CONTRACT DOCUMENTS
FOR

CITY OF FERNDALE, WASHINGTON

Brown Road Culvert Replacement Project

City Project Number SW2014-03

Consisting of:

Bid Documents
Contract Forms
Specifications & Conditions
Drawings

Plans Provided for:

City of Ferndale
Greg Young, Acting Public Works Director
2095 Main Street
Ferndale, WA 98248
Phone: (360) 384-4006

Engineer:

Reichhardt & Ebe Engineering, Inc.
423 Front Street
Lynden, WA 98264
Phone: (360) 354-3687
Fax: (360) 354-0407

BROWN ROAD CULVERT REPLACEMENT PROJECT
FERNDALE, WASHINGTON

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BID PROCEDURES AND CONDITIONS
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INVITATION TO BID
FOR
BROWN ROAD CULVERT REPLACEMENT PROJECT
 # SW2014-03

Sealed bid proposals will be received by the City of Ferndale at Ferndale City Hall, 2095 Main Street, Ferndale, Washington, 98248, (360) 384-4006, until May 13, 2015, at 4:00 PM, and will then and there be opened and publicly read for replacing an aging concrete culvert under Brown Road with a box culvert. Work will include installation of a box culvert; precast retaining walls; removal of existing pavement; grading; placing streambed gravel, gravel base, and crushed surfacing; hot mix asphalt paving; and other work in accordance with the Contract Plans, Special Provisions, the Standard Specifications, including the amendments thereto, and Standard Plans.

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check, or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory performance bond and payment bond both in an amount of 100 percent (100%) of the contract price within the time stated in the specifications, the bid proposal deposit shall be forfeited to the City of Ferndale. All bidders and subcontractors shall have a contractor's license to work in the State of Washington and a City of Ferndale Business License before starting work. All work performed on this project will be subject to prevailing state wage rates.

Project Documents:
Maps, plans, and specifications may be obtained from the Ferndale City Hall upon payment in the amount of $50 for specifications and plan sets. Informational copies of maps, plans and specifications are on file for inspection in the Ferndale City Hall, 2095 Main Street, Ferndale, Washington 98248.

Bidders, prior to submittal of a bid, may attend a pre-bid conference with the Project Engineer. The meeting will start on May 7, 2015, at 2:00 PM at the Ferndale City Hall, 2095 Main Street, Ferndale, Washington 98248. A jobsite visit may follow upon request.

The City of Ferndale in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

The City of Ferndale is an Equal Opportunity and Affirmative Action Employer. Minority and Women-Owned firms are encouraged to submit bids.

Sam Taylor
City Clerk - City of Ferndale
Ferndale Record Journal - Published Wednesday, April 22, 2015 and April 29, 2015

BID PROPOSAL FORMS
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BROWN ROAD CULVERT REPLACEMENT PROJECT SW 2014-03
CITY OF FERNDALE

April 22, 2015

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1	1 LUMP SUM	MOBILIZATION 1-09.7	$ per LS	$
2	1 LUMP SUM	SPILL PREVENTION, CONTROL & COUNTERMEASURES PLAN 1-07	$ per LS	$
3	1 LUMP SUM	PROJECT TEMPORARY TRAFFIC CONTROL 1-10	$ per LS	$
4	1 LUMP SUM	CLEARING AND GRUBBING 2-01	$ per LS	$
5	1 LUMP SUM	REMOVAL OF STRUCTURES AND OBSTRUCTIONS 2-02	$ per LS	$
6	300 LINEAR FOOT-INCH	SAWCUT ACP 2-02	$ per LF-IN	$
7	110 CUBIC YARD	ROADWAY EXCAVATION INCLUDING HAUL 2-03	$ per CY	$
8	15 CUBIC YARD	EMBANKMENT COMPACTION 2-03	$ per CY	$
9	30 CUBIC YARD	UNSUITABLE FOUNDATION EXCAVATION INCLUDING HAUL 2-03	$ per CY	$
10	20 M GAL.	WATER 2-07	$ per M GAL.	$
11	455 CUBIC YARD	STRUCTURE EXCAVATION CL A INCLUDING HAUL 2-09	$ per CY	$

BROWN ROAD CULVERT REPLACEMENT PROJECT SW 2014-03
CITY OF FERNDALE

April 22, 2015

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
12	1 LUMP SUM	SHORING OR EXTRA EXCAVATION CLASS A 2-09	$ per LS	$
13	1 FORCE ACCOUNT	SELECTED GRADING 2-13	$ 7,000.00 FA	$ 7,000.00
14	1,500 TON	GRAVEL BASE 4-02	$ per TON	$
15	260 TON	CRUSHED SURFACING TOP COURSE INCLUDING HAUL 4-04	$ per TON	$
16	75 TON	HMA CLASS 1/2" PG 64-22 5-04	$ per TON	$
17	1 CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT 5-04	$0.00 CALC	$0.00
18	1 CALC	COMPACTION PRICE ADJUSTMENT 5-04	$0.00 CALC	$0.00
19	1 LUMP SUM	3 SIDED INVERTED BOX CULVERT 6-02	$ per LS	$
20	1 LUMP SUM	PRECAST CANTILEVERED RETAINING WALL 6-02	$ per LS	$
21	1 FORCE ACCOUNT	EROSION/WATER POLLUTION CONTROL 8-01	$ 5,000.00 FA	$ 5,000.00
22	1 LUMP SUM	ESC LEAD 8-01	$ per LS	$
23	20 LINEAR FOOT	CHECK DAM 8-01	$ per LF	$

BROWN ROAD CULVERT REPLACEMENT PROJECT SW 2014-03
CITY OF FERNDALE

April 22, 2015

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
24	250 LINEAR FOOT	SILT FENCE 8-01	$ per LF	$
25	1 FORCE ACCOUNT	LANDSCAPE RESTORATION 8-02	$ 3,000.00 FA	$ 3,000.00
26	220 SQUARE YARD	SEEDED LAWN INSTALLATION 8-02	$ per SY	$
27	300 LINEAR FOOT	PAINT LINE 8-22	$ per LF	$
28	2 EACH	POTHOLE EXISTING UNDERGROUND UTILITY 8-30	$ per EA	$
29	1 FORCE ACCOUNT	REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES 8-31	$ 2,000.00 FA	$ 2,000.00
30	1 FORCE ACCOUNT	UNANTICIPATED SITE WORK 8-32	$ 2,000.00 FA	$ 2,000.00
31	115 CUBIC YARD	STREAMBED AGGREGATE MIX 8-33	$ per CY	$
32	1 LUMP SUM	TEMPORARY STREAM BYPASS SYSTEM 8-34	$ per LS	$

TOTAL BID $ _____

BID PROPOSAL

FOR

BROWN ROAD CULVERT REPLACEMENT PROJECT
FERNDALE, WASHINGTON

Date: _____

TO: City of Ferndale

Gentlepersons:

This certifies that the Undersigned: has examined the location of the project site and the conditions of work; and has carefully read and thoroughly understands the contract documents entitled: "**BROWN ROAD CULVERT REPLACEMENT PROJECT",** in Ferndale, including the "Bid Procedures and Conditions", "Specifications and Conditions", "Contract Forms", and "Plans" governing the work embraced in this project and the method by which payment will be made for said work. The Undersigned hereby proposes to undertake and complete the work embraced in this project in accordance with said contract documents, and agrees to accept as payment for said work, the schedule of lump sum and unit prices as set forth in the "Bid" below.

The Undersigned acknowledges that payment will be based on the actual work performed and material used as measured or provided for in accordance with the said contract documents, and that no additional compensation will be allowed for any taxes not included in each lump sum or unit price, and that the basis for payment will be the actual work performed and measured or provided for in accordance with the said contract documents.

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 have agreed to the provisions of this declaration.

NOTICE TO ALL BIDDERS

To report bid 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.

BIDDER IDENTIFICATION

The name of the Bidder submitting this proposal, the address and phone number to which all communications concerned with this proposal shall be made and the number which has been assigned indicating the Bidder is licensed to do business in the State of Washington are as follows:

Firm Name: ___________________________________

Address: ___________________________________

____

Telephone: ___________________________ Fax: ___________________________

Contractor's Number: ____________________

The Firm submitting this proposal is a _____Sole Proprietorship
_____Partnership
_____Corporation

The names and titles of the principal officers of the corporation submitting this proposal, or of the partnership, or of all persons interested in this proposal as principals are as follows:

___________________________________ ___________________________________
___________________________________ ___________________________________
___________________________________ ___________________________________
___________________________________ ___________________________________

- -

NOTE: Signatures of this proposal must be identified above. Failure to identify the Signatories will be cause for considering the proposal irregular and for subsequent rejection of the bid.

BID PROPOSAL SIGNATURE AND ADDENDUM ACKNOWLEDGMENT

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

☐	CASH	IN THE AMOUNT OF_____
☐	CASHIER'S CHECK	_____DOLLARS
☐	CERTIFIED CHECK	($_____) PAYABLE TO THE CITY OF FERNDALE
☐	PROPOSAL BOND	IN THE AMOUNT OF 5% OF THE BID.

Receipt is hereby acknowledged by addendum(s) No.(s) _____, _____, & _____

SIGNATURE OF AUTHORIZED OFFICIAL(S)

(PROPOSAL MUST BE SIGNED) _____

_____
SIGNATURE

_____
FIRM NAME

STATE OF WASHINGTON)
) ss.
COUNTY OF WHATCOM)

On this _____ day of _____, 2015, before me personally appeared _____ to me personally known to be the person described in and who executed the above instrument and who acknowledged to me the act of signing thereof.

NOTARY PUBLIC, in and for the
State of Washington, residing at:
_____

My Commission Expires: _____

This proposal form is not transferable and any alteration of the firm's name entered hereon without prior permission from the City of Ferndale will be cause for considering the proposal irregular and for subsequent rejection of the bid.

BID 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 having its principal place of business at _____, in the State of Washington, as Surety, are held and firmly bound unto the City of Ferndale, a Municipal Corporation in the State of Washington, in the full and penal sum of five percent (5%) of the total bid amount appearing on 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, jointly and severally, firmly by these presents.

The condition of this bond is such that, whereas, the principal herein is herewith submitting his or its bid proposal for, **BROWN ROAD CULVERT REPLACEMENT PROJECT**, said bid proposal, by reference thereto, being hereby made a part hereof.

