREE
DIA	DIAMETER
DWG	DRAWING
E	EAST/EASTING
EL & ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EST	ESTIMATED
EVC	END VERTICAL CURVE
FT & '	FEET
GALV	GALVANIZED
GND	GROUND
HMA	HOT MIX ASPHALT
HR	HOUR
IN & "	INCHES
INV	INVERT
K	CURVE COEFFICIENT
L	LENGTH OF CURVE
LF	LINEAR FOOT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MIC	MONUMENT IN CASE
MON	MONUMENT
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH/NORTHING
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OHWM	ORDINARY HIGH WATER MARK
PERF	PERFORATED PIPE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
R	RADIUS
RD	ROAD
RGE	RANGE
R/W & ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
SEC	SECTION
SF	SQUARE FOOT
SHLD	SHOULDER
SPEC	SPECIFICATIONS
ST	STREET
STA	STATION
SY	SQUARE YARD
SYMM	SYMMETRICAL
TWN	TOWNSHIP
TYP	TYPICAL
UG	UNDERGROUND
VCL	VERTICAL CURVE LENGTH
VPI	VERTICAL POINT INTERSECTION
W	WEST
W.M.	WILLAMETTE MERIDIAN
WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

LINETYPES:

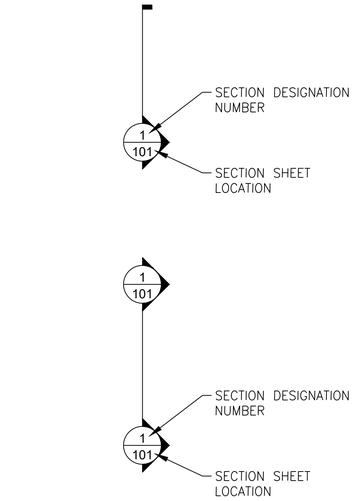
EXISTING FEATURES:

- ROAD CENTERLINE
- ROADWAY CENTERLINE STRIPING
- EDGE LINE STRIPING
- ASPHALT EDGE
- CONCRETE EDGE
- GRAVEL EDGE
- DIRT PATH
- MAJOR CONTOUR
- MINOR CONTOUR
- CULVERT
- RIGHT-OF-WAY LINE
- RIGHT-OF-WAY CENTERLINE
- ORDINARY HIGH WATER MARK
- EDGEWATER
- THALWEG
- EDGE OF WATER
- OVERHEAD POWER
- OVERHEAD TELECOM
- UNDERGROUND FIBER OPTIC
- UNDERGROUND TELECOM
- SANITARY SEWER
- STORM SEWER
- FENCE
- DITCH
- PROPERTY LINE
- GUARDRAIL
- WETLAND

PROPOSED FEATURES:

- ROAD ALIGNMENT LINE
- STREAM ALIGNMENT LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- STRUCTURE
- LIMITS OF EARTHWORK (CUT)
- LIMITS OF EARTHWORK (FILL)
- CLEARING AND GRUBBING LIMIT
- GUARDRAIL
- HIGH VISIBILITY SILT FENCE
- CREEK EDGE
- THALWEG
- GRADE BREAK
- TEMPORARY STREAM DIVERSION
- ROADWAY CENTERLINE STRIPING
- SHOULDER STRIPING
- FISH BLOCK NET
- TEMPORARY CONSTRUCTION EASEMENT
- SAWCUT
- STORM SEWER
- DITCH

SYMBOLS:



LEGEND:

EXISTING

- ALDER TREE
- FIR TREE
- CEDAR TREE
- MAPLE TREE
- COTTONWOOD TREE
- EXISTING TREE TO BE REMOVED, TYP
- TRAFFIC SIGN
- TRAFFIC SIGN
- UTILITY POLE

EXISTING

- GRAVEL
- HOT MIX ASPHALT (HMA)
- CONCRETE
- ROCK EMBANKMENT
- DIRT PATH

PROPOSED

- COFFERDAM
- BYPASS PUMP
- STREAMBED MATERIAL
- HOT MIXED ASPHALT (HMA)
- CONCRETE
- GRAVEL
- CONSTRUCTION ENTRANCE

PROPOSED

- GRAVEL BACKFILL FOR WALL
- CRUSHED SURFACING BASE COURSE
- GRAVEL BORROW
- ASPHALT REMOVAL
- MEANDER BAR HEAD
- MEANDER BAR TAIL

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MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
ANTHONY J. KUHTIC
STATE OF WASHINGTON
27430
PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

LA01ES07000-15
SYMBOLS AND ABBREVIATIONS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
03 OF 20

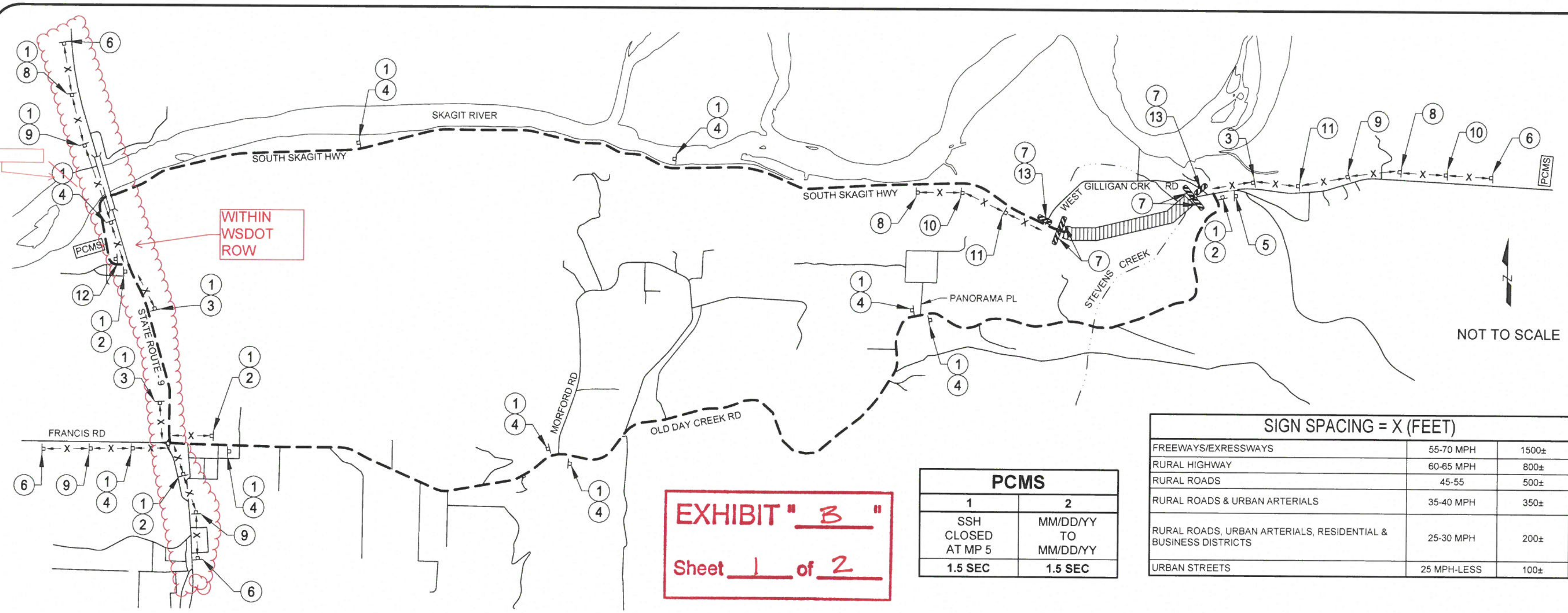

EXHIBIT "B"
Sheet 1 of 2

PCMS	
1	2
SSH CLOSED AT MP 5	MM/DD/YY TO MM/DD/YY
1.5 SEC	1.5 SEC

SIGN SPACING = X (FEET)		
FREEWAYS/EXRESSWAYS	55-70 MPH	1500±
RURAL HIGHWAY	60-65 MPH	800±
RURAL ROADS	45-55	500±
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200±
URBAN STREETS	25 MPH-LESS	100±

CONSTRUCTION SIGNS CLASS 'A' SCHEDULE

LEADER NO.	SIGN DESIGNATION	QTY	SIZE	LEADER NO.	SIGN DESIGNATION	QTY	SIZE	LEADER NO.	SIGN DESIGNATION	QTY	SIZE
1 1A	S. SKAGIT HWY M4-8 (MOD) S. SKAGIT HWY East from WEST GILLIGAN CRK RD	16	36" X 12" (4.5 SF)	5	END DETOUR M4-8A	1	30" X 24" (5.0 SF)	9	DETOUR AHEAD W20-2	4	*SEE NOTE 9
2	DETOUR → M4-9R	4	30" X 24" (5.0 SF)	6	S. SKAGIT HWY CLOSED AT WEST GILLIGAN CREEK RD MILEPOST 5 FOLLOW DETOUR M4-9 (MOD)	4	48" X 60" (20.0 SF)	10	ROAD CLOSED AHEAD W20-3	2	*SEE NOTE 9
3	DETOUR ← M4-9L	3	30" X 24" (5.0 SF)					11	ROAD CLOSED 500' W20-3-B	2	*SEE NOTE 9
4	DETOUR ↑ M4-9S	9	30" X 24" (5.0 SF)	7	TYPE III BARICADE W/ LIGHTS	6	8'-0"	12	ROAD CLOSED 5 MILES AHEAD LOCAL TRAFFIC ONLY R11-3A	1	48" X 24" (8.0 SF)
				8	ROAD WORK AHEAD W20-1	3	*SEE NOTE 9	13	ROAD CLOSED TO THRU TRAFFIC R11-4	2	30" X 18" (3.75 SF)

CONSTRUCTION SIGNS CLASS 'A' NOTES:

WSDOT Notes on Sheet 5 of 20.

1. SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE MUTCD ADOPTED BY WAC 468-95 AND IT'S MODIFICATIONS.
2. SIGNS SHALL CONFORM TO THE CURRENT EDITION OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
3. SIGNS SHALL NOT BE LOCATED WHERE THEY MAY CAUSE SIGHT DISTANCE OBSTRUCTIONS.
4. CONTRACTOR SHALL FURNISH AND INSTALL ALL SIGNS.
5. SIGNS SHALL BE MOUNTED ON 4X4 TIMBER POSTS.
6. ALL SIGN SPACING MAY BE ADJUSTED TO ACCOMMODATE AT-GRADE INTERSECTIONS AND DRIVEWAYS.
7. CONTRACTOR SHALL VERIFY UNDERGROUND UTILITY CONFLICTS PRIOR TO SIGN INSTALLATION.
8. SIGNS SHALL BE COVERED UNLESS CONDITIONS ARE PRESENT.
9. DIAMOND SHAPED SIGNS WITHIN WSDOT ROW MUST BE 48" X 48". DIAMOND SHAPED SIGNS OUTSIDE OF WSDOT ROW MAY BE 36" X 36".

LEGEND

- ROAD CLOSURE AREA
- DETOUR ROUTE
- SIGN (SINGLE POST)
- TYPE III BARRICADE
- BRIDGE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

APPROVAL EXPIRES 6 MONTHS AFTER DATE SIGNED
ACCEPTED AS NOTED
11/25/25
Krissy Kaufman
WSDOT TRAFFIC OPERATIONS
Within WSDOT Right-of-Way/Limited Access Only
Local Agency Shall Also Accept

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SKAGIT COUNTY PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO.	REVISIONS	DATE

COUNTY ENGINEER — ENGINEER OF RECORD
THOMAS M. WELLER, STATE OF WASHINGTON, 36669, REGISTERED PROFESSIONAL ENGINEER
12/01/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: MF
DRAWN BY: MF
CHECKED BY: JAS
APPROVED BY: TMW

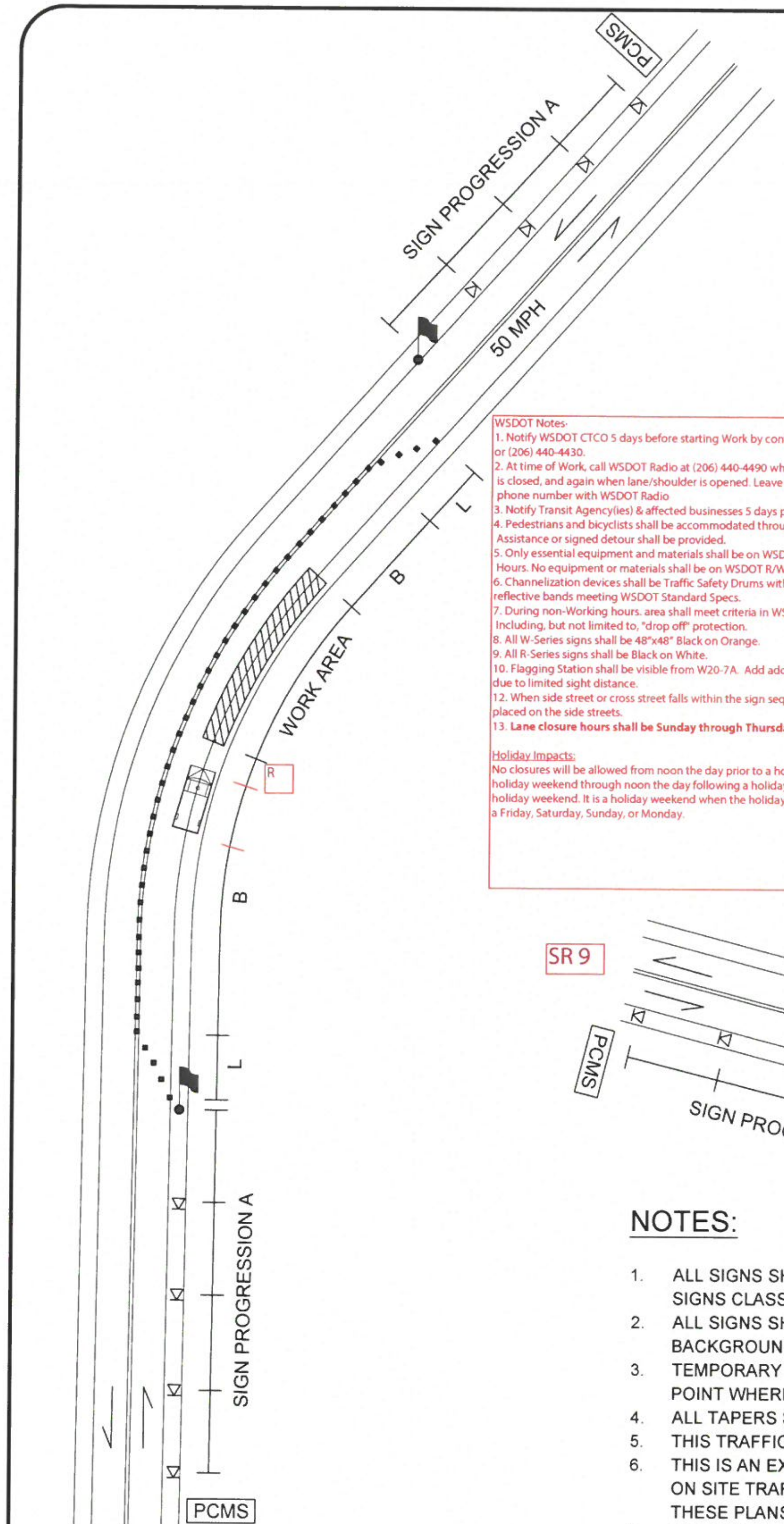
PROJECT LOCATED NEAR:
SEDRO WOOLLEY, WA
SECTION 36,TOWNSHIP 35 N, RANGE 5E W.M.

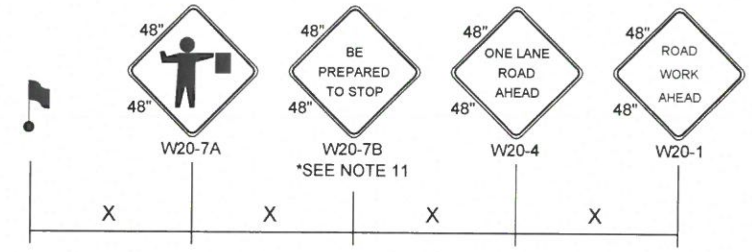
STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

TC01ES07000-15
DETOUR PLAN

1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY

JOELS - November 18, 2025 - 10:32 AM - \\SKAGIT\DEPT\PW\ENGINEERING\SHARED\PROJECTS\RCO-11 CULVERTS\E_SSH - STEVENSCRK_ES7000-15\VI CAD\CONTRACTPLANS\STEVENS CREEK TCP.DWG





SIGN PROGRESSION A (TYP)

SEE SIGN SPACING TABLE FOR "X"

TA/PV and Roll Ahead Distance R are mandatory inside WSDOT ROW (SR 9)

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					

WSDOT Notes:

1. Notify WSDOT CTCO 5 days before starting Work by contacting austin.bighorse@wsdot.wa.gov or (206) 440-4430.
2. At time of Work, call WSDOT Radio at (206) 440-4490 when lane/shoulder is closed, and again when lane/shoulder is opened. Leave contact name and mobile phone number with WSDOT Radio
3. Notify Transit Agency(ies) & affected businesses 5 days prior to beginning Work.
4. Pedestrians and bicyclists shall be accommodated through the work zone. Assistance or signed detour shall be provided.
5. Only essential equipment and materials shall be on WSDOT R/W during working Hours. No equipment or materials shall be on WSDOT R/W during non-working hours.
6. Channelization devices shall be Traffic Safety Drums with Type C Lights OR 6" Retro reflective bands meeting WSDOT Standard Specs.
7. During non-Working hours. area shall meet criteria in WSDOT Std Specs. 1-07 23, Including, but not limited to, "drop off" protection.
8. All W-Series signs shall be 48"x48" Black on Orange.
9. All R-Series signs shall be Black on White.
10. Flagging Station shall be visible from W20-7A. Add additional W20-7A if needed due to limited sight distance.
12. When side street or cross street falls within the sign sequence, signs shall also be placed on the side streets.
13. **Lane closure hours shall be Sunday through Thursday 8:00 PM to 5:00 AM nightly.**

Holiday Impacts:

No closures will be allowed from noon the day prior to a holiday or holiday weekend through noon the day following a holiday or holiday weekend. It is a holiday weekend when the holiday falls on a Friday, Saturday, Sunday, or Monday.