NOW, THEREFORE, if the said bid proposal submitted by the 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 the performance bond as required by the bidding and contract documents within a period of ten (10) days from and after said award, exclusive of the day of such award, then its obligation to pay the above-mentioned penal sum as liquidated damages shall be null and void, otherwise it shall remain and be in full force and effect.

SIGNED AND SEALED this _____ day of _____, 2015.

Principal

By _____ (Seal)

Surety

By _____
Attorney-In-Fact

The Attorney-in-fact who executes this bond on behalf of the surety company, must attach a copy of his power-of-attorney as evidence of his authority.

SPECIFICATIONS AND CONDITIONS

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INTRO.AP1

INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2014 Standard Specifications for Road, Bridge, and Municipal Construction.

AMENDMENTS TO THE STANDARD SPECIFICATIONS

The following Amendments to the Standard Specifications are made a part of this contract and supersede any conflicting provisions of the Standard Specifications. For informational purposes, the date following each Amendment title indicates the implementation date of the Amendment or the latest date of revision.

Each Amendment contains all current revisions to the applicable section of the Standard Specifications and may include references which do not apply to this particular project.

1-01.AP1

Section 1-01, Definitions and Terms
August 4, 2014

1-01.3 Definitions
The definition for "**Engineer**" is revised to read:

> The Contracting Agency's representative who directly supervises the engineering and administration of a construction Contract.

The definition for "**Inspector**" is revised to read:

> The Engineer's representative who inspects Contract performance in detail.

The definition for "**Project Engineer**" is revised to read:

> Same as Engineer.

The definition for "**Working Drawings**" is revised to read:

> Drawings, plans, diagrams, or any other supplementary data or calculations, including a schedule of submittal dates for Working Drawings where specified, which the Contractor must submit to the Engineer.

1-02.AP1

Section 1-02, Bid Procedures and Conditions
April 7, 2014

1-02.8(1) Noncollusion Declaration
The third paragraph is revised to read:

Therefore, by including the Non-collusion Declaration as part of the signed bid Proposal, the Bidder is deemed to have certified and agreed to the requirements of the Declaration.

1-03.AP1

Section 1-03, Award and Execution of Contract
January 5, 2015

1-03.3 Execution of Contract

The first paragraph is revised to read:

Within 20 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, and a satisfactory bond as required by law and Section 1-03.4, and shall be registered as a contractor in the state of Washington.

1-03.4 Contract Bond

The last word of item 3 is deleted.

Item 4 is renumbered to 5.

The following is inserted after item 3 (after the preceding Amendments are applied):

4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and

1-03.5 Failure to Execute Contract

The first sentence is revised to read:

Failure to return the insurance certification and bond with the signed Contract as required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's Business Enterprise information if required in the Contract, or failure or refusal to sign the Contract, or failure to register as a contractor in the state of Washington shall result in forfeiture of the proposal bond or deposit of this Bidder.

1-04.AP1

Section 1-04, Scope of the Work
August 4, 2014

1-04.4 Changes

In the third paragraph, item number 1 and 2 are revised to read:

A. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or

B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original Contract quantity. For the purpose of this Section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.

The last two paragraphs are deleted.

This section is supplemented with the following new subsections:

1-04.4(2) Value Engineering Change Proposal (VECP)

1-04.4(2)A General

A VECP is a Contractor proposed change to the Contract Provisions which will accomplish the projects functional requirements in a manner that is equal to or better than the requirements in the Contract. The VECP may be: (1) at a less cost or time, or (2) either no cost savings or a minor increase in cost with a reduction in Contract time. The net savings or added costs to the Contract Work are shared by the Contractor and Contracting Agency.

The Contractor may submit a VECP for changing the Plans, Specifications, or other requirements of the Contract. The Engineer's decision to accept or reject all or part of the proposal is final and not subject to arbitration under the arbitration clause or otherwise subject to litigation.

The VECP shall meet all of the following:

1. Not adversely affect the long term life cycle costs.
2. Not adversely impact the ability to perform maintenance.
3. Provide the required safety and appearance.
4. Provide substitution for deleted or reduced Disadvantaged Business Enterprise Condition of Award Work, Apprentice Utilization and Training.

VECPs that provide a time reduction shall meet the following requirements:

1. Time saving is a direct result of the VECP.
2. Liquidated damages penalties are not used to calculate savings.
3. Administrative/overhead cost savings experienced by either the Contractor or Contracting Agency as a result of time reduction accrue to each party and are not used to calculate savings.

1-04.4(2)B VECP Savings

1-04.4(2)B1 Proposal Savings

The incentive payment to the Contractor shall be one-half of the net savings of the proposal calculated as follows:

1. (gross cost of deleted work) – (gross cost of added work) = (gross savings)
2. (gross savings) – (Contractor's engineering costs) – (Contracting Agency's costs) = (net savings)
3. (net savings) / 2 = (incentive pay)

The Contracting Agency's costs shall be the actual consultant costs billed to the Contracting Agency and in-house costs. Costs for personnel assigned to the Engineer's office shall not be included.

1-04.4(2)B2 Added Costs to Achieve Time Savings

The cost to achieve the time savings shall be calculated as follows:

1. (cost of added work) + (Contractor's engineering costs - Contracting Agency's engineering costs) = (cost to achieve time savings)

2. (cost to achieve time savings) / 2 = (Contracting Agency's share of added cost)

If the timesaving proposal also involves deleting work and, as a result, creates a savings for the Contracting Agency, then the Contractor shall also receive one-half of the savings realized through the deletion.

1-04.4(2)C VECP Approval

1-04.4(2)C1 Concept Approval

The Contractor shall submit a written proposal to the Engineer for consideration. The proposal shall contain the following information:

1. An explanation outlining the benefit provided by the change(s).

2. A narrative description of the proposed change(s). If applicable, the discussion shall include a demonstration of functional equivalency or a description of how the proposal meets the original contract scope of work.

3. A cost discussion estimating any net savings. Savings estimates will generally follow the outline below under the section, "Proposal Savings".

4. A statement providing the Contracting Agency with the right to use all or any part of the proposal on future projects without future obligation or compensation.

5. A statement acknowledging and agreeing that the Engineer's decision to accept or reject all or part of the proposal is final and not subject to arbitration under the arbitration clause or otherwise be subject to claims or disputes.

6. A statement giving the dates the Engineer must make a decision to accept or reject the conceptual proposal, the date that approval to proceed must be received, and the date the work must begin in order to not delay the contract. If the Contracting Agency does not approve the VECP by the date specified by the Contractor in their proposal the VECP will be deemed rejected.

7. The submittal will include an analysis on other Work that may have costs that changed as a result of the VECP. Traffic control and erosion control shall both be included in addition to any other impacted Work.

After review of the proposal, the Engineer will respond in writing with acceptance or rejection of the concept. This acceptance shall not be construed as authority to proceed with any change contract work. Concept approval allows the Contractor to proceed with the Work needed to develop final plans and other information to receive formal approval and to support preparation of a change order.

1-04.4(2)C2 Formal Approval

The Contractor's submittal to the Engineer for formal approval shall include the following:

1. Deleted Work – Include the calculated quantities of unit price Work to be deleted. Include the proposed partial prices for portions of lump sum Work deleted. For deletion of force account items include the time and material estimates.

2. Added Work – Include the calculated quantities of unit price Work to be added, either by original unit Contract prices or by new, negotiated unit prices. For new items of Work include the quantities and proposed prices.

3. Contractor's Engineering Costs – Submit the labor costs for the engineering to develop the proposal; costs for Contractor employees utilized in contract operations on a regular basis shall not be included.

4. Schedule Analysis – If the VECP is related to time savings, the Contractor shall submit a partial progress schedule showing the changed Work. The submittal shall also include a discussion comparing the partial progress schedule with the approved progress schedule for the project.

5. Working Drawings – Type 3 Working Drawings shall be submitted; those drawings which require engineering shall be a Type 3E.

Formal approval of the proposal will be documented by issuance of a change order. The VECP change order will contain the following statements which the Contractor agrees to by signing the change order:

1. The Contractor accepts design risk of all features, both temporary and permanent, of the changed Work.

2. The Contractor accepts risk of constructability of the changed Work.

3. The Contractor provides the Contracting Agency with the right to use all or any part of the proposal on future projects without further obligation or compensation.

VECP change orders will contain separate pay items for the items that are applicable to the Proposal. These are as follows:

1. Deleted Work.

2. Added Work.

3. The Contractor's engineering costs, reimbursed at 100 percent of the Contractor's cost.

4. Incentive payment to the Contractor.

When added Work costs exceed Deleted Work costs, but time savings make a viable proposal, then items 3 and 4 above are replaced with the following:

3. The Contracting Agency's share of added cost to achieve time savings.

4. The Contractor's share of savings from deleted Work.

1-04.4(2)C3 Authority to Proceed with Changed Work
The authority for the Contractor to proceed with the VECP Work will be provided by one of the following options:

1. Execution of the VECP change order, or

2. At the Contractor's request the Contracting Agency may provide approval by letter from the Engineer for the Work to proceed prior to execution of a change order. All of the risk for proceeding with the VECP shall be the responsibility of the Contractor. Additionally, the following criteria are required to have been met:

   a) Concept approval has been granted by the Contracting Agency.

   b) All design reviews and approvals have been completed, including plans and specifications.

   c) The Contractor has guaranteed, in writing, the minimum savings to the Contracting Agency.

1-05.AP1

Section 1-05, Control of Work
August 4, 2014

1-05.1 Authority of the Engineer
In this section, "Project Engineer" is revised to read "Engineer".

The second paragraph (up until the colon) is revised to read:

> The Engineer's decisions will be final on all questions including the following:

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

> The Engineer represents the Contracting Agency with full authority to enforce Contract requirements.

1-05.2 Authority of Assistants and Inspectors
The first paragraph is revised to read:

> The Engineer may appoint assistants and Inspectors to assist in determining that the Work and materials meet the Contract requirements. Assistants and Inspectors have the authority to reject defective material and suspend Work that is being done improperly, subject to the final decisions of the Engineer.

In the third paragraph, "Project Engineer" is revised to read "Engineer".

1-05.3 Plans and Working Drawings
This section's title is revised to read:

Working Drawings

This section is revised to read:

The Contract may require the Contractor to submit Working Drawings for the performance of the Work. Working Drawings shall be submitted by the Contractor electronically to the Engineer in PDF format; drawing details shall be prepared in accordance with conventional detailing practices. If the PDF format is found to be unacceptable, at the request of the Engineer, the Contractor shall provide paper copies of the Working Drawings with drawings on 11 by 17 inch sheets and calculations/text on 8½ by 11 inch sheets.

Working Drawings will be classified under the following categories:

1. **Type 1** – Submitted for Contracting Agency information. Submittal must be received by the Contracting Agency a minimum of 7 calendar days before work represented by the submittal begins.

2. **Type 2** – Submitted for Contracting Agency review and comment. Unless otherwise stated in the Contract, the Engineer will require up to 20 calendar days from the date the Working Drawing is received until it is returned to the Contractor. The Contractor shall not proceed with the Work represented by the Working Drawing until comments from the Engineer have been addressed.

3. **Type 2E** – Same as a Type 2 Working Drawing with Engineering as described below.

4. **Type 3** – Submitted for Contracting Agency review and approval. Unless otherwise stated in the Contract, the Engineer will require up to 30 calendar days from the date the Working Drawing is received until it is returned to the Contractor. The Contractor shall obtain the Engineer's written approval before proceeding with the Work represented by the Working Drawing.

5. **Type 3E** – Same as a Type 3 Working Drawing with Engineering as described below.

All Working Drawings shall be considered Type 3 Working Drawings except as specifically noted otherwise in the Contract. Unless designated otherwise by the Contractor, submittals of Working Drawings will be reviewed in the order they are received by the Engineer. In the event that several Working Drawings are received simultaneously, the Contractor shall specify the sequence in which they are to be reviewed. If the Contractor does not submit a review sequence for simultaneous Working Drawing submittals, the review sequence will be at the Engineer's discretion.

Working Drawings requiring Engineering, Type 2E and 3E, shall be prepared by (or under the direction of) a Professional Engineer, licensed under Title 18 RCW, State of Washington, and in accordance with WAC 196-23-020. Design calculations shall carry the Professional Engineer's signature and seal, date of signature, and registration number on the cover page. The cover page shall also include the Contract number, Contract title and sequential index to calculation page numbers.

If more than the specified number of days is required for the Engineer's review of any individual Working Drawing or resubmittal, an extension of time will be considered in accordance with Section 1-08.8.

Review or approval of Working Drawings shall neither confer upon the Contracting Agency nor relieve the Contractor of any responsibility for the accuracy of the drawings or their conformity with the Contract. The Contractor shall bear all risk and all costs of any Work delays caused by rejection or nonapproval of Working Drawings.

Unit Bid prices shall cover all costs of Working Drawings.

1-07.AP1

Section 1-07, Legal Relations and Responsibilities to the Public
January 5, 2015

1-07.2 State Taxes
This section is revised to read:

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 Contracting Agency will not adjust its payment if the Contractor bases a Bid on a misunderstood tax liability.

The Contracting Agency may deduct from its payments to the Contractor, retainage or lien the bond, in the amount the Contractor owes the State Department of Revenue, whether the amount owed relates to the Contract in question or not. Any amount so deducted will be paid into the proper State fund on the contractor's behalf. For additional information on tax rates and application refer to applicable RCWs, WACs or the Department of Revenue's website.

1-07.2(1) State Sales Tax: Work Performed on City, County, or Federally-Owned Land
This section including title is revised to read:

1-07.2(1) State Sales Tax: WAC 458-20-171 – Use Tax
For Work designated as Rule 171, **Use Tax,** the Contractor shall include for compensation the amount of any taxes paid in the various unit Bid prices or other Contract amounts. Typically, these taxes are collected on materials incorporated into the project and items such as the purchase or rental of; tools, machinery, equipment, or consumable supplies not integrated into the project.

The Summary of Quantities in the Contract Plans identifies those parts of the project that are subject to **Use Tax** under Section 1-07.2(1).

1-07.2(2) State Sales Tax: Work on State-Owned or Private Land
This section including title is revised to read:

1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax
For Work designated as Rule 170, **Retail Sales Tax,** the Contractor shall collect from the Contracting Agency, **Retail Sales Tax** on the full Contract price. The Contracting Agency will automatically add this **Retail Sales Tax** to each payment to the Contractor and for this reason; the Contractor shall not include the **Retail Sales Tax** in the unit Bid prices or in any other Contract amount. However, the Contracting Agency will not provide additional compensation to the Prime Contractor or Subcontractor for **Retail Sales Taxes** paid by the Contractor in addition to the **Retail Sales Tax** on the total contract amount. Typically, these taxes are collected on items such as 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 prices or in any other Contract amounts.

The Summary of Quantities in the Contract Plans identifies those parts of the project that are subject to **Retail Sales Tax** under Section 1-07.2(2).

1-07.2(3) Services

This section is revised to read:

Any contract wholly for professional or other applicable services is generally not subject to **Retail Sales Tax** and therefore the Contractor shall not collect **Retail Sales Tax** from the Contracting Agency on those Contracts. Any incidental taxes paid as part of providing the services shall be included in the payments under the contract.

1-07.23(1) Construction Under Traffic

In the second paragraph, the following new sentence is inserted after the second sentence:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired.

1-08.AP1

Section 1-08, Prosecution and Progress
May 5, 2014

1-08.1 Subcontracting

The eighth paragraph is revised to read:

On all projects, the Contractor shall certify to the actual amounts paid to Disadvantaged, Minority, Women's, or Small Business Enterprise firms that were used as Subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the Contract. This Certification shall be submitted to the Project Engineer on a monthly basis each month between Execution of the Contract and Physical Completion of the contract using the application available at: https://remoteapps.wsdot.wa.gov/mapsdata/tools/dbeparticipation. The monthly report is due 20 calendar days following the end of the month. A monthly report shall be submitted for every month between Execution of the Contract and Physical Completion regardless of whether payments were made or work occurred.

The ninth paragraph is deleted.

1-09.AP1

Section 1-09, Measurement and Payment
January 5, 2015

1-09.6 Force Account

In the third paragraph of item number 3, the last sentence is revised to read:

In the event that prior quotations are not obtained and the vendor is not a firm independent from the Contractor or Subcontractor, then after-the-fact quotations may be obtained by the Engineer from the open market in the vicinity and the lowest such quotation may be used in place of submitted invoice.

1-10.AP1

Section 1-10, Temporary Traffic Control
August 4, 2014

1-10.1(1) Materials
The following material reference is deleted from this section:

Barrier Drums 9-35.8

1-10.1(2) Description
The first paragraph is revised to read:

The Contractor shall provide flaggers, and all other personnel required for labor for traffic control activities and not otherwise specified as being furnished by the Contracting Agency.

1-10.2(1) General
In the third paragraph, the first two sentences are revised to read:

The primary and alternate TCS shall be certified by one of the organizations listed in the Special Provisions. Possession of a current Washington State TCS card and flagging card by the primary and alternate TCS is mandatory.

1-10.2(1)B Traffic Control Supervisor
The first paragraph is revised to read:

A Traffic Control Supervisor (TCS) shall be present on the project whenever flagging or other traffic control labor is being utilized or less frequently, as authorized by the Engineer.

The last paragraph is revised to read:

The TCS may perform the Work described in Section 1-10.3(1)A Flaggers or in Section 1-10.3(1)B Other Traffic Control Labor and be compensated under those Bid items, provided that the duties of the TCS are accomplished.

1-10.2(2) Traffic Control Plans
The first paragraph is revised to read:

The traffic control plan or plans appearing in the Contract documents show a method of handling vehicle, bicycle, and pedestrian traffic. All construction signs, flaggers, and other traffic control devices are shown on the traffic control plan(s) except for emergency situations. If the Contractor proposes adding the use of flaggers to a plan, this will constitute a modification requiring approval by the Engineer. The modified plans shall show locations for all the required advance warning signs and a safe, protected location for the flagging station. If flagging is to be performed during hours of darkness, the plan shall include appropriate illumination for the flagging station.

In the second paragraph, the second sentence is revised to read:

Any Contractor-proposed modification, supplement or replacement shall show the necessary construction signs, flaggers, and other traffic control devices required to support the Work.

1-10.2(3) Conformance to Established Standards

In the second paragraph, the second sentence is revised to read:

> The National Cooperative Highway Research Project (NCHRP) Report 350 and the AASHTO Manual for Assessing Safety Hardware (MASH) have established requirements for crash testing.

In the third paragraph, "NCHRP 350" is revised to read "NCHRP 350 or MASH".

In the fourth paragraph, "NCHRP 350" is revised to read "NCHRP 350 or MASH".

In the fifth paragraph, "NCHRP 350" is revised to read "NCHRP 350 or MASH".

1-10.3(1) Traffic Control Labor

The first paragraph is revised to read:

> The Contractor shall furnish all personnel for flagging, for the execution of all procedures related to temporary traffic control and for the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations.

1-10.3(1)A Flaggers and Spotters

This section's title is revised to read:

> **Flaggers**

The first paragraph is revised to read:

> Flaggers shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. The flagging card shall be immediately available and shown to the Contracting Agency upon request.

The last paragraph is deleted.

1-10.3(1)B Other Traffic Control Labor

This section is revised to read:

> In addition to flagging duties, the Contractor shall provide personnel for all other traffic control procedures required by the construction operations and for the labor to install, maintain and remove any traffic control devices shown on Traffic Control Plans.

1-10.3(3)B Sequential Arrow Signs

This section is supplemented with the following:

> A sequential arrow sign is required for all lane closure tapers on a multilane facility. A separate sequential arrow sign shall be used for each closed lane. The arrow sign shall not be used to laterally shift traffic. When used in the caution mode, the four corner mode shall be used.

1-10.3(3)C Portable Changeable Message Signs

This section is revised to read:

> Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate, and maintain portable changeable message signs (PCMS). A PCMS shall be

placed behind a barrier or guardrail whenever possible, but shall at a minimum provide 4 ft. of lateral clearance to edge of travelled lane and be delineated by channelization devices. The Contractor shall remove the PCMS from the clear zone when not in use unless protected by barrier or guardrail.