PCMS	
1	2
ROAD WORK AHEAD	BE PREPARED TO STOP
1.5 SEC	1.5 SEC

LEGEND

- FLAGGING STATION
- SIGN LOCATION
- CHANNELIZATION DEVICE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- PROTECTIVE VEHICLE

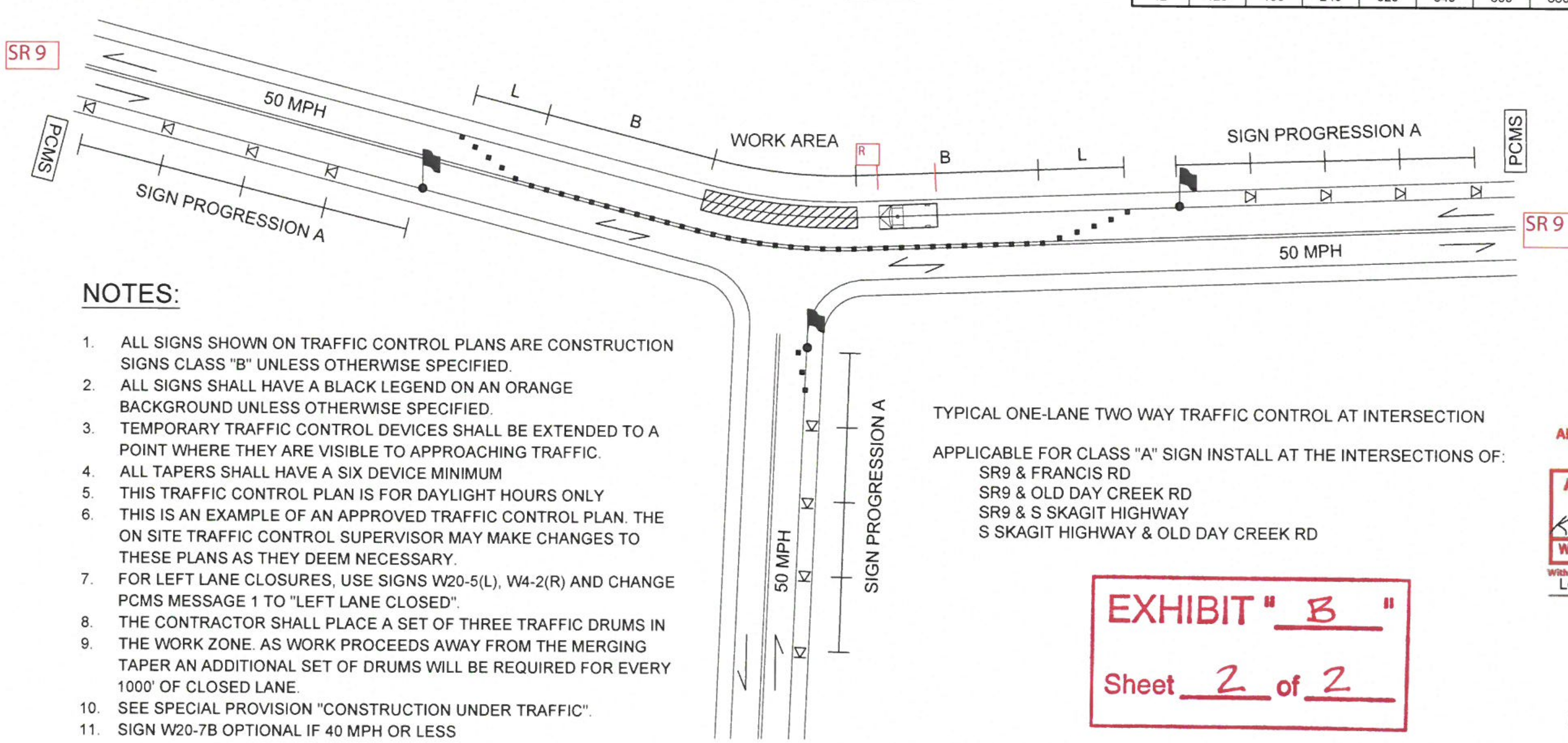
SIGN SPACING = X (FEET)		
FREEWAYS/EXRESSWAYS	55-70 MPH	1500±
RURAL HIGHWAY	60-65 MPH	800±
RURAL ROADS	45-55	500±
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200±
URBAN STREETS	25 MPH-LESS	100±

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

CHANNELIZATION DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
50-60	40	80
35-45	30	60
25-30	20	40

MINIMUM TAPER LENGTH = L (FEET)										
LANE WIDTH (FEET)	POSTED SPEED LIMIT (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	780	840



TYPICAL ONE-LANE TWO WAY TRAFFIC CONTROL

APPLICABLE FOR CLASS "A" SIGN INSTALL ON:
- SR9 MP 52.0 - MP 56.0
- FRANCIS RD MP 5.0 - MP 5.7
- OLD DAY CREEK RD MP 0.0 - MP 6.5
- S SKAGIT HIGHWAY MP 0.0 - MP 6.0

NOTES:

1. ALL SIGNS SHOWN ON TRAFFIC CONTROL PLANS ARE CONSTRUCTION SIGNS CLASS "B" UNLESS OTHERWISE SPECIFIED.
2. ALL SIGNS SHALL HAVE A BLACK LEGEND ON AN ORANGE BACKGROUND UNLESS OTHERWISE SPECIFIED.
3. TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. ALL TAPERS SHALL HAVE A SIX DEVICE MINIMUM
5. THIS TRAFFIC CONTROL PLAN IS FOR DAYLIGHT HOURS ONLY
6. THIS IS AN EXAMPLE OF AN APPROVED TRAFFIC CONTROL PLAN. THE ON SITE TRAFFIC CONTROL SUPERVISOR MAY MAKE CHANGES TO THESE PLANS AS THEY DEEM NECESSARY.
7. FOR LEFT LANE CLOSURES, USE SIGNS W20-5(L), W4-2(R) AND CHANGE PCMS MESSAGE 1 TO "LEFT LANE CLOSED".
8. THE CONTRACTOR SHALL PLACE A SET OF THREE TRAFFIC DRUMS IN THE WORK ZONE. AS WORK PROCEEDS AWAY FROM THE MERGING TAPER AN ADDITIONAL SET OF DRUMS WILL BE REQUIRED FOR EVERY 1000' OF CLOSED LANE.
10. SEE SPECIAL PROVISION "CONSTRUCTION UNDER TRAFFIC".
11. SIGN W20-7B OPTIONAL IF 40 MPH OR LESS

TYPICAL ONE-LANE TWO WAY TRAFFIC CONTROL AT INTERSECTION

APPLICABLE FOR CLASS "A" SIGN INSTALL AT THE INTERSECTIONS OF:
- SR9 & FRANCIS RD
- SR9 & OLD DAY CREEK RD
- SR9 & S SKAGIT HIGHWAY
- S SKAGIT HIGHWAY & OLD DAY CREEK RD

EXHIBIT "B"

Sheet 2 of 2

APPROVAL EXPIRES 6 MONTHS AFTER DATE SIGNED

ACCEPTED AS NOTED
11/25/25
Krissy Kaufman
WSDOT TRAFFIC OPERATIONS
Within WSDOT Right-of-Way/Limited Access Only
Local Agency Shall Also Accept

811 Know what's **below**. **Call** before you dig.

SKAGIT COUNTY PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO. | REVISIONS | DATE

ENGINEER OF RECORD

COUNTY ENGINEER

STATE OF WASHINGTON — THOMAS M. WELLER — REGISTERED PROFESSIONAL ENGINEER — 12/01/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: MF
DRAWN BY: MF
CHECKED BY: JAS
APPROVED BY: TMW

PROJECT LOCATED NEAR:
SEDRO WOOLLEY, WA
SECTION 36, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

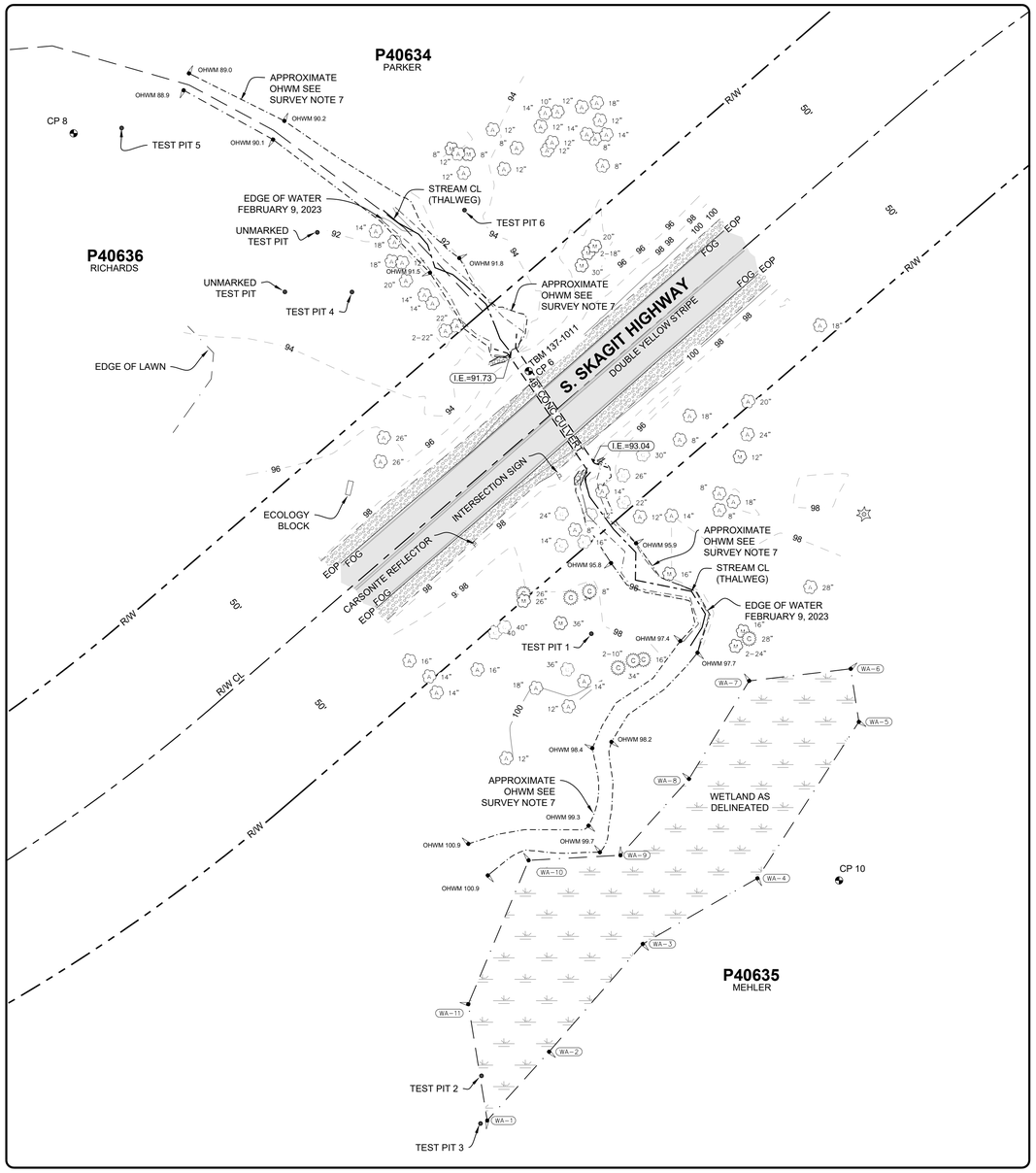
TC01ES07000-15
DETOUR PLAN

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET 5 OF 20

JOELS - November 18, 2025 - 10:35 AM - \\SKAGIT\DEPT\PW\ENGINEERING\SHARED\PROJECTS\RCO-11 CULVERTS\E_SSH - STEVENSCRK_ES7000-15\VI CAD\CONTRACTPLANS\STEVENS CREEK TCP.DWG

TOPOGRAPHIC SURVEY IN THE NORTHEAST QUARTER OF OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 35 NORTH, RANGE 5 EAST, W.M.
SKAGIT COUNTY, WASHINGTON



STEVENS CREEK CULVERT CROSSING AT SOUTH SKAGIT HIGHWAY
SCALE 1"=30'

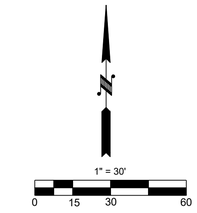
SURVEY NOTES

1. HORIZONTAL DATUM: GRID NORTH, WASHINGTON COORDINATE SYSTEM NORTH ZONE NAD 83/2011, US SURVEY FOOT, BY GLOBAL NAVIGATION SATELLITE SYSTEM OBSERVATIONS (GNSS).
2. VERTICAL DATUM: NAVD88 DERIVED FROM GNSS OBSERVATIONS.
3. THIS SURVEY WAS ACCOMPLISHED BY FIELD TRAVERSE WITH A 3-SECOND ELECTRONIC DIGITAL TOTAL STATION AND REAL-TIME KINEMATIC GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) DATA CORRECTED WITH THE WASHINGTON STATE REFERENCE NETWORK.
4. ALL DISTANCES ARE IN US SURVEY FEET AND DECIMALS THEREOF.
5. UNDERGROUND UTILITIES WERE NOT FOUND WITHIN THE PROJECT AREA BY AN UNDERGROUND UTILITY LOCATING SERVICE UTILIZING CONVENTIONAL LOCATING METHODS AT THE TIME OF SURVEY. IT IS ADVISABLE TO INDEPENDENTLY VERIFY PRIOR TO CONSTRUCTION.
6. THE RIGHT-OF-WAY SHOWN HEREON IS SHOWN FROM SHORT PLAT 128-79 RECORDED UNDER AUDITOR'S FILE NUMBERS 7911210039, RECORDS OF SKAGIT COUNTY, WASHINGTON.
7. THE ORDINARY HIGH WATER MARK (OHWM) WAS FLAGGED IN THE FIELD AND FLAG LOCATIONS WERE SURVEYED. OHWM FLAG LOCATIONS WERE TIED TOGETHER BASED ON SURVEYED ELEVATIONS WITHIN THE SURVEYED PROJECT LIMITS. THE OHWM DEPICTED OUTSIDE OF THE PROJECT LIMITS IS A GRAPHIC INTERPOLATION BETWEEN THE LOCATED FLAGS AND IS NOT BASED ON AN ACTUAL SURVEYED STREAM LOCATION.

TEMPORARY VERTICAL BENCHMARK

TBM 137-1011 TOP OF 1/2" REBAR WITH PLASTIC CAP MARKED "HARMSEN CONTROL" SET AT CULVERT CROSSING ±4 FEET NORTHWEST OF EDGE OF GRAVEL SHOULDER. ELEVATION = 99.27' (NAVD88)

CONTROL POINTS				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	544165.49'	1323788.93'	99.27'	1/2" REBAR WITH CAP
8	544262.41'	1323603.31'	92.06'	WOOD HUB & MAGNETIC NAIL
10	543957.82'	1323915.48'	114.86'	WOOD HUB & MAGNETIC NAIL



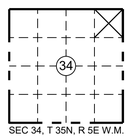
VERTICAL DATUM
NAVD88

LEGEND AND ABBREVIATIONS

- CALCULATED POSITION
- BENCHMARK/ CONTROL POINT
- FOUND REBAR WITH CAP AS NOTED
- PAINT MARK
- MAILBOX
- TRAFFIC SIGN
- SIGN POST
- (A) ALDER TREE
- (F) FIR TREE
- (C) CEDAR TREE
- (M) MAPLE TREE
- (C) COTTONWOOD TREE
- (H) HEMLOCK TREE
- CONIFER TREE AS NOTED
- WETLAND FLAG
- CENTERLINE
- OP OVERHEAD POWER LINE

AFN - AUDITOR'S FILE NUMBER
APN - ASSESSOR'S PARCEL NUMBER
CL - CENTERLINE
CONC - CONCRETE
CMP - CORRUGATED METAL PIPE
CP- CONTROL POINT
CPP - CORRUGATED PLASTIC PIPE
DIA - DIAMETER
FT - FOOT
GE - GRATE ELEVATION
IE - INVERT ELEVATION
MON - MONUMENT
MPH - MILES PER HOUR
OP - OVERHEAD POWER
PVC - POLYVINYL CHLORIDE
SD - STORM DRAIN
TBM - TEMPORARY VERTICAL BENCHMARK
W- WATER

THIS SURVEY WAS PERFORMED IN FEBRUARY, 2023 AND REFLECTS EXISTING CONDITIONS AT THAT TME.



SEC 34, T 35N, R 5E W.M.

SKAGIT COUNTY PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO.	REVISIONS	DATE
	SURVEY CONTROL TABLE ADDED	5/25/25
	SURVEY NOTE 5 EDITED	5/25/25

COUNTY ENGINEER
ENGINEER OF RECORD

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: NA
DRAWN BY: JTF
CHECKED BY: JAH
APPROVED BY: JAH

PROJECT LOCATED NEAR: SEDRO-WOOLLEY, WA
SECTION 34, TOWNSHIP 35N, RANGE 5E, W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

EXISTING CONDITIONS TOPOGRAPHIC SURVEY

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
06 OF 20

CONSTRUCTION STORMWATER POLLUTION PREVENTION (SWPPP) ELEMENTS:

ELEMENT 1 - PRESERVE VEGETATION/MARK CLEARING LIMITS

a. BEFORE BEGINNING LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRADING, CLEARLY MARK ALL CLEARING LIMITS, SENSITIVE AREAS AND THEIR BUFFERS, AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA.

b. RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM DEGREE PRACTICABLE.

ELEMENT 2 - ESTABLISH CONSTRUCTION ACCESS

a. LIMIT CONSTRUCTION VEHICLE ACCESS AND EXIT TO ONE ROUTE, IF POSSIBLE.

b. STABILIZE ACCESS POINTS WITH A PAD OF QUARRY SPALLS, CRUSHED ROCK, OR OTHER EQUIVALENT BMPS, TO MINIMIZE TRACKING SEDIMENT ONTO PUBLIC ROADS.

c. LOCATE WHEEL WASH OR TIRE BATHS ON SITE, IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT EFFECTIVE IN PREVENTING TRACKING SEDIMENT ONTO PUBLIC ROADS.

d. IF SEDIMENT IS TRACKED OFF SITE, CLEAN THE AFFECTED ROADWAY THOROUGHLY AT THE END OF EACH DAY, OR MORE FREQUENTLY AS NECESSARY (FOR EXAMPLE, DURING WET WEATHER), REMOVE SEDIMENT FROM ROADS BY SHOVELING, SWEEPING, OR PICKUP AND TRANSPORT OF THE SEDIMENT TO A CONTROLLED SEDIMENT DISPOSAL AREA.

e. CONDUCT STREET WASHING ONLY AFTER SEDIMENT REMOVAL IN ACCORDANCE WITH 2.d ABOVE.

f. CONTROL STREET WASH WASTEWATER BY PUMPING BACK ON SITE OR OTHERWISE PREVENTING IT FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.

ELEMENT 3 - CONTROL FLOW RATES

a. PROTECT PROPERTIES AND WATERWAYS DOWNSTREAM OF DEVELOPMENT SITES FROM EROSION AND THE ASSOCIATED DISCHARGE OF TURBID WATERS DUE TO INCREASES IN THE VELOCITY AND PEAK VOLUMETRIC FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE, AS REQUIRED BY LOCAL PLAN APPROVAL AUTHORITY.

b. WHERE NECESSARY TO COMPLY WITH 3.a (ABOVE), CONSTRUCT STORMWATER INFLITRATION OR DETENTION BMPs AS ONE OF THE FIRST STEPS IN GRADING. ASSURE THAT DETENTION BMPs FUNCTION PROPERLY BEFORE CONSTRUCTING SITE IMPROVEMENTS (E.G., IMPERVIOUS SURFACES).

c. IF PERMANENT INFILTRATION PONDS ARE USED FOR FLOW CONTROL DURING CONSTRUCTION, PROTECT THESE FACILITIES FROM SILTATION DURING THE CONSTRUCTION PHASE.