1-10.3(3)F Barrier Drums

This section including title is deleted in its entirety and replaced with the following:

1-10.3(3)F Vacant

1-10.3(3)K Portable Temporary Traffic Control Signal

The fifth paragraph is revised to read:

The Project Engineer or designee will inspect the signal system at initial installation/operation and approve the signal timing. Final approval will be based on the results of the operational inspection.

1-10.4(2) Item Bids With Lump Sum for Incidentals

In the second paragraph, the first and second sentences are revised to read:

"Flaggers" will be measured by the hour. Hours will be measured for each flagging station, shown on an approved Traffic Control Plan, when that station is staffed in accordance with Section 1-10.3(1)A.

The first sentence of the last bulleted item in this section is revised to read:

Installing and removing Barricades, Traffic Safety Drums, Cones, Tubular Markers and Warning Lights and Flashers to carry out approved Traffic Control Plan(s).

1-10.5(2) Item Bids With Lump Sum for Incidentals

This section is deleted and replaced with the following:

"Traffic Control Supervisor", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work defined in Section 1-10.2(1)B.

"Pedestrian Traffic Control", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work for pedestrian traffic control defined in Section 1-10.

"Flaggers", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work defined in Section 1-10.3(1)A.

"Other Traffic Control Labor", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all labor costs incurred by the Contractor in performing the Work specified for this item in Section 1-10.4(2).

"Construction Signs Class A", per square foot.
The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work described in Section 1-10.3(3)A. In the event that "Do Not Pass" and "Pass With Care" signs must be left in place, a change order, as described in Section 1-04.4, will be required. When the Bid Proposal contains the item "Sign Covering", then covering those signs indicated in the Contract will be measured and paid according to Section 8-21.

"Sequential Arrow Sign", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work described in Section 1-10.3(3)B.

"Portable Changeable Message Sign", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work for procuring all portable changeable message signs required for the project and for transporting these signs to and from the project.

"Transportable Attenuator", per each.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work described in Section 1-10.3(3)J except for costs compensated separately under the items "Operation of Transportable Attenuator" and "Repair Transportable Attenuator".

"Operation of Transportable Attenuator", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work for operating transportable attenuators on the project.

"Repair Transportable Attenuator", by force account.

All costs of repairing or replacing transportable attenuators that are damaged by the motoring public while in use as shown on an approved Traffic Control Plan will be paid for by force account as specified in Section 1-09.6. To provide a common Proposal for all Bidders, the Contracting Agency has estimated the amount of force account for "Repair Transportable Attenuator" and has entered the amount in the Proposal to become a part of the total Bid by the Contractor. Transportable attenuators damaged due to the Contractor's operation or damaged in any manner when not in use shall be repaired or replaced by the Contractor at no expense to the Contracting Agency.

"Other Temporary Traffic Control", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work defined in Section 1-10, and which costs are not compensated by one of the above-listed items.

"Portable Temporary Traffic Control Signal", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work as described in Section 1-10.3(3)K, including all costs for traffic control during manual control, adjustment, malfunction, or failure of the portable traffic control signals and during replacement of failed or malfunctioning signals.

2-01.AP2

Section 2-01, Clearing, Grubbing, and Roadside Cleanup
August 4, 2014

2-01.3(1) Clearing
In the second paragraph, item number 3 (up until the colon) is revised to read:

3. Follow these requirements for all stumps that will be buried deeper than 5 feet from the top, side, or end surface of the embankment or any structure and are in a location that will not be terraced as described in Section 2-03.3(14):

2-02.AP2

Section 2-02, Removal of Structures and Obstructions
January 5, 2015

2-02.3(2) Removal of Bridges, Box Culverts, and Other Drainage Structures
This section is supplemented with the following new subsections:

2-02.3(2)A Bridge Removal
2-02.3(2)A1 Bridge Demolition Plan Submittal
The Contractor shall submit a Type 2E Working Drawing consisting of a bridge demolition plan, showing the method of removing the existing bridge(s), or portions of bridges, as specified.

The bridge demolition plan shall show all equipment, sequence of operations, and details required to complete the work, including containment, collection, and disposal of all debris. The plan shall include a crane foundation stability analysis and crane load calculations for the work. The plan shall detail the containment, collection, and disposal of all debris. The plan shall show all stages of demolition.

When the bridge removal work includes removal of a truss, and when the Contractor's removal method involves use of a crane or cranes to pick, lift, and remove the truss, the Contractor shall confirm the truss dead load weight prior to beginning the truss removal operation. The operation of confirming the truss dead load shall be performed at both ends of the truss, and shall ensure that the truss is broken free of its support bearings. The Contractor's method of confirming the truss dead load, whether by hydraulic jacks or other means, shall be included in the Contractor's bridge demolition plan submittal.

When the bridge removal work involves removing portions of existing concrete without replacement, the methods and tools used to achieve the smooth surface and profile specified in Section 2-02.3(2)A2 shall be included in the Contractor's bridge demolition plan submittal.

2-02.3(2)A2 Removing Portions of Existing Concrete
Care shall be taken in removing concrete to prevent overbreakage or damage to portions of the existing Structure which are to remain. Before concrete removal begins, a saw cut shall be made into the surface of the concrete at the perimeter of the removal limits. The saw cut shall be 3/4-inch deep when the steel reinforcement is to remain, and may be deeper when the steel reinforcement is removed with the concrete.

Concrete shall be completely removed (exposing the deformed surface of the bar) from existing steel reinforcing bars which extend from the existing members and are specified to remain. Steel reinforcing bars that are not designated to remain shall be cut a minimum of 1-inch behind the final surface. The void left by removal of the steel reinforcing bar shall be filled with mortar conforming to Section 9-20.4(2). The mortar shall match the color of the existing concrete surface as nearly as practicable.

The Contractor shall roughen, clean, and saturate existing concrete surfaces, against which fresh concrete will be placed, in accordance with Section 6-02.3(12)B. When a portion of existing concrete is to be removed without replacement, concrete shall be removed to a clean line with a smooth surface of less than 1/16 inch profile.

2-02.3(2)A3 Use of Explosives for Bridge Demolition
Explosives shall not be used for bridge demolition, except as specifically allowed by the Special Provisions.

2-02.5 Payment
This section is supplemented with the following new Bid items:

"Removing Existing Bridge___", lump sum.

"Removing Existing Structure___", lump sum.

"Removing Portion of Existing Bridge___", lump sum.

"Removing Portion of Existing Structure___", lump sum.

2-03.AP2

Section 2-03, Roadway Excavation and Embankment
August 4, 2014

2-03.3(14) Embankment Construction
The third paragraph is revised to read:

Hillside Terraces – The Contractor shall terrace the original ground or embankment when the slope of the surface is 2H:1V or steeper unless otherwise directed by the Engineer. The face of each terrace shall be a minimum of 1 foot and a maximum of 5 feet in height and shall be vertical or near vertical as required to remain stable during material placement and compaction. The bench of the terrace shall slope outward to drain and shall not be inclined steeper than 0.05 foot per foot. Terraces damaged during work shall be reestablished. The Engineer may order the Contractor to place gravel backfill, pipe drains or both to drain any seepage.

2-03.3(14)L Embankment Widening for Guardrail
The first sentence is revised to read:

> Embankments widened for the installation of beam guardrail shall be terraced in accordance with the requirements for hillside terraces in Section 2-03.3(14).

The second sentence is deleted.

2-09.AP2

Section 2-09, Structure Excavation
January 5, 2015

2-09.4 Measurement
The seventh paragraph is revised to read:

> For pipelines the lower limit in measuring structure excavation will be the foundation level as shown in the Plans or as directed by the Engineer.

2-12.AP2

Section 2-12, Construction Geosynthetic
January 5, 2015

2-12.3(4) Permanent Erosion Control and Ditch Lining
In the fourth paragraph, "Section 9-13.2" is revised to read "Section 9-13.1(4)".

3-04.AP3

Section 3-04, Acceptance of Aggregate
August 4, 2014

3-04.5 Payment
In Table 2, the row containing the item "HMA Aggregate" is revised to read:

9-03.8(2)	HMA Aggregate						15	15	Uncompacted Void Content 15

5-04.AP5

Section 5-04, Hot Mix Asphalt
January 5, 2015

5-04.3(3)A Material Transfer Device/Vehicle
The first paragraph is supplemented with the following new sentence:

> At the Contractor's request the Engineer may approve paving without an MTD/V; the Engineer will determine if an equitable adjustment in cost or time is due.

In the last sentence of the second paragraph, "Project Engineer" is revised to read "Engineer".

5-04.3(5)A Preparation of Existing Surfaces

The first sentence of the last paragraph is revised to read:

> Unless otherwise approved by the Engineer, the tack coat shall be CSS-1 or CSS-1h emulsified asphalt.

5-04.3(7)A3 Commercial Evaluation

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

> Mix designs for HMA accepted by commercial evaluation shall be submitted to the Project Engineer on WSDOT Form 350-042.

5-04.3(8)A4 Definition of Sampling and Sublot

In the second sentence of the second paragraph, "800 tons" is revised to read "1,000 tons".

5-04.3(10)A General

In the first paragraph, "checking" and "cracking" are deleted.

In the third paragraph, the following new sentence is inserted after the second sentence:

> Coverage with a steel wheel roller may precede pneumatic tired rolling.

In the third paragraph, the following new sentence is inserted before the last sentence:

> Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat.

5-04.3(10)B1 General

In this section, "Project Engineer" is revised to read "Engineer".

The first paragraph is revised to read:

> HMA mixture accepted by statistical or nonstatistical evaluation that is used in traffic lanes, including lanes for 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 Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a minimum of 91 percent of the maximum density. The percent of maximum density shall be determined by WSDOT FOP for AASHTO T 729 when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density. The specified level of density attained will be determined by the statistical evaluation of the density of the pavement.

The following four new paragraphs are inserted after the first paragraph:

> Tests for the determination of the pavement density will be taken in accordance 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.

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 unless other 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.

In the sixth paragraph (after the preceding Amendments are applied), the second sentence is revised to read:

Sublots will be uniform in size with a maximum of approximately 100 tons per sublot; the final sublot of the day may be increased to 150 tons.

5-04.3(10)B4 Test Results

The first paragraph is revised to read:

The results of all compaction acceptance testing and the CPF of the lot after three sublots have been tested will be available to the Contractor through WSDOT's website. Determination of the relative density of the HMA with a nuclear density gauge requires a correlation factor and may require resolution after the correlation factor is known. Acceptance of HMA compaction will be based on the statistical evaluation and CPF so determined.