ELEMENT 4 - INSTALL SEDIMENT CONTROLS

a. THE PERMITTEE MUST DESIGN, INSTALL AND MAINTAIN EFFECTIVE EROSION CONTROLS AND SEDIMENT CONTROLS TO MINIMIZE THE DISCHARGE OF POLLUTANTS. AT A MINIMUM, THE PERMITTEE MUST DESIGN, INSTALL AND MAINTAIN SUCH CONTROLS TO:

b. CONSTRUCT SEDIMENT CONTROL BMPS (SEDIMENT PONDS, TRAPS, FILTERS, INFILTRATION FACILITIES, ETC.) AS ONE OF THE FIRST STEPS IN GRADING. THESE BMPS MUST BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.

c. MINIMIZE SEDIMENT DISCHARGES FROM THE SITE. THE DESIGN, INSTALLATION, AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS MUST ADDRESS FACTORS SUCH AS THE AMOUNT, FREQUENCY, INTENSITY AND DURATION OF PRECIPITATION, THE NATURE OF RESULTING STORMWATER RUNOFF, AND SOIL CHARACTERISTICS, INCLUDING THE RANGE OF SOIL PARTICLE SIZES EXPECTED TO BE PRESENT ON THE SITE.

d. DIRECT STORMWATER RUNOFF FROM DISTURBED AREAS THROUGH A SEDIMENT POND OR OTHER APPROPRIATE SEDIMENT REMOVAL BMP BEFORE THE RUNOFF LEAVES A CONSTRUCTION SITE OR BEFORE DISCHARGE TO AN INFILTRATION FACILITY. RUNOFF FROM FULLY STABILIZED AREAS MAY BE DISCHARGED WITHOUT A SEDIMENT REMOVAL BMP BUT MUST CONTROL FLOW RATES PER ELEMENT 3: CONTROL FLOW RATES.

e. LOCATE BMPS INTENDED TO TRAP SEDIMENT ON SITE IN A MANNER TO AVOID INTERFERENCE WITH THE MOVEMENT OF JUVENILE SALMONIDS ATTEMPTING TO ENTER OFF-CHANNEL AREAS OR DRAINAGES.

f. PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATERS, DIRECT STORMWATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORMWATER INFILTRATION, UNLESS INFEASIBLE.

g. WHERE FEASIBLE, DESIGN OUTLET STRUCTURES THAT WITHDRAW IMPOUNDED STORMWATER FROM THE SURFACE TO AVOID DISCHARGING SEDIMENT THAT IS STILL SUSPENDED LOWER IN THE WATER COLUMN.

ELEMENT 5 - STABILIZE SOILS

a. THE PERMITTEE MUST STABILIZE EXPOSED AND UNWORKED SOILS BY APPLICATION OF EFFECTIVE BMPS THAT PREVENT EROSION. APPLICABLE BMPS INCLUDE BUT ARE NOT LIMITED TO: TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED, AND DUST CONTROL.

b. THE PERMITTEE MUST CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION.

c. THE PERMITTEE MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND TO MINIMIZE DOWNSTREAM CHANNEL AND STREAM BANK EROSION.

d. DEPENDING ON THE GEOGRAPHIC LOCATION OF THE PROJECT, THE PERMITTEE MUST NOT ALLOW SOILS TO REMAIN EXPOSED AND UNWORKED FOR MORE THAN THE TIME PERIODS SET FORTH BELOW TO PREVENT EROSION:

WEST OF THE CASCADE MOUNTAINS CREST
DURING THE DRY SEASON (MAY 1 - SEPTEMBER 30): 7 DAYS DURING THE WET SEASON (OCTOBER 1 - APRIL 30): 2 DAYS

EAST OF THE CASCADE MOUNTAINS CREST, EXCEPT FOR CENTRAL BASIN* DURING THE DRY SEASON (JULY 1 - SEPTEMBER 30): 10 DAYS
DURING THE WET SEASON (OCTOBER 1 - JUNE 30): 5 DAYS

THE CENTRAL BASIN*, EAST OF THE CASCADE MOUNTAINS CREST DURING THE DRY SEASON (JULY 1 - SEPTEMBER 30): 30 DAYS DURING THE WET SEASON (OCTOBER 1 - JUNE 30): 15 DAYS
NOTE THE CENTRAL BASIN IS DEFINED AS THE PORTIONS OF EASTERN WASHINGTON WITH MEAN ANNUAL PRECIPITATION OF FEWER THAN 12 INCHES.

e. THE PERMITTEE MUST STABILIZE SOILS AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST.

f. THE PERMITTEE MUST STABILIZE SOIL STOCKPILES FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHERE POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATERWAYS, AND DRAINAGE CHANNELS.

g. THE PERMITTEE MUST MINIMIZE THE AMOUNT OF SOIL EXPOSED DURING CONSTRUCTION ACTIVITY.

h. THE PERMITTEE MUST MINIMIZE THE DISTURBANCE OF STEEP SLOPES.

i. THE PERMITTEE MUST MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

ELEMENT 6 - PROTECT SLOPES

a. THE PERMITTEE MUST DESIGN AND CONSTRUCT CUT-AND-FILL SLOPES IN A MANNER TO MINIMIZE EROSION. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, REDUCING CONTINUOUS LENGTH OF SLOPE WITH TERRACING AND DIVERSIONS, REDUCING SLOPE STEEPNESS, AND ROUGHENING SLOPE SURFACES (FOR EXAMPLE, TRACK WALKING).

b. THE PERMITTEE MUST DIVERT OFF-SITE STORMWATER (RUN-ON) OR GROUNDWATER AWAY FROM SLOPES AND DISTURBED AREAS WITH INTERCEPTOR DIKES, PIPES, AND/OR SWALES. OFF-SITE STORMWATER SHOULD BE MANAGED SEPARATELY FROM STORMWATER GENERATED ON THE SITE.

c. AT THE TOP OF SLOPES, COLLECT DRAINAGE IN PIPE SLOPE DRAINS OR PROTECTED CHANNELS TO PREVENT EROSION.

i. WEST OF THE CASCADE MOUNTAINS CREST: TEMPORARY PIPE SLOPE DRAINS MUST HANDLE THE PEAK 10-MINUTE FLOW RATE FROM A TYPE 1A, 10-YEAR, 24-HOUR FREQUENCY STORM FOR THE DEVELOPED CONDITION. ALTERNATIVELY, THE 10-YEAR, 1-HOUR FLOW RATE PREDICTED BY AN APPROVED CONTINUOUS RUNOFF MODEL, INCREASED BY A FACTOR OF 1.6, MAY BE USED. THE HYDROLOGIC ANALYSIS MUST USE THE EXISTING LAND COVER CONDITION FOR PREDICTING FLOW RATES FROM TRIBUTARY AREAS OUTSIDE THE PROJECT LIMITS. FOR TRIBUTARY AREAS ON THE PROJECT SITE, THE ANALYSIS MUST USE THE TEMPORARY OR PERMANENT PROJECT LAND COVER CONDITION, WHICHEVER WILL PRODUCE THE HIGHEST FLOW RATES. IF USING THE WESTERN WASHINGTON HYDROLOGY MODEL (WWHM) TO PREDICT FLOWS, BARE SOIL AREAS SHOULD BE MODELED AS "LANDSCAPED AREA."

ii. EAST OF THE CASCADE MOUNTAINS CREST: TEMPORARY PIPE SLOPE DRAINS MUST HANDLE THE EXPECTED PEAK FLOW RATE FROM A 6-MONTH, 3-HOUR STORM FOR THE DEVELOPED CONDITION, REFERRED TO AS THE SHORT DURATION STORM.

d. PLACE EXCAVATED MATERIAL ON THE UPHILL SIDE OF TRENCHES, CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS.

e. PLACE CHECK DAMS AT REGULAR INTERVALS WITHIN CONSTRUCTED CHANNELS THAT ARE CUT DOWN A SLOPE.

ELEMENT 7 - PROTECT DRAIN INLETS

a. PROTECT ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT.

b. CLEAN OR REMOVE AND REPLACE INLET PROTECTION DEVICES WHEN SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE (UNLESS A DIFFERENT STANDARD IS SPECIFIED BY THE PRODUCT MANUFACTURER).

ELEMENT 8 - STABILIZE CHANNELS AND OUTLETS

a. DESIGN, CONSTRUCT, AND STABILIZE ALL ON-SITE CONVEYANCE CHANNELS TO PREVENT EROSION FROM THE FOLLOWING EXPECTED PEAK FLOWS:

i. WEST OF THE CASCADE MOUNTAINS CREST: CHANNELS MUST HANDLE THE PEAK 10-MINUTE FLOW RATE FROM A TYPE 1A, 10-YEAR, 24-HOUR FREQUENCY STORM FOR THE DEVELOPED CONDITION. ALTERNATIVELY, THE 10-YEAR, 1-HOUR FLOW RATE INDICATED BY AN APPROVED CONTINUOUS RUNOFF MODEL, INCREASED BY A FACTOR OF 1.6, MAY BE USED. THE HYDROLOGIC ANALYSIS MUST USE THE EXISTING LAND COVER CONDITION FOR PREDICTING FLOW RATES FROM TRIBUTARY AREAS OUTSIDE THE PROJECT LIMITS. FOR TRIBUTARY AREAS ON THE PROJECT SITE, THE ANALYSIS MUST USE THE TEMPORARY OR PERMANENT PROJECT LAND COVER CONDITION, WHICHEVER WILL PRODUCE THE HIGHEST FLOW RATES. IF USING THE WWHM TO PREDICT FLOWS, BARE SOIL AREAS SHOULD BE MODELED AS "LANDSCAPED AREA."

ii. EAST OF THE CASCADE MOUNTAINS CREST: CHANNELS MUST HANDLE THE EXPECTED PEAK FLOW RATE FROM A 6-MONTH, 3-HOUR STORM FOR THE DEVELOPED CONDITION, REFERRED TO AS THE SHORT DURATION STORM.

b. PROVIDE STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES, AND DOWNSTREAM REACHES AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.

ELEMENT 9 - CONTROL POLLUTANTS

a. DESIGN, INSTALL, IMPLEMENT, AND MAINTAIN EFFECTIVE POLLUTION PREVENTION MEASURES TO MINIMIZE THE DISCHARGE OF POLLUTANTS. THE PERMITTEE MUST:

b. HANDLE AND DISPOSE OF ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS THAT OCCUR ON SITE IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.

c. PROVIDE COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND OTHER MATERIALS THAT HAVE THE POTENTIAL TO POSE A THREAT TO HUMAN HEALTH OR THE ENVIRONMENT. ON-SITE FUELING TANKS MUST INCLUDE SECONDARY CONTAINMENT. SECONDARY CONTAINMENT MEANS PLACING TANKS OR CONTAINERS WITHIN AN IMPERVIOUS STRUCTURE CAPABLE OF CONTAINING 110% OF THE VOLUME CONTAINED IN THE LARGEST TANK WITHIN THE CONTAINMENT STRUCTURE. DOUBLE- WALLED TANKS DO NOT REQUIRE ADDITIONAL SECONDARY CONTAINMENT.

d. CONDUCT MAINTENANCE, FUELING, AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES USING SPILL PREVENTION AND CONTROL MEASURES. CLEAN CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY SPILL INCIDENT.

e. DISCHARGE WHEEL WASH OR TIRE BATH WASTEWATER TO A SEPARATE ON-SITE TREATMENT SYSTEM THAT PREVENTS DISCHARGE TO SURFACE WATER, SUCH AS CLOSED-LOOP RECIRCULATION OR UPLAND LAND APPLICATION, OR TO THE SANITARY SEWER WITH LOCAL SEWER DISTRICT APPROVAL.

f. APPLY FERTILIZERS AND PESTICIDES IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. FOLLOW MANUFACTURERS' LABEL REQUIREMENTS FOR APPLICATION RATES AND PROCEDURES.

g. USE BMPS TO PREVENT CONTAMINATION OF STORMWATER RUNOFF BY pH-MODIFYING SOURCES. THE SOURCES FOR THIS CONTAMINATION INCLUDE, BUT ARE NOT LIMITED TO: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, RECYCLED CONCRETE STOCKPILES, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, DEWATERING CONCRETE VAULTS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS.

h. ADJUST THE pH OF STORMWATER OR AUTHORIZED NON-STORMWATER IF NECESSARY TO PREVENT AN EXCEEDANCE OF GROUNDWATER AND/OR SURFACE WATER QUALITY STANDARDS.

i. ASSURE THAT WASHOUT OF CONCRETE TRUCKS IS PERFORMED OFF-SITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY. DO NOT WASH OUT CONCRETE TRUCK DRUMS OR CONCRETE HANDLING EQUIPMENT ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS. WASHOUT OF CONCRETE HANDLING EQUIPMENT MAY BE DISPOSED OF IN A DESIGNATED CONCRETE WASHOUT AREA OR IN A FORMED AREA AWAITING CONCRETE WHERE IT WILL NOT CONTAMINATE SURFACE OR GROUNDWATER. DO NOT DUMP EXCESS CONCRETE ON SITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. CONCRETE SPILLAGE OR CONCRETE DISCHARGE DIRECTLY TO GROUNDWATER OR SURFACE WATERS OF THE STATE IS PROHIBITED. DO NOT WASH OUT TO FORMED AREAS AWAITING LID FACILITIES.

j. OBTAIN WRITTEN APPROVAL FROM ECOLOGY BEFORE USING ANY CHEMICAL TREATMENT, EXCEPT FOR CO2, DRY ICE, OR FOOD GRADE VINEGAR TO ADJUST pH.

k. UNCONTAMINATED WATER FROM WATER-ONLY BASED SHAFT DRILLING FOR CONSTRUCTION OF BUILDING, ROAD, AND BRIDGE FOUNDATIONS MAY BE INFILTRATED PROVIDED THE WASTEWATER IS MANAGED IN A WAY THAT PROHIBITS DISCHARGE TO SURFACE WATERS. PRIOR TO INFILTRATION, WATER FROM WATER-ONLY BASED SHAFT DRILLING THAT COMES INTO CONTACT WITH CURING CONCRETE MUST BE NEUTRALIZED UNTIL pH IS IN THE RANGE OF 6.5 TO 8.5 (SU).

ELEMENT 10 - CONTROL DEWATERING

a. PERMITTEES MUST DISCHARGE FOUNDATION, VAULT, AND TRENCH DEWATERING WATER, WHICH HAVE CHARACTERISTICS SIMILAR TO STORMWATER RUNOFF AT THE SITE, INTO A CONTROLLED CONVEYANCE SYSTEM BEFORE DISCHARGE TO A SEDIMENT TRAP OR SEDIMENT POND.

b. PERMITTEES MAY DISCHARGE CLEAN, NON-TURBID DEWATERING WATER, SUCH AS WELL-POINT GROUNDWATER, TO SYSTEMS TRIBUTARY TO, OR DIRECTLY INTO SURFACE WATERS OF THE STATE, AS SPECIFIED IN ELEMENT 8: STABILIZE CHANNELS AND OUTLETS, PROVIDED THE DEWATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. DO NOT ROUTE CLEAN DEWATERING WATER THROUGH STORMWATER SEDIMENT PONDS. NOTE THAT "SURFACE WATERS OF THE STATE" MAY EXIST ON A CONSTRUCTION SITE AS WELL AS OFF SITE; FOR EXAMPLE, A CREEK RUNNING THROUGH A SITE.

c. OTHER DEWATERING TREATMENT OR DISPOSAL OPTIONS MAY INCLUDE:
i. INFILTRATION
ii. TRANSPORT OFF SITE IN A VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS.
iii. ECOLOGY-APPROVED ON-SITE CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES.
iv. SANITARY OR COMBINED SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, IF THERE IS NO OTHER OPTION.
v. USE OF A SEDIMENTATION BAG WITH DISCHARGE TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DEWATERING.
vi. PERMITTEES MUST HANDLE HIGHLY TURBID OR CONTAMINATED DEWATERING WATER SEPARATELY FROM STORMWATER.

ELEMENT 11 - MAINTAIN BMPS

a. PERMITTEES MUST MAINTAIN AND REPAIR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMPS AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION IN ACCORDANCE WITH BMP SPECIFICATIONS.

b. PERMITTEES MUST REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS WITHIN 30 DAYS AFTER ACHIEVING FINAL SITE STABILIZATION OR AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED.

ELEMENT 12 - MANAGE THE PROJECT

a. PHASE DEVELOPMENT PROJECTS TO THE MAXIMUM DEGREE PRACTICABLE AND TAKE INTO ACCOUNT SEASONAL WORK LIMITATIONS.

b. INSPECTION AND MONITORING - INSPECT, MAINTAIN AND REPAIR ALL BMPS AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. PROJECTS REGULATED UNDER THE CONSTRUCTION STORMWATER GENERAL PERMIT (CSWGP) MUST CONDUCT SITE INSPECTIONS AND MONITORING IN ACCORDANCE WITH SPECIAL CONDITION S4 OF THE CSWGP.

c. MAINTAINING AN UPDATED CONSTRUCTION SWPPP.

ELEMENT 13 - PROTECT LOW IMPACT DEVELOPMENT (LID) BMPS

a. THE PRIMARY PURPOSE OF LID BMPS/ON-SITE LID STORMWATER MANAGEMENT BMPS IS TO REDUCE THE DISRUPTION OF THE NATURAL SITE HYDROLOGY. LID BMPS ARE PERMANENT FACILITIES.

b. PERMITTEES MUST PROTECT ALL BIORETENTION AND RAIN GARDEN FACILITIES FROM SEDIMENTATION THROUGH INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BMPS ON PORTIONS OF THE SITE THAT DRAIN INTO THE BIORETENTION AND/OR RAIN GARDEN FACILITIES. RESTORE THE FACILITIES TO THEIR FULLY FUNCTIONING CONDITION IF THEY ACCUMULATE SEDIMENT DURING CONSTRUCTION. RESTORING THE FACILITY MUST INCLUDE REMOVAL OF SEDIMENT AND ANY SEDIMENT-LADEN BIORETENTION/RAIN GARDEN SOILS, AND REPLACING THE REMOVED SOILS WITH SOILS MEETING THE DESIGN SPECIFICATION.

c. PERMITTEES MUST MAINTAIN THE INFILTRATION CAPABILITIES OF BIORETENTION AND RAIN GARDEN FACILITIES BY PROTECTING AGAINST COMPACTION BY CONSTRUCTION EQUIPMENT AND FOOT TRAFFIC. PROTECT COMPLETE LAWN AND LANDSCAPED AREAS FROM COMPACTION DUE TO CONSTRUCTION EQUIPMENT.

d. PERMITTEES MUST CONTROL EROSION AND AVOID INTRODUCING SEDIMENT FROM SURROUNDING LAND USES ONTO PERMEABLE PAVEMENTS. DO NOT ALLOW MUDDY CONSTRUCTION EQUIPMENT ON THE BASE MATERIAL OR PAVEMENT. DO NOT ALLOW SEDIMENT-LADEN RUNOFF ONTO PERMEABLE PAVEMENTS.

e. PERMITTEES MUST CLEAN PERMEABLE PAVEMENTS FOULED WITH SEDIMENTS OR NO LONGER PASSING AN INITIAL INFILTRATION TEST USING LOCAL STORMWATER MANUAL METHODOLOGY OR THE MANUFACTURER'S PROCEDURES.

f. PERMITTEES MUST KEEP ALL HEAVY EQUIPMENT OFF EXISTING SOILS UNDER LID FACILITIES THAT HAVE BEEN EXCAVATED TO FINAL GRADE TO RETAIN THE INFILTRATION RATE OF THE SOILS.

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
SAMUEL J. KURTZ
STATE OF WASHINGTON
27420
PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
CHECKED BY: LS
DRAWN BY: BL
APPROVED BY: SJK

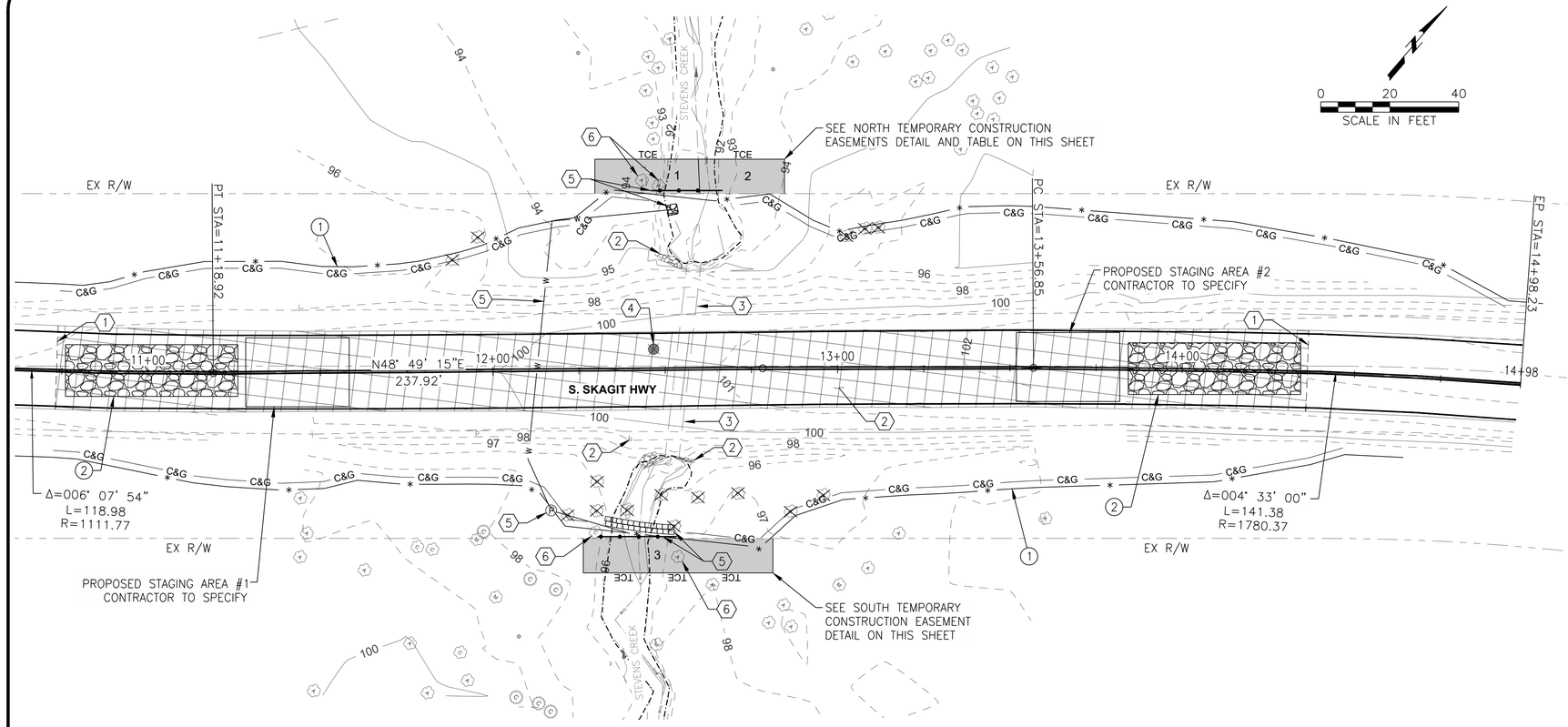
PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

GN01ES07000-15
CONSTRUCTION SWPPP ELEMENTS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
07 OF **20**



1 PLAN VIEW

Scale: 1:20

SITE PREPARATION NOTES

1. EXTENTS OF ROADWAY EXCAVATION. SAWCUT EXISTING PAVEMENT.
2. REMOVE AND DISPOSE OF EXISTING PAVEMENT, SIGN(S), QUARRY SPALLS PER THE SPECIFICATIONS. COORDINATE WITH CONTRACTING AGENCY AS REQUIRED FOR THE DELIVERY OF THE REMOVAL OF SIGNS TO COUNTY STORAGE FACILITY. THIS WORK TO BE INCLUDED IN REMOVAL OF STRUCTURE AND OBSTRUCTION.
3. REMOVE AND DISPOSE EXISTING STORM CULVERT.
4. BORING LOCATION HAS BEEN BACKFILLED PER DEPARTMENT OF ECOLOGY STANDARDS.
5. TEMPORARY STREAM DIVERSION IS FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE BYPASS METHOD AS WELL AS THE DESIGN OF THE PUMP, PIPES, ENERGY DISSIPATER, FISH BLOCK NET, COFFERDAM, AND ASSOCIATED TEMPORARY STREAM DIVERSION ITEMS. CONTRACTOR TO ADD BLOCK NET IF NEEDED ON THE DOWNSTREAM. CONTRACTOR SHALL DESIGN AND SUBMIT A PLAN TO BE REVIEWED BY ENGINEER OF RECORD (EOR). STREAM BYPASS AND OUTLET PROTECTION TO BE DESIGNED PER WDFW WATER CROSSING DESIGN GUIDELINES (2013).
6. PROTECT EXISTING TREE DURING CONSTRUCTION.

EROSION CONTROL NOTES

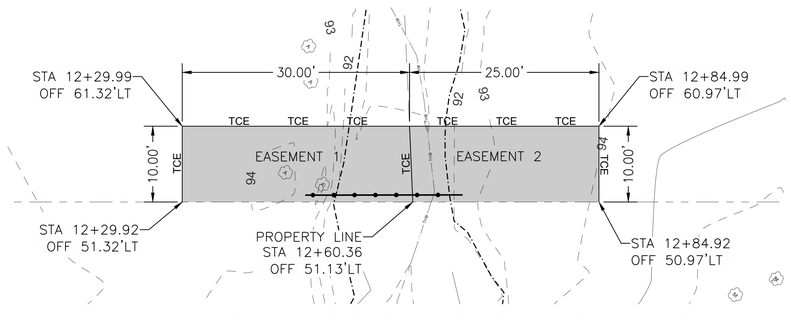
1. INSTALL HIGH VISIBILITY SILT FENCE PER WSDOT STD PLAN I-30.16-01. INSTALL FENCE AT TEMPORARY CONSTRUCTION EASEMENT LINES IF NEEDED TO DELINEATE BOUNDARIES.
2. STABILIZED CONSTRUCTION ENTRANCE: INSTALL 50'x15' BED OF PERMEABLE BALLAST AT A DEPTH OF 12" FOR THE DURATION OF CONSTRUCTION WHEN VEHICLES MUST ENTER/EXIT AREAS OF SEDIMENT OR EXPOSED SOIL. A MANUFACTURED STEEL TRACK/GRATE MAY BE USED AS AN ALTERNATIVE.

GENERAL NOTES

1. ALL TREES TO BE REMOVED WILL BE FIELD VERIFIED BY SKAGIT COUNTY REPRESENTATIVE. CONTRACTOR TO FLAG TREES FOR APPROVAL BY COUNTY PRIOR TO REMOVAL.
2. TREES TO BE REMOVED AND DEEMED SUITABLE BY COUNTY OR ENGINEER FOR USE AS LARGE WOODY MATERIAL SHALL BE STOCKPILED AND PROTECTED. ROOTWADS SHALL BE KEPT INTACT FOR TREES TO BE REUSED ON SITE.
3. REFERENCE STANDARD SWPPP ELEMENTS ON SHEET 07.
4. APPLY SUITABLE BMP'S SUCH AS, BUT NOT LIMITED TO, SEEDING AND WOOD MULCH. TIME TO COVER DEPENDS ON THE SEASON WORK IS COMPLETED PER SECTION 8-01.3(1).

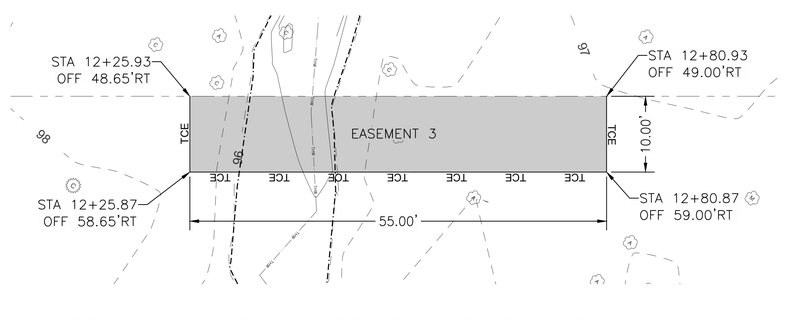
PROPOSED TEMPORARY CONSTRUCTION EASEMENTS

TCE	PARCEL ID	OWNERS	ADDRESS	AREA (SF)
1	P40636	HERBERT & IRENE RICHARDS	27806 W GILLIGAN CREEK ROAD, SEDRO-WOOLLEY, WA 98284	303
2	P40634	SHANE & CHRISTINA PARKER	27902 W GILLIGAN CREEK ROAD, SEDRO-WOOLLEY, WA 98284	248
3	P40635	MEHLER LIVING TRUST	281XX SOUTH SKAGIT HWY, SEDRO-WOOLLEY, WA 98284	550



2 NORTH TEMPORARY CONSTRUCTION EASEMENTS DETAIL

Scale: 1:10



3 SOUTH TEMPORARY CONSTRUCTION EASEMENT DETAIL

Scale: 1:10

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
SAMUEL J. KLINKLA
STATE OF WASHINGTON
17430
PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

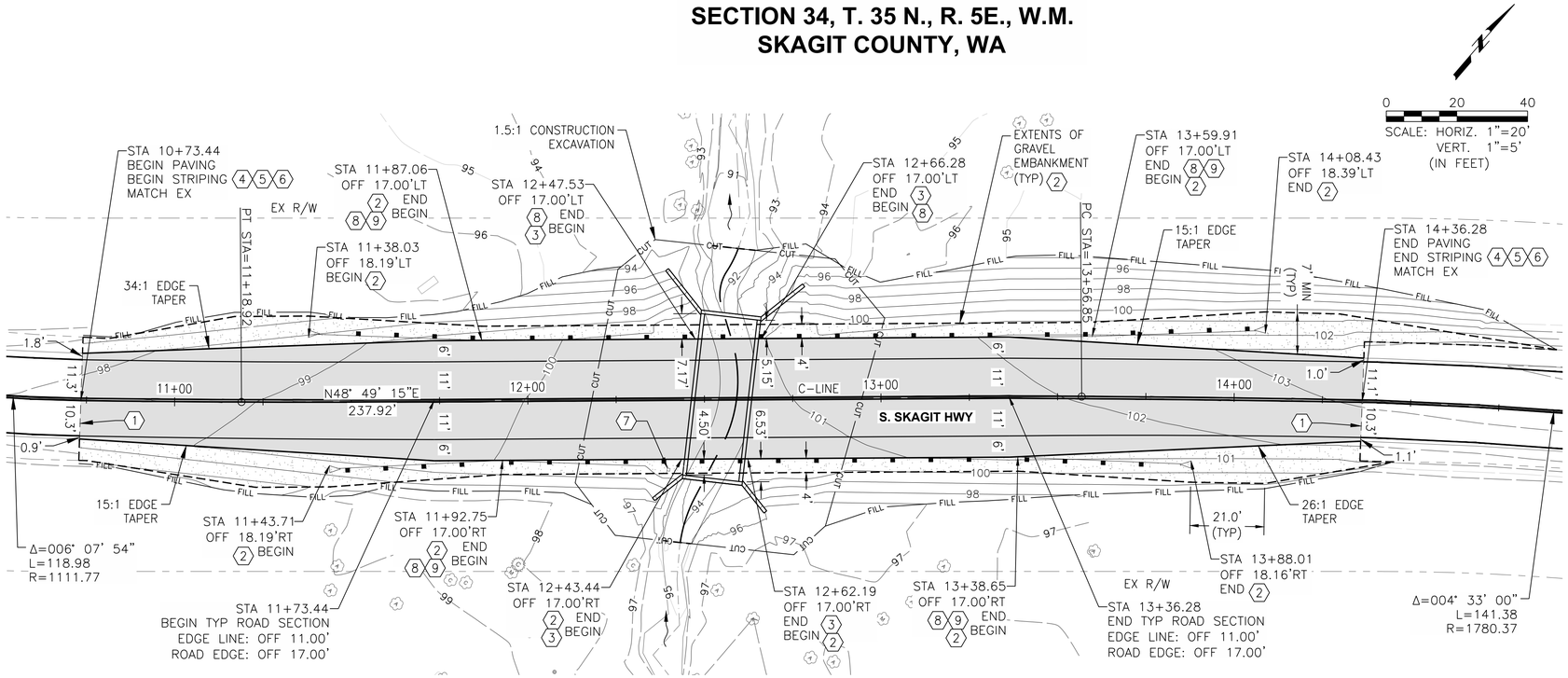
STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

EC01ES07000-15
SITE PREPARATION AND TESC PLAN

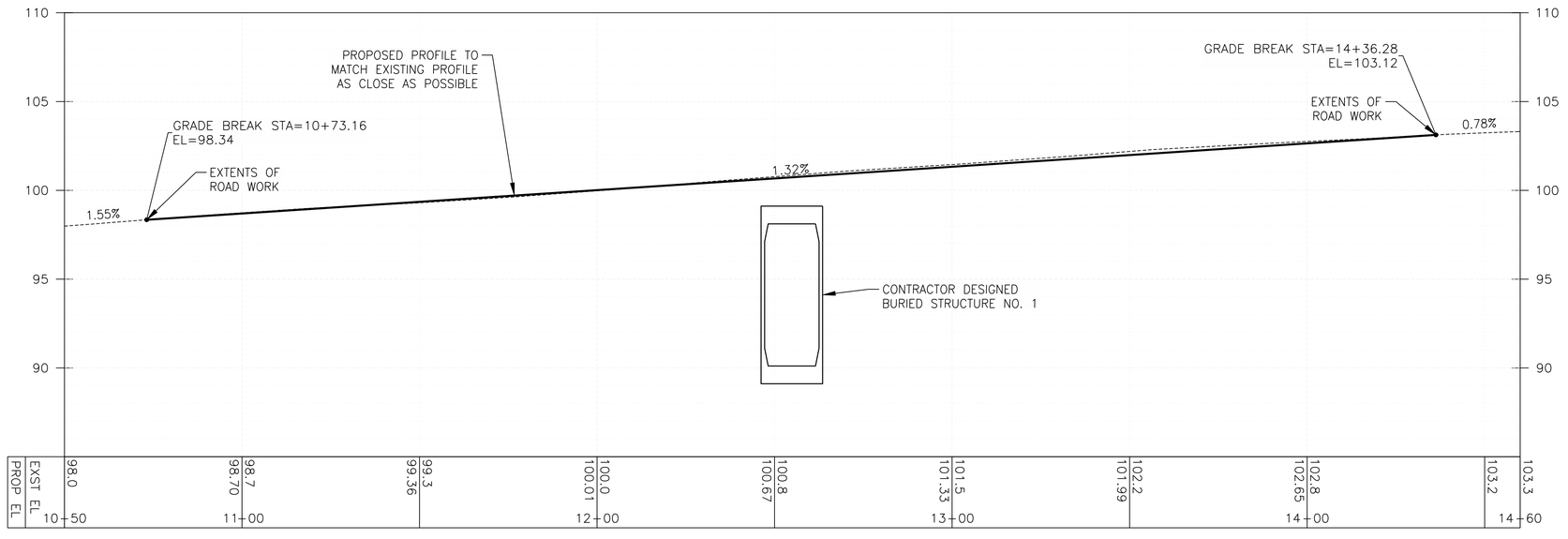
1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
08 OF **20**

SECTION 34, T. 35 N., R. 5E., W.M.
SKAGIT COUNTY, WA



1 PLAN VIEW
Scale: 1:20



2 PROFILE VIEW
Scale: 1:20

CONSTRUCTION NOTES

1. TRANSITION TO EXISTING PAVEMENT GRADES PER DETAIL SHEET 09. SEE THIS SHEET FOR TRANSITION LOCATIONS.
2. FURNISH AND INSTALL BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL AND GRAVEL EMBANKMENT PER WSDOT STD PLAN C-22.40-10.
3. FURNISH AND INSTALL BOX CULVERT EMBEDDED ANCHOR GUARDRAIL STEEL POST – TYPE 31 PER WSDOT STD PLAN C-20.41-05.
4. 4" PAINTED EDGE LINE PER WSDOT STD PLAN M-20.10-04.
5. DOUBLE YELLOW PAINTED CENTERLINE PER WSDOT STD PLAN M-20.10-04. DISTANCE BETWEEN DOUBLE CENTERLINE SHALL BE 4".
6. FURNISH AND INSTALL RAISED PAVEMENT MARKERS TYPE 2YY PER WSDOT STD PLAN M-20.30-04.
7. REPLACE SIGN ON NEW POST PER WSDOT STD PLAN G-24.50-05.
8. FURNISH AND INSTALL BEAM GUARDRAIL TYPE 31 PER WSDOT STD PLAN C-20.10-09.
9. 4'-WIDE GRAVEL EMBANKMENT FOR GUARDRAIL.

GENERAL NOTES

1. ALL SIGN TYPES, COLORS, AND DIMENSIONS SHALL BE STANDARD PER THE MUTCD, UNLESS OTHERWISE INDICATED.
2. SIGNS SHALL BE CONSTRUCTED ENTIRELY OF TYPE III OR TYPE IV REFLECTIVE SHEETING PER WSDOT STANDARD SPECIFICATIONS SECTION 9-28.12.
3. FURNISH AND INSTALL TEMPORARY PAVEMENT MARKINGS IMMEDIATELY FOLLOWING PAVING.
4. PROPOSED CONTOURS REPRESENT THE FINISHED GRADE FOR SURFACE MATERIALS. BACKFILL ELEVATIONS IN THE LANDSCAPING AREAS WILL BE PER SHEET 18 SOIL PREPARATION DETAILS AT A DEPTH BELOW THE PROPOSED CONTOURS.
5. SEE SHEETS 11 AND 12 FOR STREAM DESIGN AND DETAILS.
6. SEE SHEETS 13, 14, 15, 16, AND 17 FOR CULVERT AND WINGWALL DESIGN AND DETAILS.
7. SEE SHEET 10 FOR SUPERELEVATION INFORMATION.