In the second paragraph, the first sentence is revised to read:

For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 91 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.

In the second sentence of the second paragraph, "moisture-density" is revised to read "density".

In the second paragraph, the fourth sentence is deleted.

5-04.3(20) Anti-Stripping Additive

This section is revised to read:

Anti-stripping additive shall be added to the liquid asphalt by the asphalt supplier prior to shipment to the hot mix asphalt mixing plant in the amount designated in the WSDOT mix design evaluation report provided by the Contracting Agency. Paving shall not begin before the anti-strip requirements have been provided to the Contractor. Anti-strip is not required for temporary work that will be removed prior to Completion.

5-04.4 Measurement

The following new paragraph is inserted after the first paragraph:

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

The second to last paragraph is deleted.

5-04.5 Payment
The bid item "Removing Temporary Pavement Marking", per linear foot and paragraph following bid item are deleted.

The following new bid item is inserted before the second to last paragraph:

"Roadway Core", per each.

The Contractor's costs for all other Work associated with the coring (e.g., traffic control) shall be incidental and included within the unit Bid price per each and no additional payments will be made.

6-01.AP6

Section 6-01, General Requirements for Structures
January 5, 2015

6-01.6 Load Restrictions on Bridges Under Construction
The first sentence of the second paragraph is revised to read:

If necessary and safe to do so, and if the Contractor requests it through a Type 2E Working Drawing, the Engineer may allow traffic on a bridge prior to completion.

In the second paragraph, item number 3 (up until the colon) is revised to read:

3. Provide stress calculations under the design criteria specified in the AASHTO LRFD Bridge Design Specifications, current edition, including at a minimum the following:

6-01.9 Working Drawings
This section is revised to read:

All Working Drawings required for bridges and other Structures shall conform to Section 1-05.3.

6-01.10 Utilities Supported by or Attached to Bridges
In the second paragraph, "bridge structures" is revised to read "bridges".

6-01.14 Premolded Joint Filler
In the second paragraph, the first sentence is revised to read:

The Contractor may substitute for the nails any adhesive acceptable to the Engineer.

6-02.AP6

Section 6-02, Concrete Structures
January 5, 2015

6-02.3(1) Classification of Structural Concrete
In paragraph two, item number 1 is revised to read:

Mix design and proportioning specified in Sections 6-02.3(2), 6-02.3(2)A and 6-02.3(2)A1.

Item number 3 is renumbered to 4.

After the preceding Amendments are applied, the following new numbered item is inserted after item number 2:

3. Temperature and time for placement requirements specified in Section 6-02.3(4)D.

6-02.3(2) Proportioning Materials

In the third paragraph, the first sentence is revised to read:

The use of fly ash is required for Class 4000P concrete, except that ground granulated blast furnace slag may be substituted for fly ash at a 1:1 ratio.

In the table titled "Cementitious Requirement for Concrete", the row beginning with "4000D" is deleted.

The fourth paragraph is revised to read:

When both ground granulated blast furnace slag and fly ash are included in the concrete mix, the total weight of both these materials is limited to 40 percent by weight of the total cementitious material for concrete class 4000A, and 50 percent by weight of the total cementitious material for all other classes of concrete.

6-02.3(2)A Contractor Mix Design

The first paragraph is revised to read:

The Contractor shall provide a mix design in writing to the Engineer for all classes of concrete specified in the Plans except for lean concrete and commercial concrete. No concrete shall be placed until the Engineer has reviewed the mix design. The required average 28-day compressive strength shall be selected in accordance with ACI 318, Chapter 5, Section 5.3.2. ACI 211.1 and ACI 318 shall be used to determine proportions. All proposed concrete mixes except Class 4000D shall meet the requirements in Cementitious Requirement for Concrete in Section 6-02.3(2).

In the fourth paragraph, the fourth sentence is deleted.

In the sixth paragraph, the first sentence is deleted.

In the seventh paragraph, the last sentence is deleted.

The eighth paragraph is revised to read:

Air content for concrete Class 4000D shall conform to Section 6-02.3(2)A1. For all other concrete, air content shall be a minimum of 4.5 percent and a maximum of 7.5 percent for all concrete placed above the finished ground line.

The following new sub-section is added:

6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D

All Class 4000D concrete shall be a project specific performance mix design conforming to the following requirements:

1. Aggregate shall use combined gradation in accordance with Section 9-03.1(5) with a nominal maximum aggregate size of 1-1/2 inches.

2. Permeability shall be less than 2,000 coulombs at 56 days in accordance with AASHTO T 277.

3. Freeze-thaw durability shall be provided by one of the following methods:
   a. The concrete shall maintain an air content between 4.5 and 7.5 percent.
   b. The concrete shall maintain a minimum air content that achieves a durability factor of 90 percent, minimum, after 300 cycles in accordance with AASHTO T 161, Procedure A. This air content shall not be less than 3.0 percent. Test samples shall be obtained from concrete batches of a minimum of 3.0 cubic yards.

4. Scaling shall have a visual rating less than or equal to 2 after 50 cycles in accordance with ASTM C 672.

5. Shrinkage at 28 days shall be less than 320 micro strain in accordance with AASHTO T 160.

6. Modulus of elasticity shall be measured in accordance with ASTM C 469.

7. Density shall be measured in accordance with ASTM C 138.

The Contractor shall submit the mix design in accordance with Section 6-02.3(2)A. The submittal shall include test reports for all tests listed above that follow the reporting requirements of the AASHTO/ASTM procedures. Samples for testing may be obtained from either laboratory or concrete plant batches. If concrete plant batches are used, the minimum batch size shall be 3.0 cubic yards. The Contractor shall submit the mix design to the Engineer at least 30 calendar days prior to the placement of concrete in the bridge deck.

6-02.3(4)D Temperature and Time For Placement

The first two sentences are revised to read:

Concrete temperatures shall remain between 55ºF and 90ºF while it is being placed, except that Class 4000D concrete temperatures shall remain between 55°F and 75°F during placement. Precast concrete that is heat cured in accordance with Section 6-02.3(25)D shall remain between 50ºF and 90ºF while being placed.

6-02.3(5)A General

The first paragraph is revised to read:

Concrete for the following applications will be accepted based on a Certificate of Compliance to be provided by the supplier as described in Section 6-02.3(5)B:

1. Lean concrete.

2. Commercial concrete.

3. Class 4000P concrete for Roadside Steel Sign Support Foundations.

4. Class 4000P concrete for Type II, III, and CCTV Signal Standard Foundations that are 12'-0" or less in depth.

5. Class 4000P concrete for Type IV and V Strain Pole Foundations that are 12'-0" or less in depth.

6. Class 4000P concrete for Steel Light Standard Foundations Types A & B.

The following new sentence is inserted at the beginning of the second paragraph:

> Slip-form barrier concrete will be accepted based on conformance to the requirements for temperature, air content and compressive strength at 28 days for sublots as tested and determined by the Contracting Agency.

6-02.3(5)G Sampling and Testing Frequency for Temperature, Consistency, and Air Content

In the fifth sentence of the second paragraph, "five truck loads" is revised to read "ten truck loads".

The second paragraph is supplemented with the following:

> If the remaining quantity to be placed is less than ten truck loads; then a sample shall be randomly taken from one of the remaining truck loads.

In the last sentence of the third paragraph, "five truck loads" is revised to read "ten truck loads".

6-02.3(5)H Sampling and Testing for Compressive Strength and Initial Curing

The second paragraph is revised to read:

> The Contractor shall provide and maintain a sufficient number of cure boxes in accordance with WSDOT FOP for AASHTO T 23 for curing concrete cylinders. The cure boxes shall be readily accessible and no more than 500 feet from the point of acceptance testing, unless otherwise approved by the Engineer. The Contractor shall also provide, maintain and operate all necessary power sources and connections needed to operate the cure boxes. The cure boxes shall be in-place and functioning at the specified temperature for curing cylinders prior to concrete placement. Concrete cylinders shall be cured in the cure boxes in accordance with WSDOT FOP for AASHTO T 23. The cure boxes shall have working locks and the Contractor shall provide the Engineer with one key to each of the locks. Once concrete cylinders are placed in the cure box, the cure box shall not be disturbed until the cylinders have been removed. The Contractor shall retain the cure box Temperature Measuring Device log and provide it to the Engineer upon request.

The following new paragraph is inserted after the last paragraph:

> All cure box costs shall be incidental to the associated item of work.

6-02.3(6)A2 Cold Weather Protection

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

> This Specification applies when the weather forecast on the day of concrete placement predicts air temperatures below 35°F at any time during the 7 days following placement.

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

> The temperature of the concrete shall be maintained above 50°F during the entire curing period or 7 days, whichever is greater.

6-02.3(10)A Preconstruction Meeting

This section including title is revised to read:

> #### 6-02.3(10)A Pre-Deck Pour Meeting
>
> A pre-deck pour meeting shall be held 5 to 10 working days before placing deck concrete to discuss construction procedures, personnel, equipment to be used, concrete sampling and testing and deck

finishing and curing operations. Those attending shall include, at a minimum, the superintendent, foremen in charge of placing and finishing concrete, and representatives from the concrete supplier and the concrete pump truck supplier.

If the project includes more than one bridge deck, and if the Contractor's key personnel change between concreting operations, or at request of the Engineer, additional conferences shall be held before each deck placement.

6-02.3(10)D Concrete Placement, Finishing, and Texturing

This section is supplemented with the following new sub-sections:

6-02.3(10)D1 Test Slab Using Bridge Deck Concrete

After the Contractor receives the Engineer's approval for the Class 4000D concrete mix design, and a minimum of seven calendar days prior to the first placement of bridge deck concrete, the Contractor shall construct a test slab using concrete of the approved mix design.

The test slab may be constructed on grade, shall have a minimum thickness of eight-inches, shall have minimum plan dimensions of 10-feet along all four edges, and shall be square or rectangular.

During construction of the test slab, the Contractor shall demonstrate concrete sampling and testing, use of the concrete temperature monitoring system, the concrete fogging system, concrete placement system, and the concrete finishing operation. The Contractor shall conduct the demonstration using the same type of equipment to be used for the production bridge decks, except that the Contractor may elect to finish the test slab with a hand-operated strike-board.

After the construction of the test slab and the demonstration of bridge deck construction operations is complete, the Contractor shall remove and dispose of the test slab in accordance with Sections 2-02.3 and 2-03.3(7)C.

6-02.3(10)D2 Preparation for Concrete Placement

Before placing bridge approach slab concrete, the subgrade shall be constructed in accordance with Sections 2-06 and 5-05.3(6).

Before any concrete is placed, the finishing machine shall be operated over the entire length of the deck/slab to check screed deflection. Concrete placement may begin only if the Engineer approves after this test.

Immediately before placing concrete, the Contractor shall check (and adjust if necessary) all falsework and wedges to minimize settlement and deflection from the added mass of the concrete deck/slab. The Contractor shall also install devices, such as telltales, by which the Engineer can readily measure settlement and deflection.

6-02.3(10)D3 Concrete Placement

The placement operation shall cover the full width of the bridge deck or the full width between construction joints. The Contractor shall locate any construction joint over a beam or web that can support the deck/slab on either side of the joint. The joint shall not occur over a pier unless the Plans permit. Each joint shall be formed vertically and in true alignment. The Contractor shall not release falsework or wedges supporting bridge deck placement sections on either side of a joint until each side has aged as these Specifications require.

Placement of concrete for bridge decks and bridge approach slabs shall comply with Section 6-02.3(6). In placing the concrete, the Contractor shall:

1. Place it (without segregation) against concrete placed earlier, as near as possible to its final position, approximately to grade, and in shallow, closely spaced piles;

2. Consolidate it around reinforcing steel by using vibrators before strike-off by the finishing machine;

3. Not use vibrators to move concrete;

4. Not revibrate any concrete surface areas where workers have stopped prior to screeding;

5. Remove any concrete splashed onto reinforcing steel in adjacent segments before concreting them;

6. Maintain a slight excess of concrete in front of the screed across the entire width of the placement operation;

7. Operate the finishing machine to create a surface that is true and ready for final finish without overfinishing or bringing excessive amounts of mortar to the surface; and

8. Leave a thin, even film of mortar on the concrete surface after the last pass of the finishing machine pan.

Workers shall complete all post screeding operations without walking on the concrete. This may require work bridges spanning the full width of the deck/slab.

After removing the screed supports, the Contractor shall fill the voids with concrete (not mortar).

If the surface left by the finishing machine is porous, rough, or has minor irregularities, the Contractor shall float the surface of the concrete. Floating shall leave a smooth and even surface. Float finishing shall be kept to the minimum number of passes necessary to seal the surface. The floats shall be at least 4-feet long. Each transverse pass of the float shall overlap the previous pass by at least half the length of the float. The first floating shall be at right angles to the strike-off. The second floating shall be at right angles to the centerline of the span. A smooth riding surface shall be maintained across construction joints.

The edge of completed roadway slabs at expansion joints and compression seals shall have a 3/8-inch radius.

After floating, but while the concrete remains plastic, the Contractor shall test the entire deck/slab for flatness (allowing for crown, camber, and vertical curvature). The testing shall be done with a 10-foot straightedge held on the surface. The straightedge shall be advanced in successive positions parallel to the centerline, moving not more than one half the length of the straightedge each time it advances. This procedure shall be repeated with the straightedge held perpendicular to the centerline. An acceptable surface shall be one free from deviations of more than 1/8-inch under the 10-foot straightedge.

If the test reveals depressions, the Contractor shall fill them with freshly mixed concrete, strike off, consolidate, and refinish them. High areas shall be cut down and refinished. Retesting and

refinishing shall continue until a surface conforming to the requirements specified above is produced.

6-02.3(10)D4 Monitoring Bridge Deck Concrete Temperature After Placement

The Contractor shall monitor and record the concrete temperature and ambient temperature hourly for seven calendar days after placement. The Contractor shall monitor and record concrete temperature by placing two maturity meter temperature monitoring devices in the bridge deck at locations specified by the Engineer. The Contractor shall monitor ambient temperature using maturity meters near the locations where concrete temperature is being monitored. When the bridge deck is being enclosed and heated to meet cold weather requirements, ambient temperature readings shall be taken within the enclosure. The Contractor shall submit the concrete temperature and ambient temperature data to the Engineer in spreadsheet format within 14 calendar days from placing the bridge deck concrete.

The Contractor shall submit the type and model of maturity meter temperature monitoring device, and the associated devices responsible for recording and documenting the temperature and curing time, to the Engineer at least 14 calendar days prior to the pre-concreting conference for the first bridge deck to be cast. The placement and operation of the temperature monitoring devices and associated devices will be an agenda item at the pre-concreting conference for the first bridge deck to be cast.

6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing

Except as otherwise specified for portions of bridge decks receiving an overlay or sidewalk under the same Contract, the Contractor shall texture the surface of the bridge deck as follows:

The Contractor shall texture the bridge deck using diamond tipped saw blades mounted on a power driven, self-propelled machine that is designed to texture concrete surfaces. The grooving equipment shall provide grooves that are 1/8" ± 1/64" wide, 3/16" ± 1/16" deep, and spaced at 3/4" ± 1/8". The bridge deck shall not be textured with a metal tined comb.

The Contractor shall submit the type of grooving equipment to be used to the Engineer for approval 30 calendar days prior to performing the work. The Contractor shall demonstrate that the method and equipment for texturing the bridge deck will not chip, spall or otherwise damage the deck. The Contractor shall not begin texturing the bridge deck until receiving the Engineer's approval of the Contractor's method and equipment.

Unless otherwise approved by the Engineer, the Contractor shall texture the concrete bridge deck surface either in a longitudinal direction, parallel with centerline or in a transverse direction, perpendicular with centerline. The Contractor shall texture the bridge deck surface to within 3-inches minimum and 15-inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of the perimeter of bridge drain assemblies.

The Contractor shall contain and collect all concrete dust and debris generated by the bridge deck texturing process, and shall dispose of the collected concrete dust and debris in accordance with Section 2-03.3(7)C.

If the Plans call for placement of a sidewalk or an HMA or concrete overlay on the bridge deck, the Contractor shall produce the final finish of these areas by dragging a strip of damp, seamless burlap lengthwise over the bridge deck or by brooming it lightly. Approximately 3-feet of the drag shall contact the surface, with the least possible bow in its leading edge. It shall be kept wet and free of

hardened lumps of concrete. When the burlap drag fails to produce the required finish, the Contractor shall replace it. When not in use, it shall be lifted clear of the bridge deck.

After the bridge deck has cured, the surface shall conform to the surface smoothness requirements specified in Section 6-02.3(10)D3.

The surface texture on any area repaired to address out-of-tolerance surface smoothness shall match closely that of the surrounding bridge deck area at the completion of the repair. Methods used to remove high spots shall cut through the mortar and aggregate without breaking or dislodging the aggregate or causing spalls.

6-02.3(10)D6 Bridge Approach Slab Finishing and Texturing

Bridge approach slabs shall be textured either in accordance with Section 6-02.3(10)D5, or using metal tined combs in the transverse direction, except bridge approach slabs receiving an overlay in the same Contract shall be finished as specified in Section 6-02.3(10)D5 only.

The comb shall be made of a single row of metal tines. It shall leave striations in the fresh concrete approximately 3/16-inch deep by 1/8-inch wide and spaced approximately 1/2-inch apart. The Engineer will decide actual depths at the site. If the comb has not been approved, the Contractor shall obtain the Engineer's approval by demonstrating it on a test section. The Contractor may operate the combs manually or mechanically, either singly or with several placed end to end. The timing and method used shall produce the required texture without displacing larger particles of aggregate.

Texturing shall end 2-feet from curb lines. This 2-foot untextured strip shall be hand finished with a steel trowel.

Surface smoothness, high spots, and low spots shall be addressed as specified in Section 6-02.3(10)D5. The surface texture on any area cut down or built up shall match closely that of the surrounding bridge approach slab area. The entire bridge approach slab shall provide a smooth riding surface.

6-02.3(10)F Bridge Approach Slab Orientation and Anchors

In the first paragraph, the following sentence is inserted after the first sentence:

Unless otherwise shown in the Plans, the pavement end of the bridge approach slab shall be constructed normal to the Roadway centerline.

The following new paragraph is inserted before the last paragraph:

The compression seal shall be a 2-1/2 inch wide gland selected from the current Qualified Products List.

6-02.3(11) Curing Concrete

Items number 1 through 4 are deleted and replaced with the following 5 new numbered items:

1. Bridge sidewalks, roofs of cut and cover tunnels — curing compound covered by white, reflective type sheeting or continuous wet curing. Curing by either method shall be for at least 10 days.

2. Bridge decks — See Section 6-02.3(11)B.

3. Bridge approach slabs (Class 4000A concrete) - 2 coats of curing compound and continuous wet cure for at least 10-days.

4. Concrete barriers and rail bases – See Section 6-02.3(11)A.

5. All other concrete surfaces — continuous wet cure for at least three days.

In the second paragraph, the first sentence is replaced with the following three new sentences:

During the continuous wet cure, the Contractor shall keep all exposed concrete surfaces saturated with water. Formed concrete surfaces shall be kept in a continuous wet cure by leaving the forms in place. If forms are removed during the continuous wet cure period, the Contractor shall treat the concrete as an exposed concrete surface.

The third paragraph is revised to read:

When curing Class 4000A, two coats of curing compound that complies with Section 9-23.2 shall be applied immediately (not to exceed 15 min.) after tining any portion of the bridge approach slab. The continuous wet cure shall be established as soon as the concrete has set enough to allow covering without damaging the finish.

In the fifth paragraph, the first sentence is revised to read:

If the Plans call for an asphalt overlay on the bridge approach slab, the Contractor shall use the clear curing compound (Type 1, Class B), applying at least 1 gallon per 150 square feet to the concrete surface.

The eighth paragraph is deleted.

6-02.3(11)A2 Slip-Form Barrier

In the fourth paragraph, item number 1, "Type 1D" is revised to read "Type 1".

6-02.3(11)B Curing Bridge Decks

This new section is supplemented with the following new sub-sections:

6-02.3(11)B1 Equipment

The Contractor shall maintain a wet sheen, without developing pooling or sheeting water, using a fogging apparatus consisting of pressure washers with a minimum nozzle output of 1,500 psi, or other means approved by the Engineer.