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NO.	REVISIONS	DATE

ENGINEER OF RECORD
SANTOSH J. KURUVILLA
STATE OF WASHINGTON
21430
PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

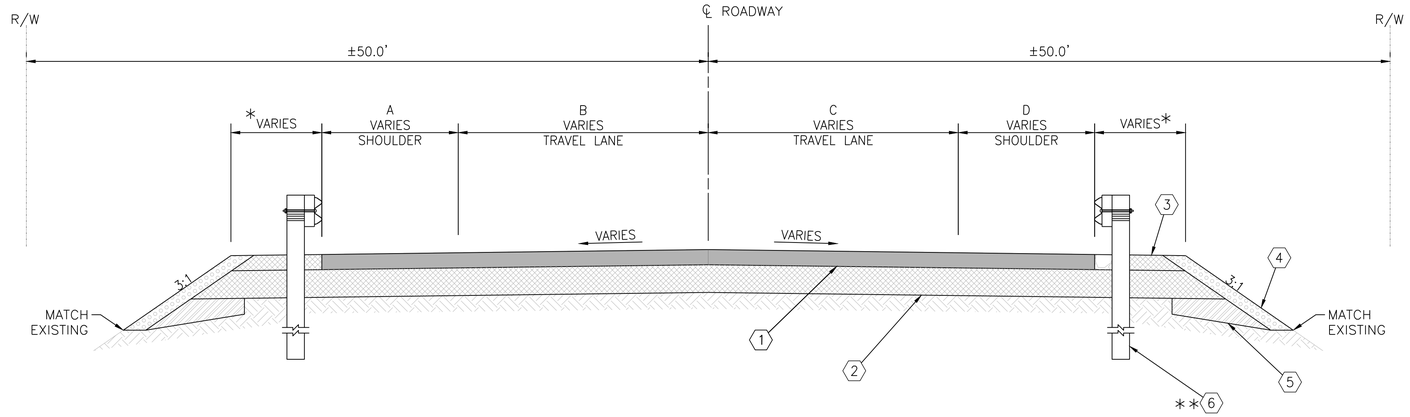
PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

PP01ES07000-15
ROADWAY PLAN AND PROFILE

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
09 OF **20**



1 TYPICAL SECTION

NTS

*SEE SHEET 09 FOR GUARDRAIL GRAVEL EMBANKMENT LIMITS
**SEE SHEET 09 FOR GUARDRAIL LIMITS

LEGEND:

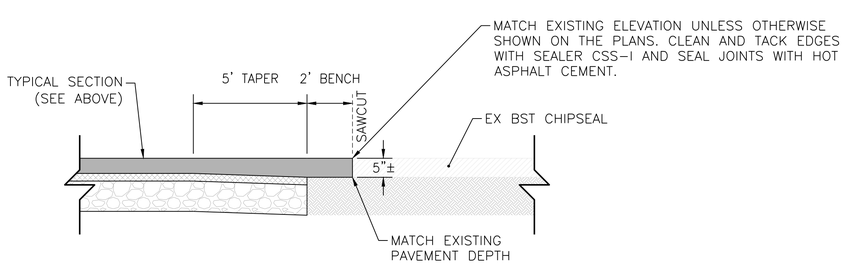
1. 4'' HMA PG CL. 1/2" PG 64H-22
2. 12'' CSBC
3. 4'' CSBC
4. 6'' TOPSOIL TYPE A
5. GRAVEL BORROW AS NEEDED TO EXPAND THE ROADWAY EMBANKMENT
6. BEAM GUARDRAIL TYPE 31 PER WSDOT STD PLAN C-20.10-08. BEAM GUARDRAIL BLOCKS AND POSTS SHALL PER WSDOT STD PLAN C-1b. GUARDRAIL POST OVER THE BOX CULVERT SHALL USE BOX CULVERT EMBEDDED ANCHOR GUARDRAIL STEEL POST PER WSDOT STD PLAN C-20.41-05.

GENERAL NOTES:

1. ALL SURFACING AND PAVING DEPTHS ARE COMPACTED DEPTHS.
2. SEE PLAN AND PROFILE SHEETS FOR ROADWAY ELEVATIONS.
3. SEE SHEET 19 FOR TOPSOIL PREPARATION DETAILS.

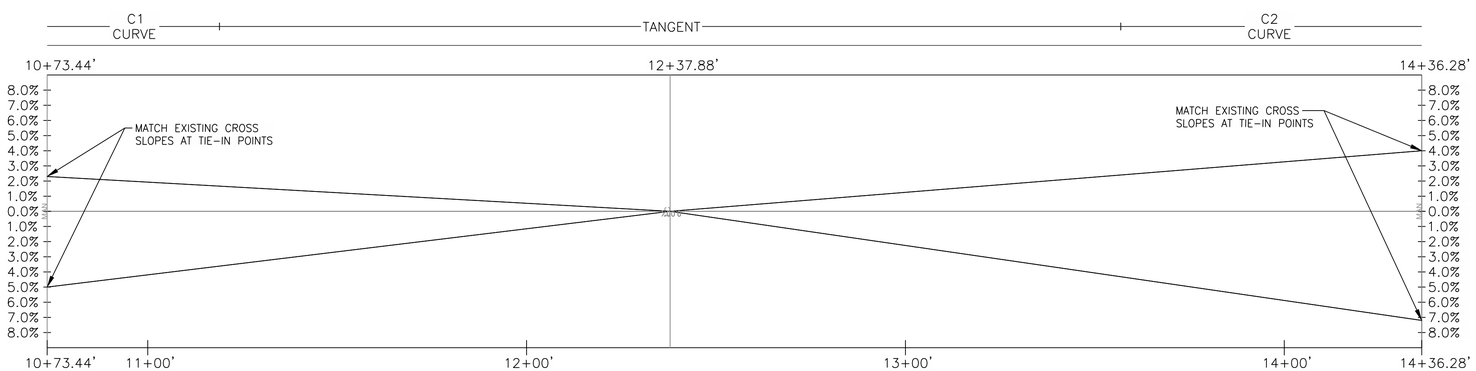
ROAD SECTIONS

BEGIN STATION	END STATION	"A" WIDTH	"B" WIDTH	"C" WIDTH	"D" WIDTH
10+73.44	11+73.44	1.8'-6.0'	11.3'-11.0'	10.3'-11.0'	0.9'-6.0'
11+73.44	13+36.28	6.0'	11.0'	11.0'	6.0'
13+36.28	14+36.28	6.0'-1.0'	11.0'-11.1'	11.0'-10.3'	6.0'-1.1'



2 PAVEMENT TRANSITION

NTS



3 SUPERELEVATION DIAGRAM

1" = 20'

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
JOANNA J. KUNKLER
STATE OF WASHINGTON
25430
REGISTERED PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

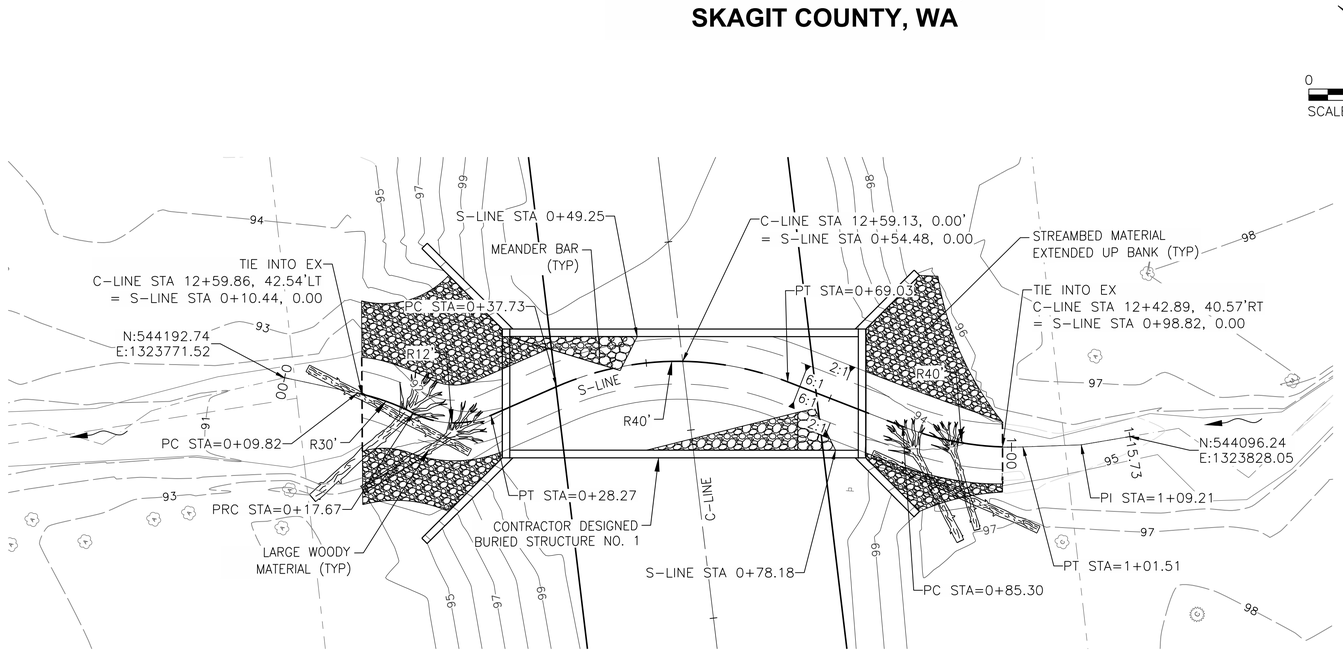
STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

TS01ES07000-15
TYPICAL ROADWAY SECTIONS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

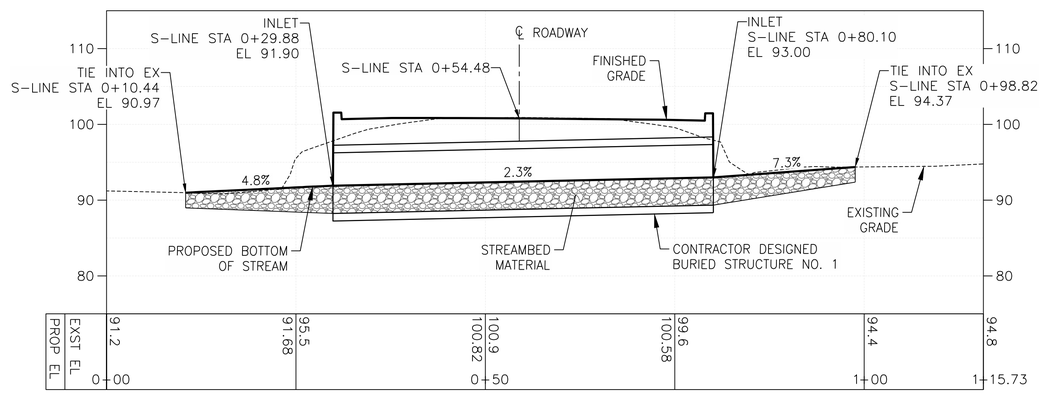
SHEET
10 OF **20**

SECTION 34, T. 35 N., R. 5E., W.M.
SKAGIT COUNTY, WA



1 PLAN VIEW

Scale: 1:10



2 STREAM (S-LINE) PROFILE VIEW

Scale: 1:10

GENERAL NOTES

1. REFERENCE SHEET 12 FOR STREAM DETAILS.
2. REFERENCE SHEETS 13 THROUGH 17 FOR PRECAST CONCRETE REINFORCED SPLIT BOX CULVERT AND WINGWALLS DESIGN AND DETAILS.
3. LWM WILL BE FIELD-FITTED AS DIRECTED BY THE ENGINEER. IF CONIFEROUS TREES ARE NOT AVAILABLE ON SITE, THEY WILL BE IMPORTED.
4. LWM WILL BE ANCHORED INTO THE BANKS OF THE STREAM CHANNEL. APPROXIMATELY 2/3 OF THE LWM WILL BE BURIED WITH 1/3 PROJECTING INTO THE CHANNEL FOR INTERACTION WITH LOW AND HIGH FLOWS. LWM WILL HAVE A MINIMUM DIAMETER AT BREAST HEIGHT OF 8" AND MAXIMUM OF 24".
5. STREAMBED MATERIAL WILL BE PLACED IN LIFTS NO THICKER THAN 12 INCHES. MATERIAL PLACEMENT SHALL ENSURE STREAM FLOW RATE IS CONVEYED ABOVE EACH LAYER. A MIXTURE OF WATER AND SAND WILL BE ADDED TO EACH LAYER TO FILL THE INTERSTITIAL VOIDS OF THE STREAMBED MATERIAL. THIS PROCESS SHALL BE REPEATED UNTIL THE STREAM DOES NOT GO SUBSURFACE AND THERE IS NO PERCEIVABLE DIFFERENCE IN FLOW RATE FROM UPSTREAM OF THE PROJECT LIMITS TO THE DOWNSTREAM LIMITS.
6. STREAMBED MATERIAL USED FOR THE STREAM, BANKS, AND FLOODPLAIN SHALL HAVE STREAMBED ORGANIC MATERIAL INCORPORATED INTO THE TOP LIFT. PRIOR TO ADDING STREAMBED ORGANIC MATERIAL ENSURE THAT THE WATER FLOW DOES NOT GO SUBSURFACE. SEE SPECIFICATIONS.

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
SANTOSH J. KUNTHIA
STATE OF WASHINGTON
21420
PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

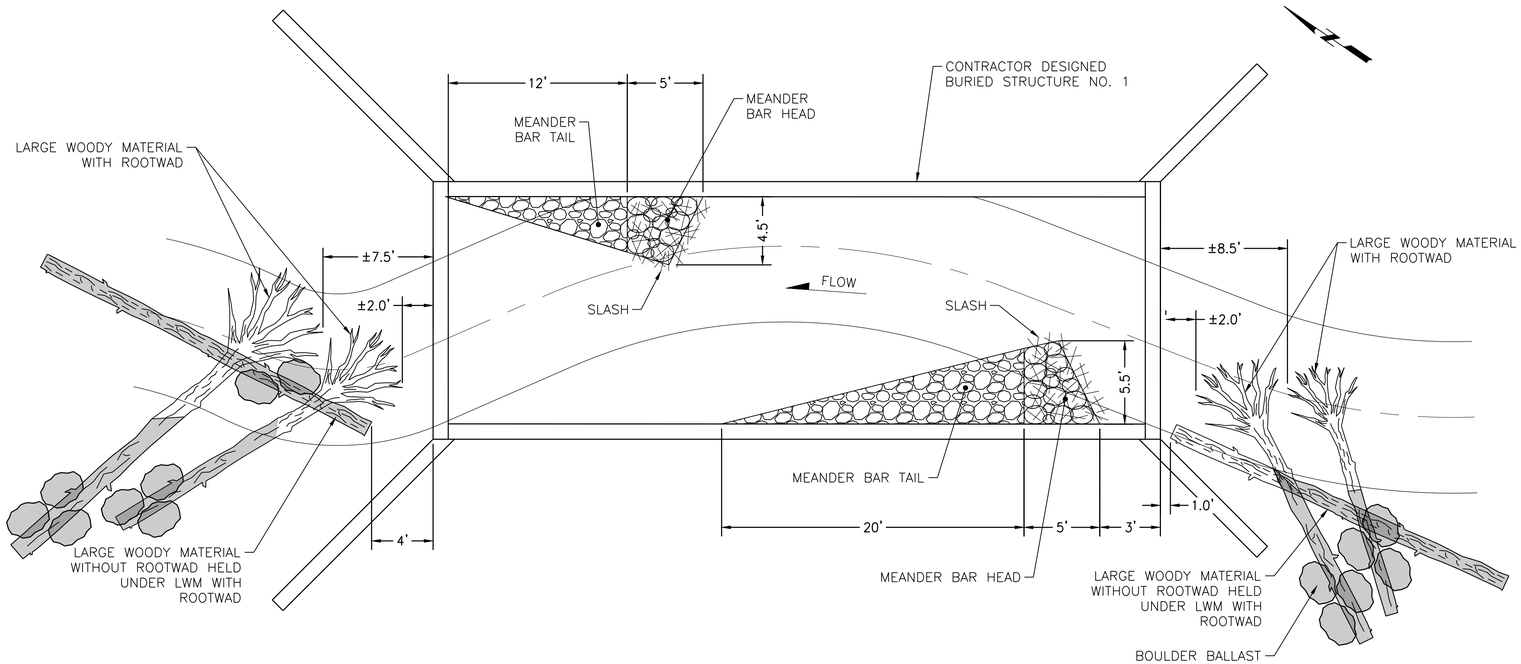
PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

PP01ES07000-15
STREAM PLAN AND PROFILE

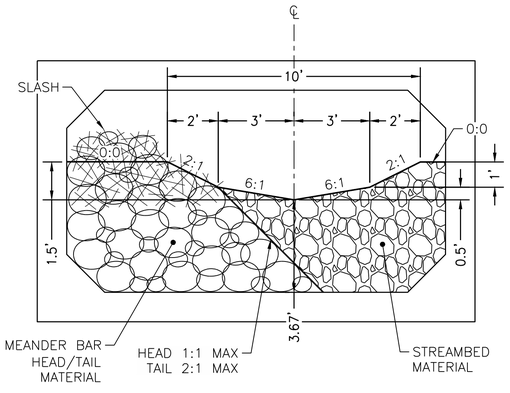
1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
11 OF **20**



1 STREAM FEATURES DETAIL

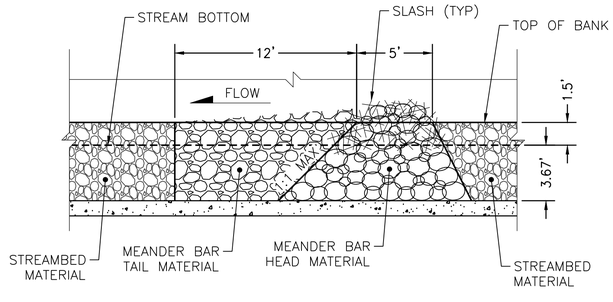
Scale: 1:5



2 TYPICAL STREAM CROSS-SECTION

Scale: 1:3

NOTE: THE WIDTHS SHOWN REPRESENT THE STANDARD STREAM SECTION. ACTUAL WIDTHS WILL VARY BASED ON STREAM ALIGNMENT LOCATION.



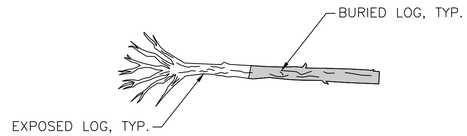
3 TYPICAL STREAM LONGITUDINAL SECTION

Scale: 1:5

MATERIAL NOTES

1. STREAMBED MATERIAL SHALL BE A MIX OF THE FOLLOWING AGGREGATES WITH ASSOCIATED RATIOS:
   - STREAMBED SEDIMENT = 67%, BY VOLUME
   - STREAMBED COBBLES 6 IN. = 33%, BY VOLUME
2. MEANDER BAR HEAD MATERIAL SHALL BE A MIX OF THE FOLLOWING AGGREGATES WITH THE ASSOCIATED RATIOS:
   - STREAMBED BOULDERS TYPE TWO = 100%, BY VOLUME
3. MEANDER BAR TAIL MATERIAL SHALL BE A MIX OF THE FOLLOWING AGGREGATES WITH THE ASSOCIATED RATIOS:
   - STREAMBED SEDIMENT = 50%, BY VOLUME
   - STREAMBED COBBLES 8 IN. = 50%, BY VOLUME
4. SLASH SHALL BE INTERWOVEN BETWEEN THE BOULDERS FORMING THE MEANDER BAR HEAD AND SHOULD ALSO WRAP AROUND THE FLOW–WARD SIDES TO ENGAGE WITH FLOW AND SCOUR POOL. SLASH SHOULD BE INCORPORATED INTO THE MEANDER BARS 2' BELOW FINISHED GRADE.
5. LWM WILL BE BURIED INTO THE BANKS OF THE STREAM CHANNEL AT A MINIMUM DEPTH OF 2 FEET. APPROXIMATELY 2/3 OF THE LWM WILL BE BURIED WITH 1/3 PROJECTING INTO THE CHANNEL FOR INTERACTION WITH LOW AND HIGH FLOWS. EACH LWM STRUCTURE WILL INCLUDE A COMBINATION OF MATERIALS CLOSELY MATCHING THE PLAN. ANY DISCREPANCIES WILL BE BROUGHT TO THE ATTENTION OF THE ENGINEER
6. LWM SPECIES SHALL BE DOUGLAS FIR OR WESTERN RED CEDAR. LOGS MUST BE GREEN (NOT STOCKPILED). DIAMETER AT BREAST HEIGHT (DBH) SHALL BE A MINIMUM OF 18 INCHES AND A MAXIMUM OF 24 INCHES.
7. LOGS WITHOUT ROOTWAD SHALL HAVE A MINIMUM LENGTH OF 24 FEET.
8. LOGS WITH ROOTWADS SHALL HAVE A MINIMUM LENGTH OF 24 FEET MEASURED FROM BASE OF ROOTWAD.
9. LWM USED IN STREAM RESTORATION PROJECTS, WITH OR WITHOUT THE ROOTWAD, MUST BE FREE OF SOIL, ROCKS, BEFORE INSTALLATION IN THE STREAM CHANNEL OR BANK.
10. BOULDER BALLASTS USED TO ANCHOR LOGS SHALL BE STREAMBED BOULDERS TYPE THREE.

LWM LEGEND



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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
SANTOSH J. KURUVILLA
STATE OF WASHINGTON
27430
REGISTERED PROFESSIONAL ENGINEER
12/11/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: BL
DRAWN BY: BL
CHECKED BY: LS
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

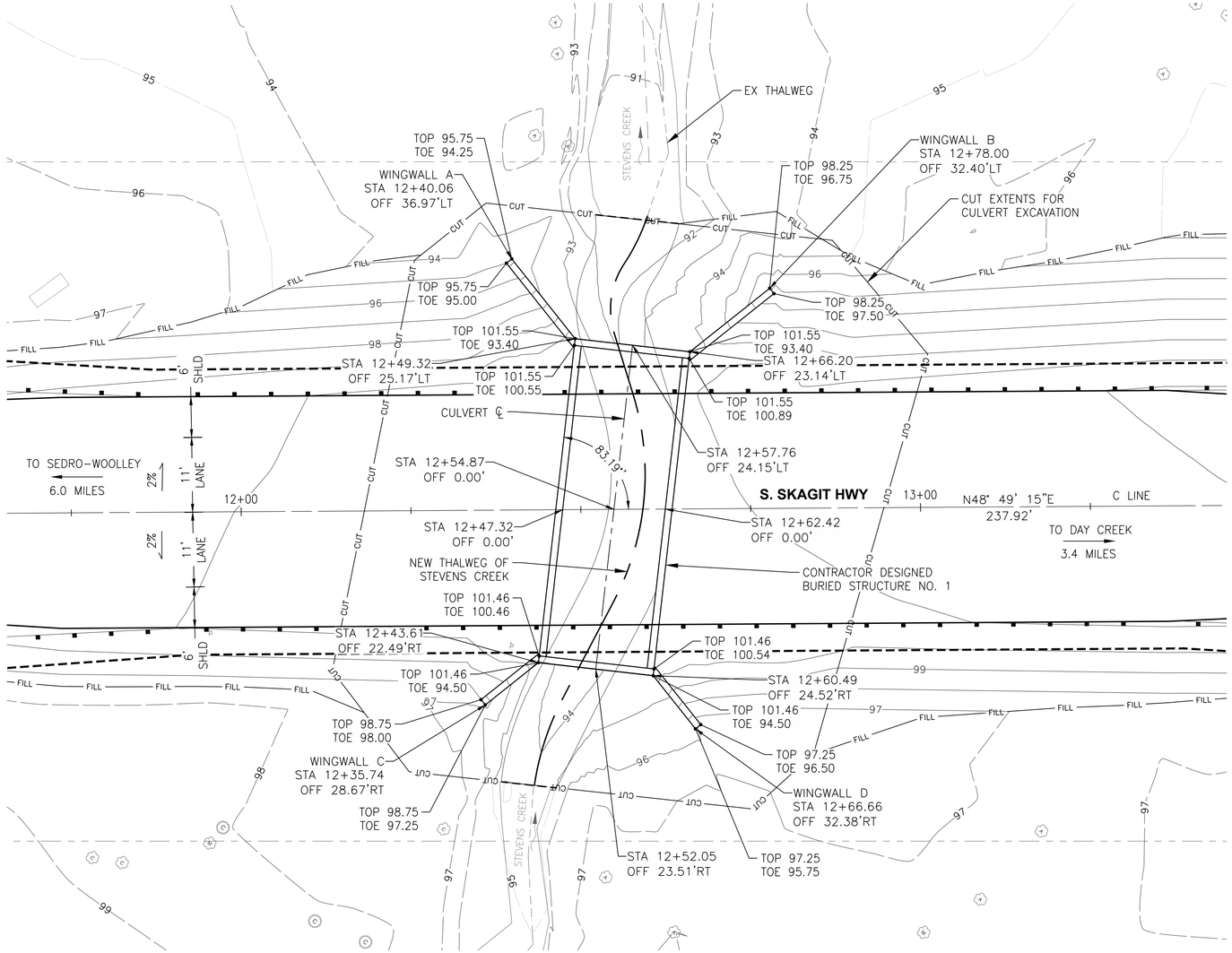
STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

DT01ES07000-15
STREAM DETAILS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
12 OF 20

SECTION 34, T. 35 N., R. 5E., W.M.
SKAGIT COUNTY, WA



1 CULVERT PLAN
Scale: 1:10

NOTES:

1. TOE ELEVATIONS ARE THE FINISHED GRADES AT FACE OF WALLS.

CONTRACTOR DESIGNED BURIED STRUCTURE NO. 1:
PRECAST CONCRETE REINFORCED SPLIT BOX CULVERT

0 10 20
SCALE IN FEET

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
RONALD L. SMITH
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
12/1/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: RS
DRAWN BY: MH
CHECKED BY: HC
APPROVED BY: SJK

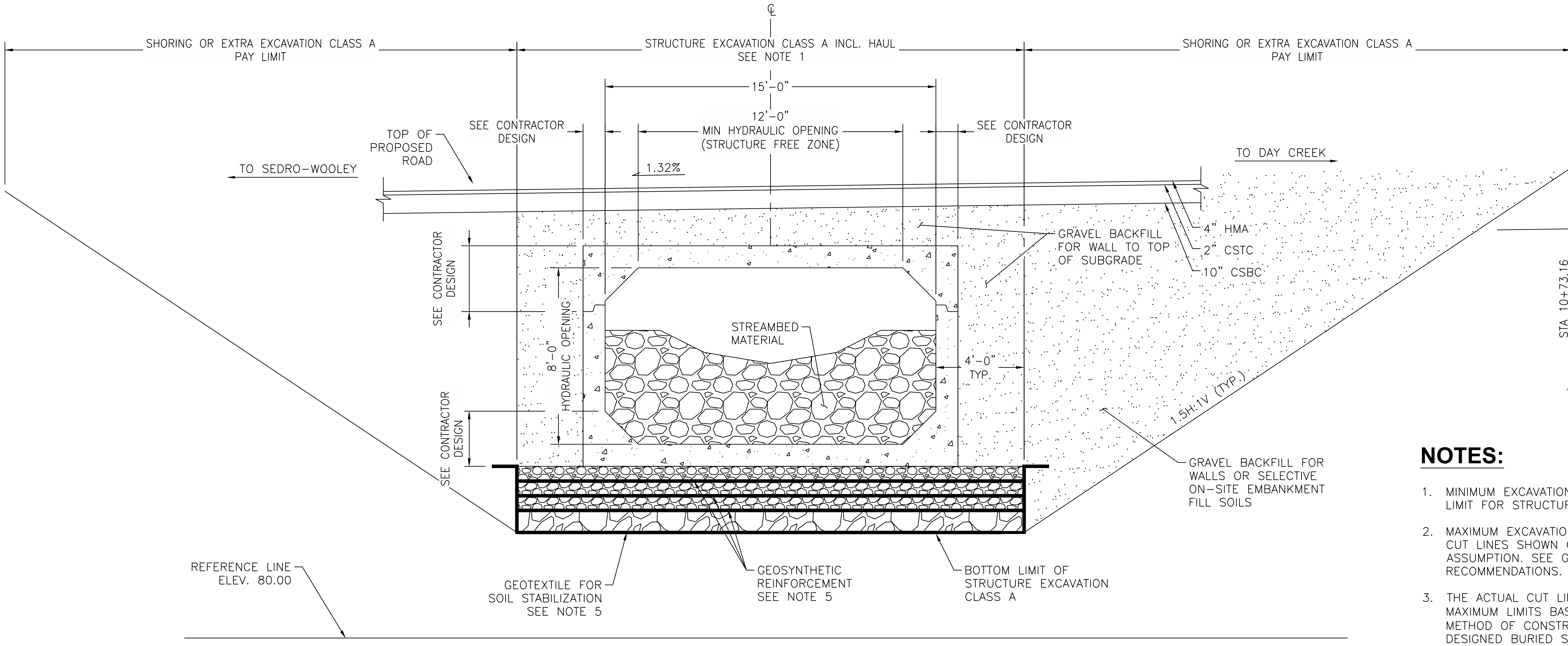
PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

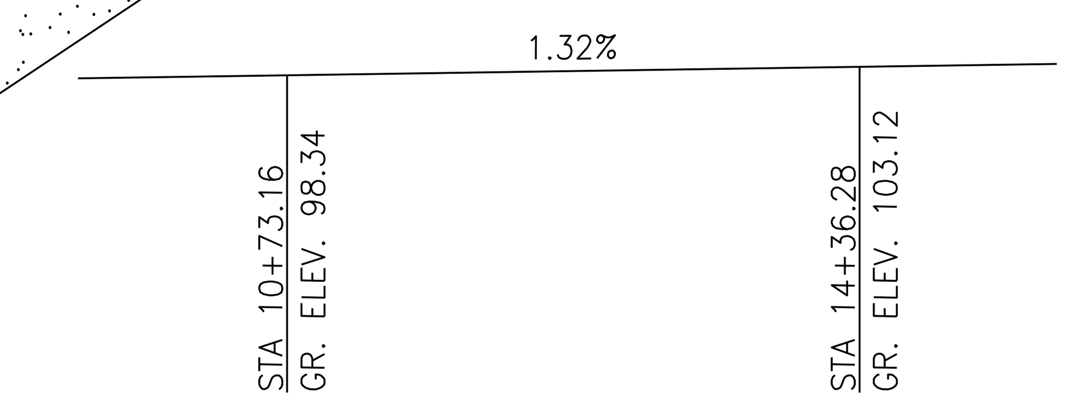
CU01ES07000-15
CULVERT PLAN

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

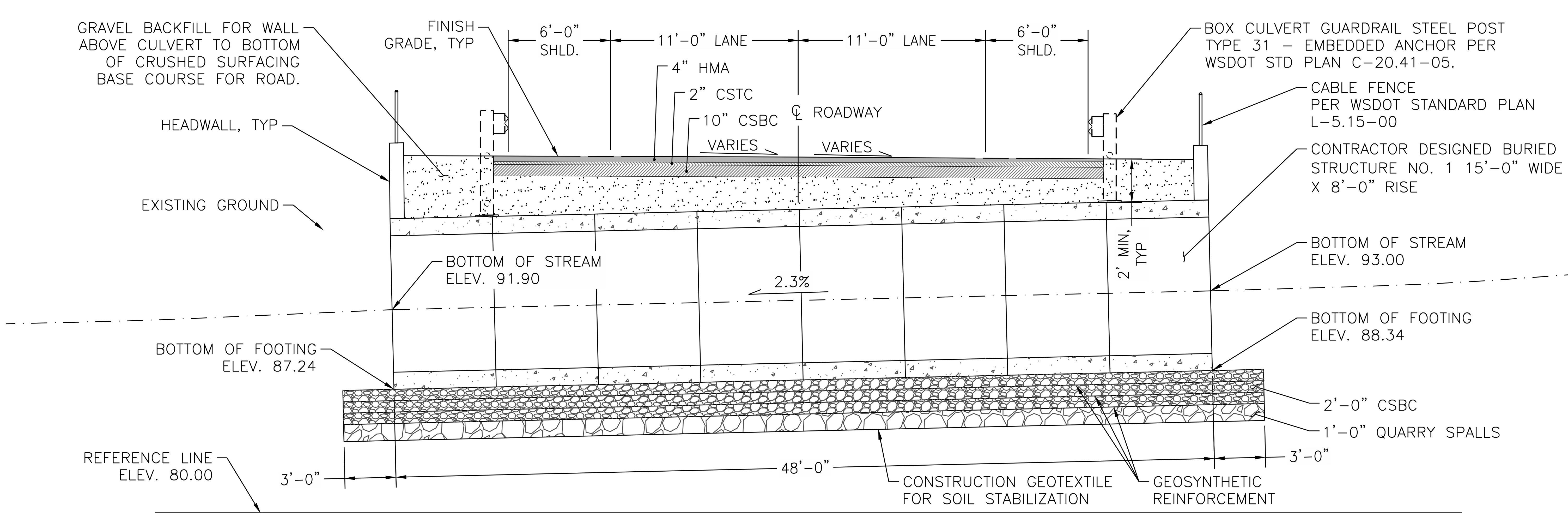
SHEET
13 OF 20



1 TRANSVERSE SECTION
Scale: 1" = 3'



STEVENS CREEK ROAD PROFILE
DATUM NAVD88



2 LONGITUDINAL SECTION
Scale: 1" = 5'
(WING WALLS NOT SHOWN FOR CLARITY)

NOTES:

1. MINIMUM EXCAVATION WIDTH IS BASED ON THE NEAT LINE PAY LIMIT FOR STRUCTURE EXCAVATION CLASS A INCLUDING HAUL.
2. MAXIMUM EXCAVATION WIDTH IS BASED ON 1.5H:1V SLOPES. CUT LINES SHOWN ON PLANS ARE BASED ON THIS ASSUMPTION. SEE GEOTECH REPORTS FOR SITE SPECIFIC RECOMMENDATIONS.
3. THE ACTUAL CUT LINE WILL VARY BETWEEN THE MINIMUM AND MAXIMUM LIMITS BASED ON THE CONTRACTOR'S APPROVED METHOD OF CONSTRUCTION, AND APPROVED CONTRACTOR DESIGNED BURIED STRUCTURE.
4. STRUCTURE EXCAVATION CLASS A, SHORING AND EXTRA EXCAVATION CLASS A, GRAVEL BACKFILL FOR WALLS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
5. PLACE AND COMPACT AT LEAST 12 INCHES OF ANGULAR QUARRY SPALLS ATOP THE GEOTEXTILE IN 6-INCH LIFTS WITH EXCAVATOR BUCKET (TAMPING). PLACE AND COMPACT A TOTAL OF 2 FEET OF CRUSHED SURFACING BASE COURSE (CSBC) WITH INTERBEDDED HORIZONTAL GEOSYNTHETIC REINFORCEMENT ATOP THE QUARRY SPALLS. AT LEAST THREE LAYERS OF INTERBEDDED GEOSYNTHETIC REINFORCEMENT CONSISTING OF A TRIAXIAL-PATTERN GEOSYNTHETIC GRID, SUCH AS H-SERIES H5.5 GEOGRID BY TENSAR, OR EQUIVALENT SHOULD BE PLACED; ONE AT THE QUARRY SPALLS-CSBC INTERFACE; A SECOND 8 INCHES ABOVE THE INTERFACE, AND THE THIRD 16 INCHES ABOVE THE INTERFACE. CSBC AND REINFORCEMENT SHOULD BE PLACED IN RELATIVELY DRY CONDITIONS. CSBC SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY.
6. BACKFILL MATERIAL SHALL CONSIST OF GRAVEL BACKFILL FOR WALLS OR SELECTIVE ON-SITE EXCAVATION FILL SOILS, THE SELECTIVE ON-SITE EXCAVATION FILL SOILS ARE SAND AND GRAVEL WITH VARYING AMOUNTS OF FINES THAT ARE LOCATED IN THE EMBANKMENT FILL EXTENDING TO 10 FEET BELOW GROUND SURFACE. SEE DETAIL 2 ON SHEET 17 FOR LIMITS OF GRAVEL BACKFILL FOR WALLS.
7. FOR WING WALL DETAILS SEE SHEET 15 AND 16.
8. REFERENCE SHEETS 11 AND 12 FOR STREAM DESIGN AND DETAILS.

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NO.	REVISIONS	DATE

ENGINEER OF RECORD
RONALD L. SMITH, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
12/1/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: RS
CHECKED BY: HC
DRAWN BY: MH
APPROVED BY: SJK
PROJECT LOCATED NEAR: SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)
DD01ES07000-15
CULVERT SECTIONS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

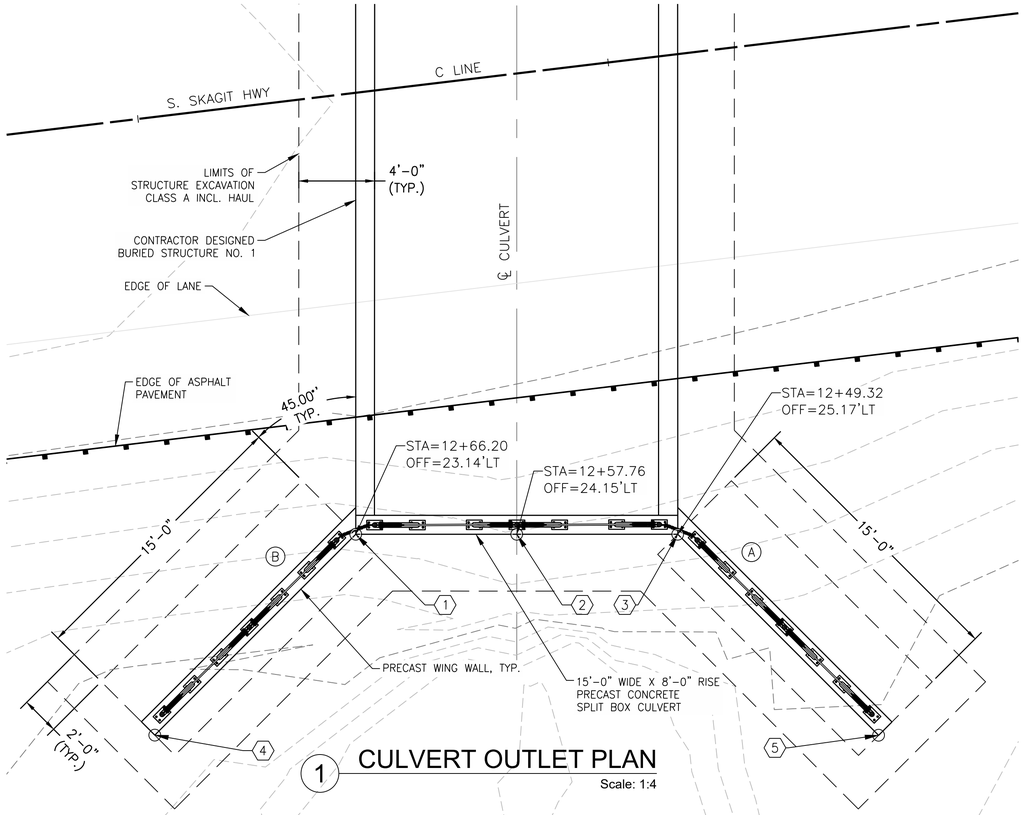
SHEET
14 OF 20

CULVERT STATION / OFFSET DIMENSIONS

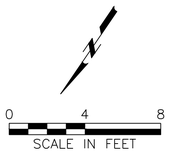
POINT	STATION / OFFSET
1	C 12+66.20 (23.14' LT)
2	C 12+57.76 (24.15' LT)
3	C 12+49.32 (25.17' LT)
4	C 12+78.00 (32.40' LT)
5	C 12+40.06 (36.97' LT)