The Contractor shall submit a bridge deck curing plan to the Engineer a minimum 14 calendar days prior to the pre-concreting conference. The Contractor's plan shall describe the sequence and timing that will be used to fog the bridge deck, apply pre-soaked burlap, install soaker hoses and cover the deck with white reflective sheeting.

6-02.3(11)B2 Curing

The fogging apparatus shall be in place and charged for fogging prior to beginning concrete placement for the bridge deck.

The Contractor shall presoak all burlap to be used to cover the deck during curing.

Immediately after the finishing machine passes over finished concrete, the Contractor shall implement the following tasks:

1. The Contractor shall fog the bridge deck while maintaining a wet sheen without developing pooling or sheeting water.

2. The Contractor shall apply the presoaked burlap to the top surface to fully cover the deck without damaging the finish, other than minor marring of the concrete surface. The Contractor shall not apply curing compound.

3. The Contractor shall continue to keep the burlap wet by fog spraying until the burlap is covered by soaker hoses and white reflective sheeting. The Contractor shall place the soaker hoses and whiter reflective sheeting after the concrete has achieved initial set. The Contractor shall charge the soaker hoses frequently so as to keep the burlap covering the entire deck wet during the course of curing.

As an alternative to tasks 2 and 3 above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. Details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained, shall be submitted to the Engineer for approval.

The wet curing regime as described shall remain in place for at least 14 consecutive calendar days.

6-02.3(12)A Construction Joints in New Construction

The third paragraph is deleted and replaced with the following three new paragraphs:

If the Plans require a roughened surface on the joint, the Contractor shall strike it off to leave grooves at right angles to the length of the member. Grooves shall be installed using one of the following options:

1. Grooves shall be ½ to 1 inch wide, ¼ to ½ inch deep, and spaced equally at twice the width of the groove. Grooves shall terminate approximately 1 ½-inches from the face of concrete.

2. Grooves shall be 1 to 2 inches wide, a minimum of ½-inch deep, and spaced a maximum of three times the width of the groove. Grooves shall terminate approximately 1 ½-inches from the face of concrete.

If the Engineer approves, the Contractor may use an alternate method to produce a roughened surface on the joint, provided that such an alternate method leaves a roughened surface of at least a ¼-inch amplitude.

If the first strike-off does not produce the required roughness, the Contractor shall repeat the process before the concrete reaches initial set. The final surface shall be clean and without laitance or loose material.

6-02.3(12)B Construction Joints Between Existing and New Construction

The phrase "by method(s) as approved by the Engineer" is deleted from each paragraph in this section.

6-02.3(13) Expansion Joints

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

Joints made of a vulcanized, elastomeric compound (with neoprene as the only polymer) shall be installed with a lubricant adhesive as recommended by the manufacturer.

In the third paragraph, "injuring" is revised to read "damaging".

The following two new subsections are added:

6-02.3(13)A Strip Seal Expansion Joint System

The Contractor shall submit Working Drawings consisting of the strip seal expansion joint shop drawings in accordance with Section 6-03.3(7). These plans shall include, at a minimum, the following:

1. Plan, elevation, and sections of the joint system and all components, with dimensions and tolerances.

2. All material designations.

3. Manufacturer's written installation procedure.

4. Corrosion protection system used on the metal components.

5. Locations of welded shear studs, lifting mechanisms, temperature setting devices, and construction adjustment devices.

6. Method of sealing the system to prevent leakage of water through the joint.

The strip seal shall be removable and replaceable.

The metal components shall conform to ASTM A 36, ASTM A 992, or ASTM A 572, and shall be protected against corrosion by one of the following methods:

1. Zinc metallized in accordance with Section 6-07.3(14).

2. Hot-dip galvanized in accordance with AASHTO M 111.

3. Paint in accordance with Section 6-07.3(9). The color of the top coat shall be Federal Standard 595 Color No. 26420. The surfaces embedded in concrete shall be painted only with a shop primer coat of paint conforming to Section 9-08.1(2)C.

The strip seal gland shall be continuous for the full length of the joint with no splices permitted, unless otherwise shown in the Plans.

Other than items shown in the Plans, threaded studs used for construction adjustments are the only items that may be welded to the steel shapes provided they are removed by grinding after use, and the area repaired by application of an approved corrosion protection system.

If the opening between the steel shapes is anticipated to be less than 1-1/2 inches at the time of seal installation, the seal may be installed prior to encasement of the steel shapes in concrete.

After the joint system is installed, the joint shall be flooded with water and inspected, from below the joint, for leakage. If leakage is observed, the joint system shall be repaired by the Contractor, as recommended by the manufacturer.

6-02.3(13)B Compression Seal Expansion Joint System

Compression seal glands shall be selected from the current Qualified Products List and sized as shown in the Plans.

The compression seal expansion joint system shall be installed in accordance with the manufacturer's written recommendations. The Contractor shall submit a Type 1 Working Drawing consisting of the manufacturer's written installation procedure and repair procedures if leakage testing fails.

After the joint system is installed, the joint area shall be flooded with water and inspected, from below the joint, for leakage. If leakage is observed, the joint system shall be repaired by the Contractor, as recommended by the manufacturer.

6-02.3(14) Finishing Concrete Surfaces

The last sentence of the first paragraph is revised to read:

The Contractor shall clean and refinish any stained or discolored surfaces.

The following new subsection is added:

6-02.3(14)D General Requirements for Concrete Surface Finishes Produced by Form Liners

Horizontal and vertical joints shall be spliced in accordance with the manufacturer's printed instructions. The Contractor shall submit a Type 1 Working Drawing consisting of the manufacturer’s joint splice instructions.

Horizontal splicing of ABS and plastic form liners to achieve the required height is not permitted and there shall be no horizontal joints. The concrete formed with ABS and plastic form liners shall be given a light sandblast to remove the glossy finish.

Side forms, traffic barrier forms, and pedestrian barrier forms using these form liners may be removed after 24 hours provided the concrete mix used includes a water-reducing admixture, and the concrete reaches 1,400 psi minimum compressive strength before form removal. Concrete in load supporting forms utilizing these form liners shall be cured in accordance with Section 6-02.3(17)N. Once the forms are removed, the Contractor shall treat the joint areas by patching or light sandblasting as required by the Engineer to ensure that the joints are not visible.

Form liners shall be cleaned, reconditioned, and repaired before each use. Form liners with repairs, patches, or defects which, in the opinion of the Engineer, would result in adverse effects to the concrete finish shall not be used.

Care shall be taken to ensure uniformity of color throughout the textured surface. A change in form release agent will not be allowed.

All surfaces formed by the form liner shall also receive a Class 2 surface finish. Form ties shall be a type that leaves a clean hole when removed. All spalls and form tie holes shall be filled as specified for a Class 2 surface finish.

6-02.3(14)C Pigmented Sealer for Concrete Surfaces

The first sentence (up until the colon) is revised to read:

> The Contractor shall submit a Type 1 Working Drawing consisting of the pigmented sealer manufacturer's written instructions covering, at a minimum, the following:

The second paragraph is deleted.

In the last sentence of the third paragraph, "approval" is revised to read "acceptance".

6-02.3(15) Date Numerals

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

> When an existing Structure is widened or when traffic barrier is placed on an existing Structure, the date shall be for the year in which the original Structure was completed.

6-02.3(16) Plans for Falsework and Formwork

This section is revised to read:

> The Contractor shall submit all plans for falsework and formwork as Type 2E Working Drawings. Submittal is not required for footing or retaining wall formwork if the wall is 4 feet or less in height (excluding pedestal height).
>
> The design of falsework and formwork shall be based on:
>
> 1. Applied loads and conditions which are no less severe than those described in Section 6-02.3(17)A, Design Loads;
>
> 2. Allowable stresses and deflections which are no greater than those described in Section 6-02.3(17)B, Allowable Stresses and Deflections;
>
> 3. Special loads and requirements no less severe than those described in Section 6-02.3(17)C, Falsework and Formwork at Special Locations;
>
> 4. Conditions required by other Sections of 6-02.3(17), Falsework and Formwork.
>
> The falsework and formwork plans shall be scale drawings showing the details of proposed construction, including: sizes and properties of all members and components; spacing of bents, posts, studs, wales, stringers, wedges and bracing; rates of concrete placement, placement sequence, direction of placement, and location of construction joints; identification of falsework devices and safe working loads as well as identification of any bolts or threaded rods used with the devices including their diameter, length, type, grade, and required torque. The falsework plans shall show the proximity of falsework to utilities or any nearby Structures including underground Structures. Formwork accessories shall be identified according to Section 6-02.3(17)H, Formwork Accessories. All assumptions, dimensions, material properties, and other data used in making the structural analysis shall be noted on the drawing.
>
> The Contractor shall furnish associated design calculations to the Engineer as part of the submittal. The design calculations shall show the stresses and deflections in load supporting members. Construction details which may be shown in the form of sketches on the calculation sheets shall be shown in the falsework or formwork drawings as well. Falsework or formwork plans will be rejected in cases where it is necessary to refer to the calculation sheets for information needed for complete

understanding of the falsework and formwork plans or how to construct the falsework and formwork.

Each sheet of falsework and formwork plans shall carry the following:

1. The initials and dates of all participating design professionals.

2. Clear notation of all revisions including identification of who authorized the revision, who made the revision, and the date of the revision.

3. The Contract number, Contract title, and sequential sheet number. These shall also be on any related documents.

4. Identify where the falsework and formwork plan will be utilized by referencing Contract Plan sheet number and related item or detail.

6-02.3(16)A Nonpreapproved Falsework and Formwork Plans

This section, including title, is deleted in its entirety and replaced with the following:

6-02.3(16)A Vacant

6-02.3(16)B Preapproved Formwork Plans

This section, including title, is revised to read:

6-02.3(16)B Pre-Contract Review of Falsework and Formwork Plans

The Contractor may request pre-contract review of formwork plans for abutments, wingwalls, diaphragms, retaining walls, columns, girders and beams, box culverts, railings, and bulkheads. Plans for falsework supporting the bridge deck for interior spans between precast prestressed concrete girders may also be submitted for pre-contract review.