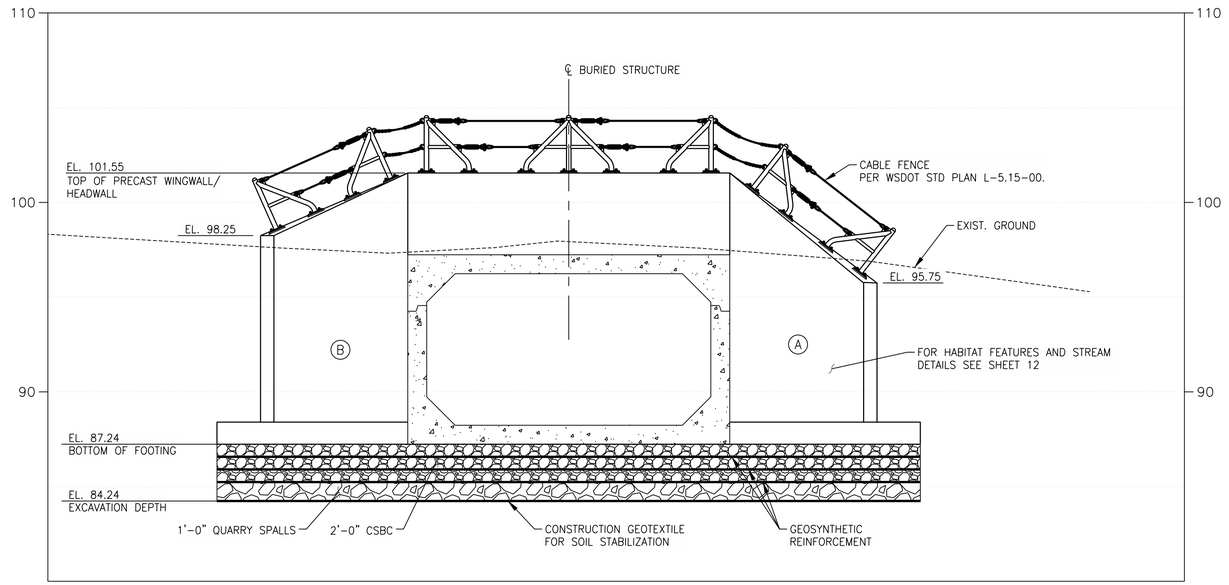
NOTES:

1. ELEVATIONS IN UNITS OF FEET.
2. CONCRETE WINGWALLS ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL REFER TO MANUFACTURER'S DRAWINGS AND SPECIFICATIONS FOR MORE INFORMATION.
3. HEADWALL AND WINGWALLS ARE INCLUDED IN LUMP SUM BID ITEM "CONTRACTOR DESIGNED BURIED STRUCTURE NO. 1".
4. CABLE FENCE TO BE CONSTRUCTED ON TOP OF WINGWALLS AND HEADWALLS.
5. SEE SHEET 17 FOR DETAILS.



1 CULVERT OUTLET PLAN
Scale: 1:4





2 CULVERT OUTLET ELEVATION
Scale: 1:10
(LOOKING UPSTREAM)

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NO.	REVISIONS	DATE

ENGINEER OF RECORD
RONALD L. SMITH
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
12/1/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: RS
CHECKED BY: HC
DRAWN BY: MH
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

WL01ES07000-15
WING WALL DETAILS (SHEET 1 OF 3)

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

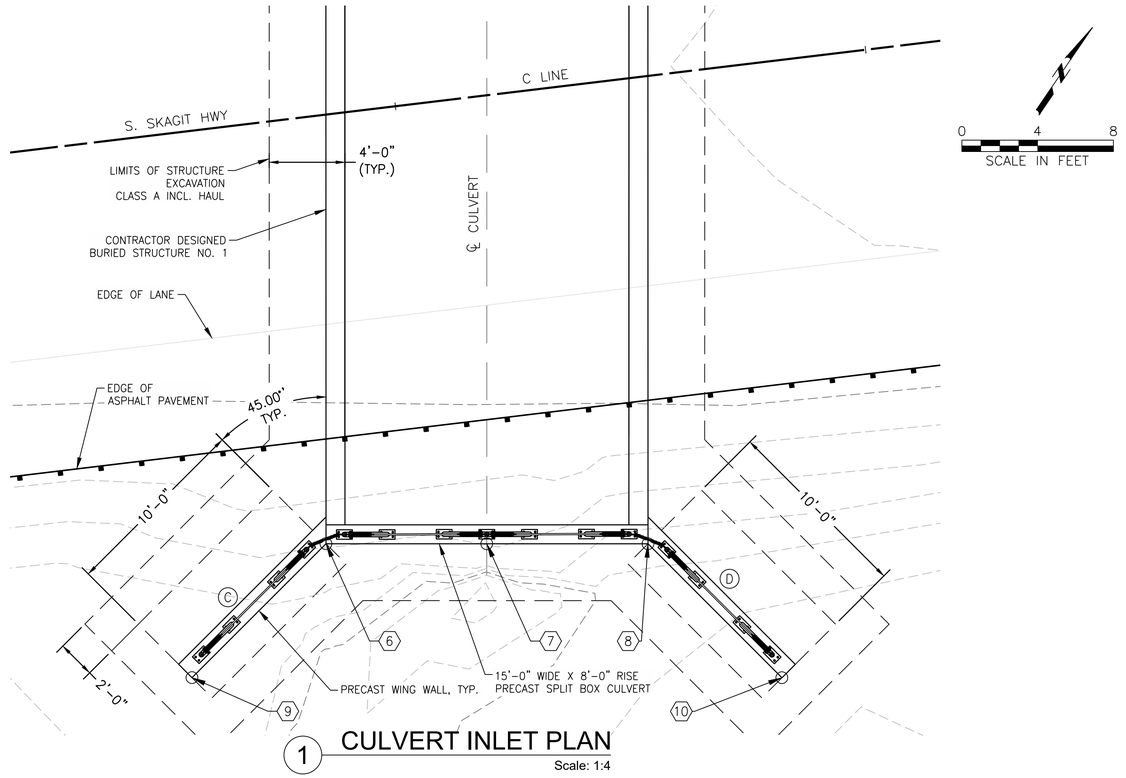
SHEET
15 OF **20**

CULVERT STATION / OFFSET DIMENSIONS

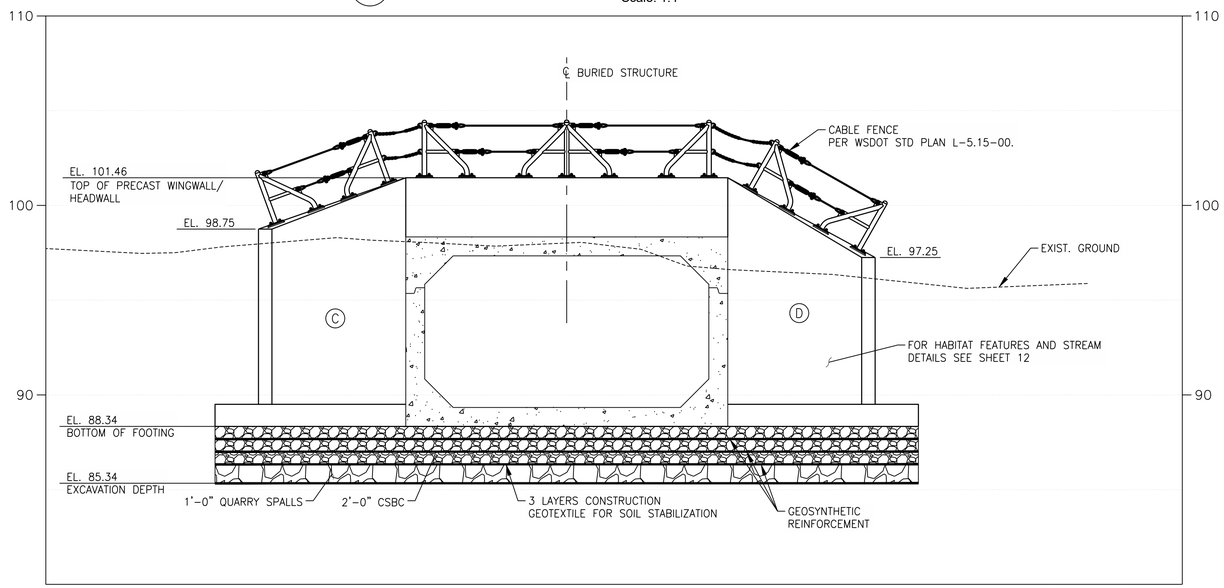
POINT	STATION / OFFSET
6	C 12+43.61 (22.49' RT)
7	C 12+52.05 (23.51' RT)
8	C 12+60.49 (24.52' RT)
9	C 12+35.74 (28.67' RT)
10	C 12+66.66 (32.38' RT)

NOTES:

1. ELEVATIONS IN UNITS OF FEET.
2. CONCRETE WINGWALLS ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL REFER TO MANUFACTURER'S DRAWINGS AND SPECIFICATIONS FOR MORE INFORMATION.
3. HEADWALL AND WINGWALLS ARE INCLUDED IN LUMP SUM BID ITEM "CONTRACTOR DESIGNED BURIED STRUCTURE NO. 1".
4. CABLE FENCE TO BE CONSTRUCTED ON TOP OF WINGWALLS AND HEADWALLS.
5. SEE SHEET 17 FOR DETAILS.



1 CULVERT INLET PLAN
Scale: 1:4



2 CULVERT INLET ELEVATION
Scale: 1:10
(LOOKING DOWNSTREAM)

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NO.	REVISIONS	DATE

ENGINEER OF RECORD
RONALD L. SMITH — STATE OF WASHINGTON — 19361 — REGISTERED PROFESSIONAL ENGINEER
12/1/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: RS
CHECKED BY: HC
DRAWN BY: MH
APPROVED BY: SJK

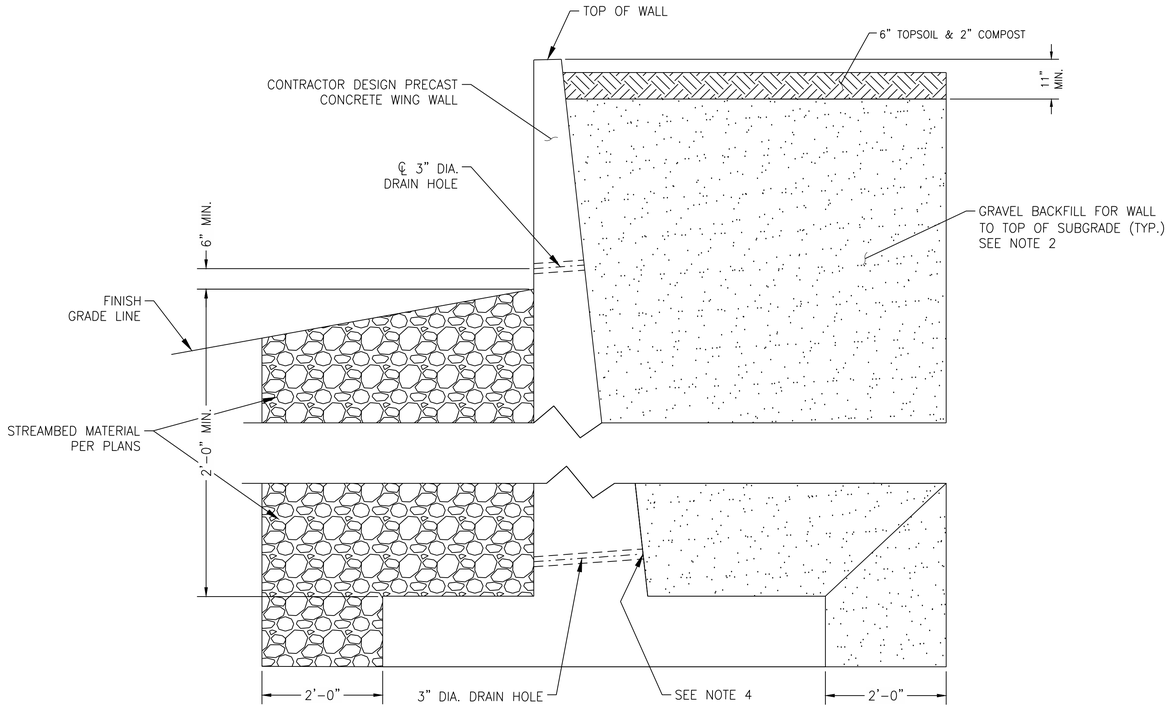
PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

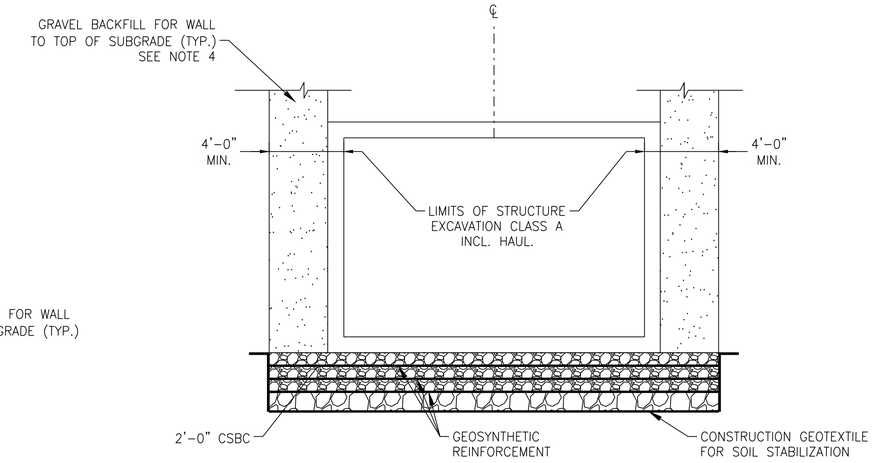
WL01ES07000-15
WING WALL DETAILS (SHEET 2 OF 3)

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

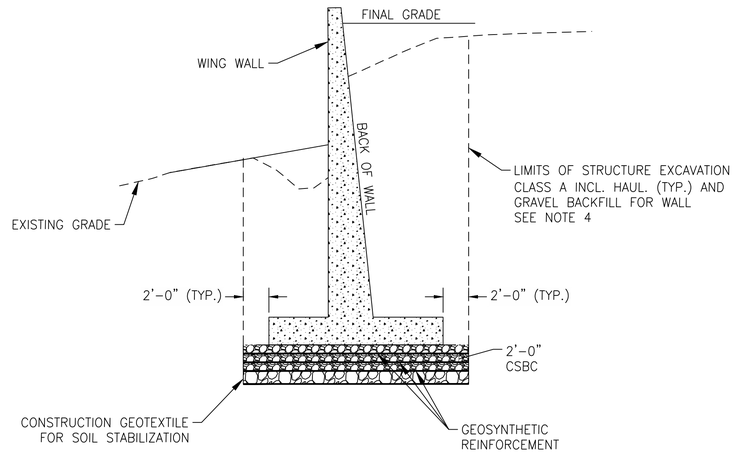
SHEET
16 OF 20



1 RETAINING WING WALL BACKFILL DETAIL (TYP.)
NTS



2 CULVERT BACKFILL DETAIL
NTS



3 RETAINING WING WALL GRADING DETAIL (TYP.)
NTS

NOTES:

1. ALL DISTANCES MEASURED ALONG TOP OF WALL.
2. BACKFILL MATERIAL SHALL CONSIST OF GRAVEL BACKFILL FOR WALLS UNLESS OTHERWISE NOTED.
3. SEE SHEETS 15 AND 16 FOR TOP OF WALL ELEVATIONS AND GEOTECHNICAL INFORMATION.
4. LOCATE TWO DRAIN HOLES BELOW THE FINISHED GROUND LINE AND TWO DRAIN HOLES ABOVE THE FINISHED GROUND LINE AS SHOWN IN THE WING WALL BACKFILL DETAIL. EACH DRAIN HOLE SHALL BE LOCATED 2 FT HORIZONTALLY FROM EITHER END OF THE WING WALL. COVER OUTLET AND INLET OF DRAIN HOLES WITH GEOTEXTILE PER STANDARD SPEC 6-02.3(22).
5. PLACE CABLE FENCE ALONG TOP OF HEADWALLS AND WING WALLS.

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(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD

RONALD L. SMITH
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER

12/1/2025

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: RS
DRAWN BY: MH
CHECKED BY: HC
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

WL01ES07000-15
WING WALL DETAILS (SHEET 3 OF 3)

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

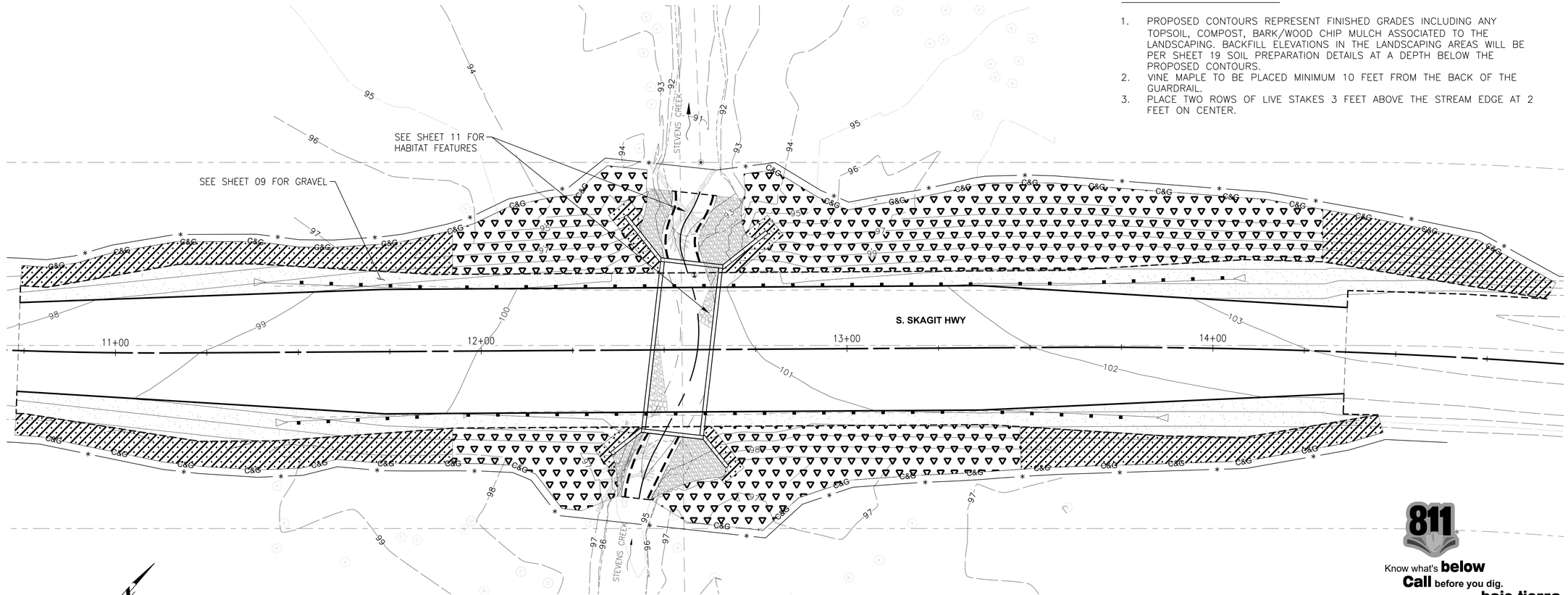
SHEET
17 OF 20

SECTION 34, T. 35 N., R. 5E., W.M.
SKAGIT COUNTY, WA

PLANT LIST		
SYMBOL	ITEM	PERCENTAGE
ZONE A (6,455 SF)		
	VINE MAPLE	30%
	RED-OSIER DOGWOOD	10%
	THIMBLEBERRY	10%
	SALMONBERRY	30%
	SNOWBERRY	20%
LIVE STAKES (76 LF), 2 ROWS AT 2' O.C.		
	SITKA WILLOW	
EROSION CONTROL SEED MIX WITH POLLINATORS ZONE (3,440 SF)		

GENERAL NOTES

1. PROPOSED CONTOURS REPRESENT FINISHED GRADES INCLUDING ANY TOPSOIL, COMPOST, BARK/WOOD CHIP MULCH ASSOCIATED TO THE LANDSCAPING. BACKFILL ELEVATIONS IN THE LANDSCAPING AREAS WILL BE PER SHEET 19 SOIL PREPARATION DETAILS AT A DEPTH BELOW THE PROPOSED CONTOURS.
2. VINE MAPLE TO BE PLACED MINIMUM 10 FEET FROM THE BACK OF THE GUARDRAIL.
3. PLACE TWO ROWS OF LIVE STAKES 3 FEET ABOVE THE STREAM EDGE AT 2 FEET ON CENTER.



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NO.	REVISIONS	DATE

ENGINEER OF RECORD
STATE OF WASHINGTON
JASMINE A. AYLWIN
LANDSCAPE ARCHITECT
LA 843 EXP. 05/10/2027
12/1/2025

COUNTY ENGINEER

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: JA
DRAWN BY: JA
CHECKED BY: JC
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

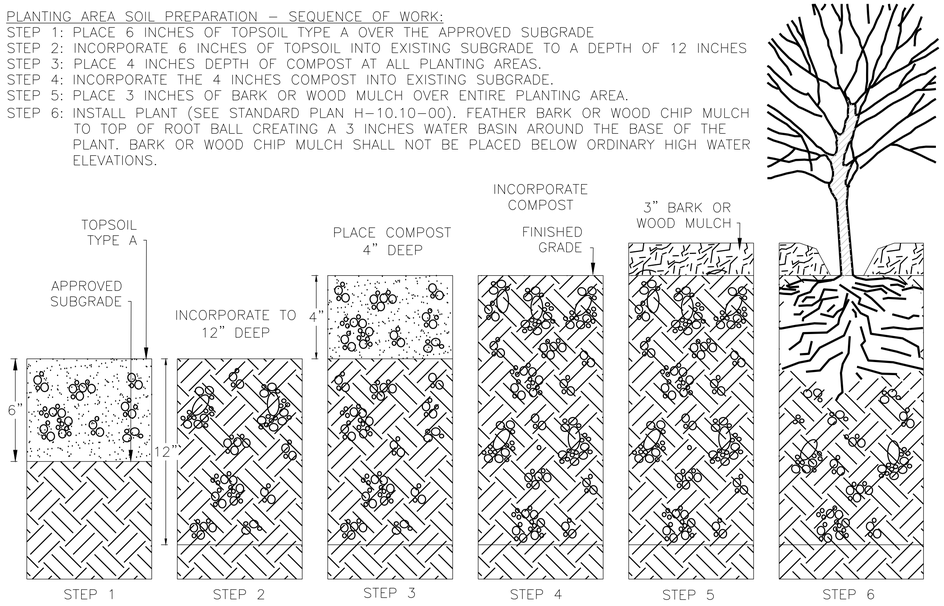
STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

LS01ES07000-15
RESTORATION PLANTING PLAN

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
18 OF **20**

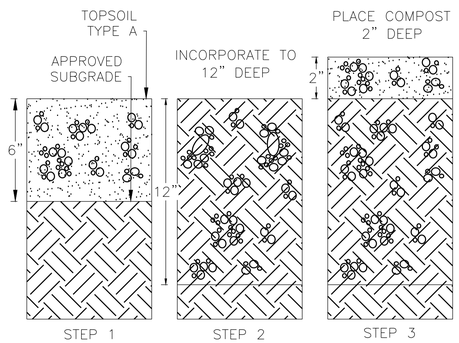
PLANTING AREA SOIL PREPARATION – SEQUENCE OF WORK:
STEP 1: PLACE 6 INCHES OF TOPSOIL TYPE A OVER THE APPROVED SUBGRADE
STEP 2: INCORPORATE 6 INCHES OF TOPSOIL INTO EXISTING SUBGRADE TO A DEPTH OF 12 INCHES
STEP 3: PLACE 4 INCHES DEPTH OF COMPOST AT ALL PLANTING AREAS.
STEP 4: INCORPORATE THE 4 INCHES COMPOST INTO EXISTING SUBGRADE.
STEP 5: PLACE 3 INCHES OF BARK OR WOOD MULCH OVER ENTIRE PLANTING AREA.
STEP 6: INSTALL PLANT (SEE STANDARD PLAN H–10.10–00). FEATHER BARK OR WOOD CHIP MULCH TO TOP OF ROOT BALL CREATING A 3 INCHES WATER BASIN AROUND THE BASE OF THE PLANT. BARK OR WOOD CHIP MULCH SHALL NOT BE PLACED BELOW ORDINARY HIGH WATER ELEVATIONS.



1 PLANTING AREA SOIL PREPARATION

Scale: NTS

PLANTING AREA SOIL PREPARATION – SEQUENCE OF WORK:
STEP 1: PLACE 6 INCHES OF TOPSOIL TYPE A OVER THE APPROVED SUBGRADE
STEP 2: INCORPORATE 6 INCHES OF TOPSOIL INTO EXISTING SUBGRADE TO A DEPTH OF 12 INCHES
STEP 3: PLACE 2 INCHES DEPTH OF COMPOST AT ALL PLANTING AREAS.



2 SEEDED AREA SOIL PREPARATION

Scale: NTS

PLANT MATERIAL LIST					
SYMBOL	ITEM	SPACING	PERCENTAGE	ROOT CONDITION	QUANTITY
ZONE A					
	ACER CIRCINATUIM/VINE MAPLE	6' O.C.	30%	NO. 1 CONT.	62
	CORNUS SERICEA/RED-OSIER DOGWOOD	6' O.C.	10%	NO. 1 CONT.	21
	RUBUS PARVIFLORUS/THIMBLEBERRY	6' O.C.	10%	NO. 1 CONT.	21
	RUBUS SPECTABILIS/SALMONBERRY	6' O.C.	30%	NO. 1 CONT.	62
	SYMPHORICARPOS ALBUS/SNOWBERRY	6' O.C.	20%	NO. 1 CONT.	41
LIVE STAKES					
	SITKA WILLOW	2' O.C.	2 ROWS	LIVE STAKES	76 LF
	EROSION CONTROL SEED MIX WITH POLLINATORS				3,440 SF

GENERAL NOTES:

1. LIMIT OF WORK TO CLEARING AND GRUBBING LINE. CLEAR AND GRUB ALL INVASIVE SPECIES WITHIN PROJECT LIMIT.
2. ANY DISCREPANCIES WITH THE DRAWING OR SPECIFICATIONS AND SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER/LANDSCAPE ARCHITECT PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. LOCATE UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR TO REVIEW ALL UTILITY LOCATIONS IN FIELD AND SHALL NOTIFY THE ENGINEER IF CONFLICTS WITH PLANT MATERIAL LOCATION EXIST.
4. ALL SEEDING AND PLANTING AREAS WITHIN THE PROJECT SITE SHALL BE WEED FREE PRIOR TO APPLICATION OF BARK MULCH AND TOPSOIL.
5. NEW PLANTING TO BE INSTALLED A MINIMUM OF TWO FEET FROM NEW OR EXISTING TREES.
6. NEW TREES IN PROJECT AREA SHALL HAVE A SETBACK OF 15 FEET FROM ROADWAY EDGE OR GUARDRAIL AND 15 FEET FROM BURIED UTILITIES.
7. PLANT SHRUBS IN GROUPS OF 3–5 BY SPECIES. RANDOMLY MIX SPECIES GROUPS WITHIN PLANTING AREAS.
8. PLACE ALL ROOTBALLS SO TOPS ARE LEVEL WITH FINISH GRADE.
9. PLANTING PITS WILL BE BACKFILLED WITH TOPSOIL THAT IS FREE OF ROCKS OVER 3/4 INCHES, LUMPS, AND OTHER FOREIGN MATERIALS. BACKFILLING AROUND TRUNKS OR STEMS IS NOT PERMITTED.
10. THE BACKFILL MATERIAL AND ROOTBALL SHALL BE THOROUGHLY WATERED ON THE SAME DAY THAT PLANTING OCCURS REGARDLESS OF SEASON.
11. POSITION ROOT CROWN AT SLOPE ELEVATION. ENSURE PLANT ROOTS ARE FULLY COVERED AND PLANT IS VERTICAL.
12. PLANT MATERIAL MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER/LANDSCAPE ARCHITECT.
13. ALL PLANTING AREAS SHALL RECEIVE A TWO–INCH UNIFORM DEPTH OF BARK OR WOOD CHIP MULCH.
14. POSITION ROOT CROWN AT SLOPE ELEVATION. ENSURE PLANT ROOTS ARE FULLY COVERED AND PLANT IS VERTICAL.
15. DURING ESTABLISHMENT, AT A MINIMUM 2 INCHES OF WATER, INCLUDING PRECIPITATION, SHALL BE PROVIDED TO PLANTING AREAS EVERY 2 WEEKS FROM JUNE 1 THROUGH SEPTEMBER 15. ENSURE ADEQUATE WATERING FOR 100% OF THE PLANTS TO BE ALIVE, HEALTHY, ESTABLISHMENT AND VIGOROUSLY GROWING.
16. WATERING PLAN SHALL BE DEVELOPED BY LANDSCAPE CONTRACTOR AND REVIEWED BY ENGINEER/LANDSCAPE ARCHITECT.
17. IF CONTRACTOR DISTURBS AN AREA OUTSIDE THE PROJECT LIMITS, THEY SHALL COORDINATE WITH THE ENGINEER/LANDSCAPE ARCHITECT TO RESTORE THE AREA IMPACTED.
18. DURING CONSTRUCTION THE CONTRACTOR WILL ATTEMPT TO REDUCE IMPACTS WHERE FEASIBLE. IF IMPACTS EXTEND BEYOND WHAT IS SHOWN IN LANDSCAPE PLANS, ADDITIONAL PLANTINGS WILL BE INCORPORATED IN THOSE LOCATIONS (WITH APPROPRIATE PLANTINGS AND SPACING) DURING CONSTRUCTION PHASE.
19. ALL PLANT MATERIAL SHALL MEET THE MINIMUM SIZE, CONDITION AND HEALTH FOR THE CONTAINER SIZE LISTED IN COMPLIANCE WITH THE CURRENT VERSION OF THE AMERICAN STANDARD FOR NURSERY STOCK AND WSDOT APPROVED.
20. IF STAKING IS REQUIRED CONTRACTOR TO GET APPROVAL FROM LANDSCAPE ARCHITECT.
21. WARRANTY AND ESTABLISHMENT PERIOD SHALL CONSIST OF PROVIDING ADEQUATE AND PROPER CARE FOR PLANT MATERIALS AND LANDSCAPE AREAS WITHIN THE CONTRACT LIMITS FOR ONE (1) YEAR (365 DAYS) PERIOD TO ENSURE HEALTHY, VIGOROUS GROWTH OF PLANTED MATERIAL. THE WARRANTY AND ESTABLISHMENT PERIOD SHALL BEGIN IMMEDIATELY UPON WRITTEN NOTIFICATION BY PROFESSIONAL OF RECORD OF THE ACCEPTANCE OF THE PLANTING MATERIALS.

811
Know what's **below**
Call before you dig.
Determina lo que está **bajo tierra**
Llama antes de excavar.

exeltech
a Bowman company
8729 Commerce Pl. Dr. NE
Lacey, WA 98516
(360) 357-8289
www.xltech.com

SKAGIT COUNTY
PUBLIC WORKS
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 416-1400

NO.	REVISIONS	DATE

ENGINEER OF RECORD
JASMINE A. RYANA
STATE OF WASHINGTON
LANDSCAPE ARCHITECT
No. 843 EXP. 05/09/2026
12/1/2025

COUNTY ENGINEER

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: JA
DRAWN BY: JA
CHECKED BY: JC
APPROVED BY: SJK

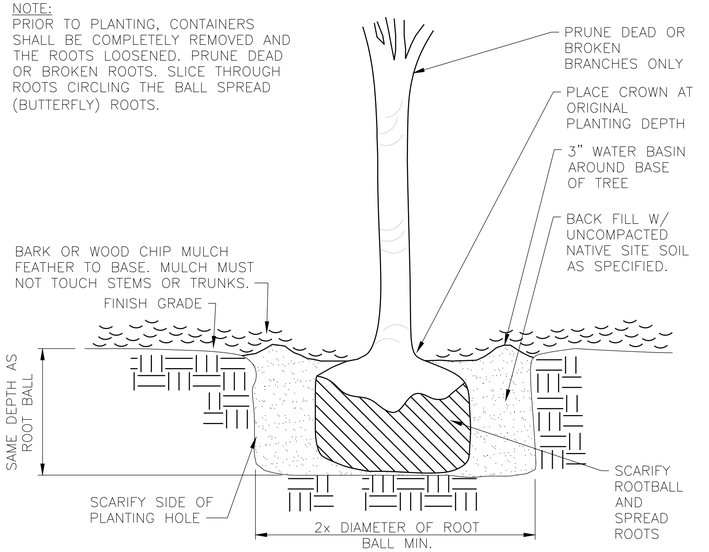
PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

LS01ES07000-15
PLANTING MATERIAL LIST

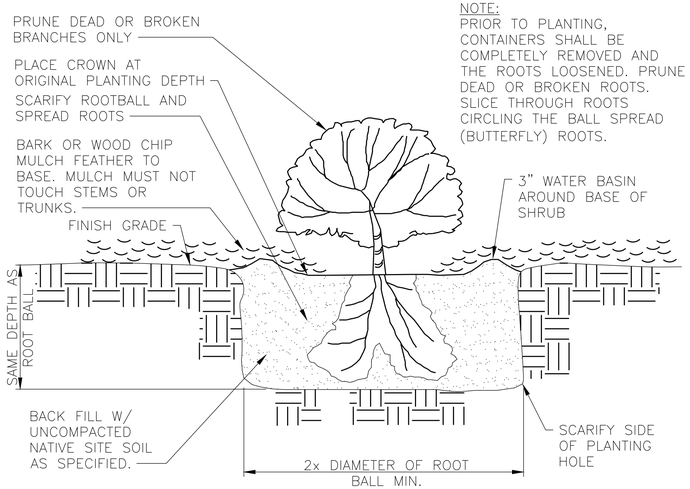
1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
19 OF 20



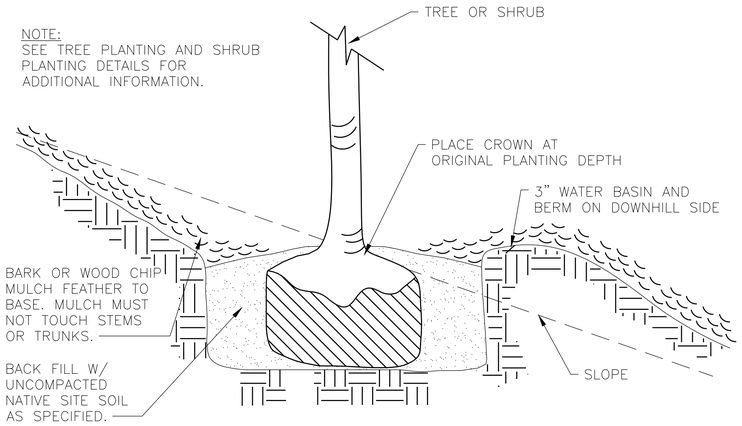
1 DECIDUOUS TREE PLANTING

Scale: NTS



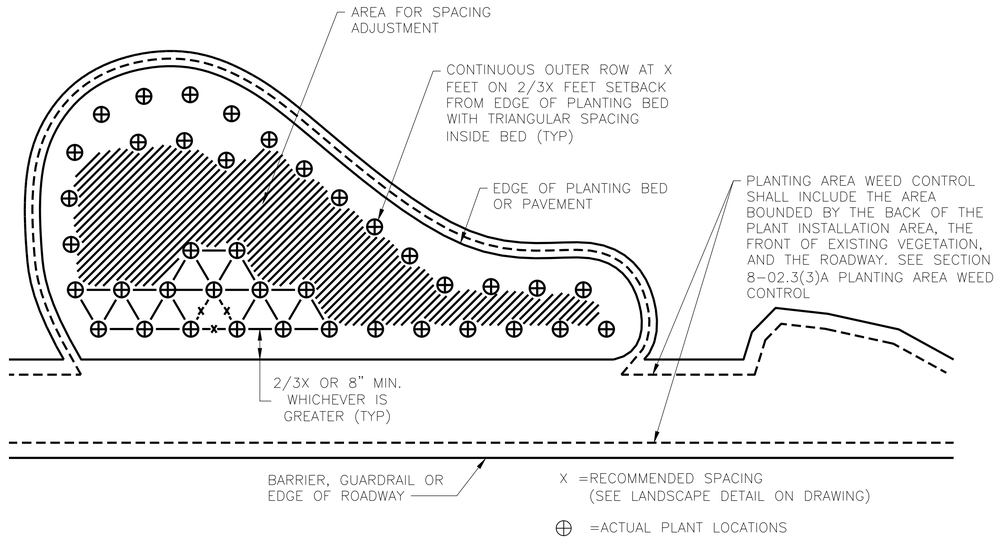
2 SHRUB PLANTING

Scale: NTS



3 SLOPE TREE/SHRUB PLANTING

Scale: NTS



4 PLANTING AREA LAYOUT, SETBACK, AND WEED CONTROL

Scale: NTS

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NO.	REVISIONS	DATE

ENGINEER OF RECORD

STATE OF WASHINGTON
JASMINE A. RYAN
19643
EXP. 05/10/2027
LANDSCAPE ARCHITECT

12/1/2025

COUNTY ENGINEER

PROJECT NO.: ES07000-15
FED. AID NO.: N/A
DESIGNED BY: JA
DRAWN BY: JA
CHECKED BY: JC
APPROVED BY: SJK

PROJECT LOCATED NEAR:
SEDRO-WOOLEY, WA
SECTION 35, TOWNSHIP 35 N, RANGE 5E W.M.

STEVENS CREEK FISH PASSAGE IMPROVEMENT PROJECT (ES07000-15)

LS01ES07000-15
PLANTING DETAILS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
20 OF **20**