To obtain pre-contract review, the Contractor shall electronically submit drawings and design calculations in PDF format directly to:

BridgeConstructionSupport@wsdot.wa.gov

The Bridge and Structures Office, Construction Support Engineer will return the falsework or formwork plan to the Contractor with review notes, an effective date of review, and any revisions needed prior to use. For each contract on which the pre-reviewed falsework or formwork plans will be used, the Contractor shall submit a copy to the Engineer. Construction shall not begin until the Engineer has given concurrence.

If the falsework or formwork being constructed has any deviations to the preapproved falsework or formwork plan, the Contractor shall submit plan revisions for review and approval in accordance with Section 6-02.3(16).

6-02.3(17)A Design Loads

The fifth paragraph is revised to read:

Live loads shall consist of a minimum uniform load of not less than 25 psf, applied over the entire falsework plan area, plus the greater of:

1. Actual weights of the deck finishing equipment applied at the rails, or;

2. A minimum load of 75 pounds per linear foot applied at the edge of the bridge deck.

6-02.3(17)J Face Lumber, Studs, Wales, and Metal Forms

The second to last paragraph is deleted.

6-02.3(17)O Early Concrete Test Cylinder Breaks

The third paragraph is revised to read:

The cylinders shall be cured in the field in accordance with WSDOT FOP for AASHTO T 23 Section 10.2 Field Curing.

6-02.3(20) Grout for Anchor Bolts and Bridge Bearings

The first five paragraphs are deleted and replaced with the following two new paragraphs:

Grout shall conform to Section 9-20.3(2) for anchor bolts and for bearing assemblies with bearing plates. Grout shall conform to Section 9-20.3(3) for elastomeric bearing pads and fabric pad bearings without bearing plates.

Grout shall be a workable mix with a viscosity that is suitable for the intended application. The Contractor shall receive approval from the Engineer before using the grout.

6-02.3(24)E Welding Reinforced Steel

This section is revised to read:

Welding of steel reinforcing bars shall conform to the requirements of ANSI/AWS D1.4 Structural Welding Code - Reinforcing Steel, latest edition, except where superseded by the Special Provisions, Plans, and these Specifications.

Before any welding begins, the Contractor shall submit a Type 2 Working Drawing consisting of the welding procedure for each type of welded splice to be used, including the weld procedure specifications and joint details. The weld procedure specifications shall be written on a form taken from AWS D1.4 Annex A, or equivalent. Test results of tensile strength, macroetch, and visual examination shall be included. The form shall be signed and dated.

Welders shall be qualified in accordance with AWS D1.4. The Contractor shall be responsible for the testing and qualification of welders, and shall submit Type 2 Working Drawings consisting of welder qualification and retention records. The weld joint and welding position a welder is qualified in shall be in accordance with AWS D1.4. The welder qualifications shall remain in effect indefinitely unless, (1) the welder is not engaged in a given process of welding for which the welder is qualified for a period exceeding six months, or (2) there is some specific reason to question a welder's ability.

Filler metals used for welding reinforcing bars shall be in accordance with AWS D1.4 Table 5.1. All filler metals shall be low-hydrogen and handled in compliance with low-hydrogen practices specified in the AWS code.

Short circuiting transfer with gas metal arc welding will not be allowed. Slugging of welds will not be allowed.

For the purpose of compatibility with AWS D1.4, welded lap splices for spiral or hoop reinforcing shall be considered Flare-V groove welds, indirect butt joints.

The Contractor is responsible for using a welding sequence that will limit the alignment distortion of the bars due to the effects of welding. The maximum out-of-line permitted will be 1/4 inch from a 3.5-foot straight-edge centered on the weld and in line with the bar.

The ground wire from the welding machine shall be clamped to the bar being welded.

Where epoxy-coated steel reinforcing bars are specified to be spliced by welding, the epoxy coating shall be left off or removed from the surfaces to be heated, but in no cases less than six inches of each bar being welded. After the welding is complete, the Contractor shall apply epoxy patching material to the uncoated portions of the bar in accordance with Section 6-02.3(24)H.

6-02.3(25) Prestressed Concrete Girders

In the first paragraph, the last sentence is revised to read:

WSDOT certification will be granted at, and renewed during, the annual prestressed plant review and approval process in accordance with WSDOT Materials Manual M 46-01.04 Standard Practice QC 6.

6-02.3(25)I Fabrication Tolerances

In the first paragraph, item number 21 is revised to read:

21. Differential Camber Between Girders in a Span (measured in place at the job site):

For deck bulb tee girders and PCPS members with grouted shear keys:	Cambers shall be equalized when the differences in cambers between adjacent girders exceeds ± ¼ inch
For deck bulb tee girders and PCPS members without grouted shear keys:	Cambers shall be equalized when the differences in cambers between adjacent girders exceeds ± ½ inch
For all other prestressed concrete girders:	± ⅛ inch per 10 feet of girder length

6-02.3(25)O Deck Bulb Tee Girder Flange Connection

This section, including title, is revised to read:

Deck Bulb Tee Girder Flange and PCPS Member Connection

The Contractor shall submit a method of equalizing deflections as a Type 1 Working Drawing. Any temporary strands in the top flange shall be cut per Section 6-02.3(25)N prior to equalizing girder deflections.

Deck bulb tee girders and PCPS members with grouted shear keys shall be constructed in the following sequence:

1. Deflections shall be equalized per the Contractor's equalization plan.

2. Intermediate diaphragms shall be placed and weld ties shall be welded. Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.

3. The keyways shown in the Plans to receive grout shall be filled flush with the surrounding surfaces using a grout conforming to Section 9-20.3(2).

4. Equalization equipment shall not be removed and other construction equipment shall not be placed on the structure until intermediate diaphragms have attained a minimum compressive strength of 2,500 psi and keyway grout has achieved a minimum compressive strength of 4000 psi.

Deck bulb tee girders and PCPS members without grouted shear keys shall be constructed in the following sequence:

1. Deflections shall be equalized per the Contractor's equalization plan.

2. Intermediate diaphragms shall be placed and weld ties shall be welded. Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.

3. Equalization equipment shall not be removed and other construction equipment shall not be placed on the structure until intermediate diaphragms have attained a minimum compressive strength of 2,500 psi.

6-02.3(26)F Prestressing Reinforcement

The last sentence in the fourth paragraph is revised to read:

If the prestressing reinforcement will not be stressed and grouted for more than 7 calendar days after it is placed in the ducts, the Contractor shall place an approved corrosion inhibitor conforming to Federal Specification MIL-I-22110C in the ducts.

6-02.3(28) Precast Concrete Panels

In the first paragraph, the third sentence is revised to read:

WSDOT Certification will be granted at, and renewed during, the annual precast plant review and approval process in accordance with WSDOT Materials Manual M 46-01.04 Standard Practice QC 7.

6-02.4 Measurement

The following three new paragraphs are inserted before the last paragraph:

Expansion joint system___seal - superstr. will be measured by the linear foot along its completed line and slope.

Expansion joint modification will be measured by the linear foot of expansion joint modified along its completed line and slope.

Prestressed concrete girder will be measured by the linear foot of girder specified in the Proposal.

6-02.5 Payment

In the paragraph following the bid item "Commercial Concrete", per cubic yard the second sentence is revised to read:

All costs in connection with concrete curing, producing concrete surface finish with form liners, and furnishing and applying pigmented sealer to concrete surfaces as specified, shall be included in the unit contract price per cubic yard for "Conc. Class ____".

The following new paragraph is inserted after the bid item "Superstructure (name bridge)", lump sum:

All costs in connection with constructing, finishing and removing the bridge deck test slab as specified in Section 6-02.3(10)D1 shall be included in the lump sum Contract price for "Superstructure___" or "Bridge Deck___" for one bridge in each project, as applicable.

In the paragraph following the bid item "Epoxy-Coated St. Reinf. Bar ___", per pound, the first sentence is revised to read:

Payment for reinforcing steel shall include the cost of drilling holes in concrete for, and setting, steel reinforcing bar dowels with epoxy bonding agent, and furnishing, fabricating, placing, and splicing the reinforcement.

The bid item "Cure Box", lump sum and paragraph following bid item are deleted.

The following three new bid items are inserted before the bid item "Bridge Approach Slab", per square yard:

"Expansion Joint System _____ - Superstr.", per linear foot.

"Expansion Joint Modification - ___", per linear foot.

"Prestressed Conc. Girder ___", per linear foot.

8-01.AP8

Section 8-01, Erosion Control and Water Pollution Control
January 5, 2015

8-01.2 Materials
This section is supplemented with the following new paragraph:

For all seed the Contractor shall furnish the Engineer with the following documentation:

1. The state or provincial seed dealer license and endorsements.

2. Copies of Washington State Department of Agriculture (WSDA) test results on each lot of seed. Test results must be within six months prior to the date of application.

8-01.3(1)A Submittals
The first sentence in the second paragraph is revised to read:

Modified TESC Plans shall meet all requirements of the current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109.

8-01.3(1)C Water Management
Items number 1 through 3 are deleted.

This section is supplemented with the following new subsections:

8-01.3(1)C1 Disposal of Dewatering Water

When uncontaminated groundwater with a pH range of 6.5 – 8.5 is encountered in an excavation, it may be disposed of as follows:

1. When the turbidity of the groundwater is 25 NTU or less, it may bypass detention and treatment facilities and be discharged into the stormwater conveyance system at a rate that will not cause erosion or flooding in the receiving surface water body.

2. When the turbidity of the groundwater is not more than 25 NTU above or 125% of the turbidity of the site stormwater runoff, whichever is greater, the same detention and treatment facilities as used to treat the site runoff may be used.

3. When the turbidity of the groundwater is more than 25 NTU above or 125% of the turbidity of the site stormwater runoff, whichever is greater, the groundwater shall be treated separately from the site stormwater.

Alternatively, the Contractor may pursue independent disposal and treatment alternatives that do not use the stormwater conveyance system.

8-01.3(1)C2 Process Wastewater

Wastewater generated on-site as a byproduct of a construction process shall not be discharged to surface waters of the State. Some sources of process wastewater may be infiltrated in accordance with the NPDES Construction Stormwater General Permit.

8-01.3(1)C3 Shaft Drilling Slurry Wastewater

Wastewater generated on-site during shaft drilling activity shall be managed and disposed of in accordance with the requirements below. No shaft drilling slurry wastewater shall be discharged to surface waters of the State. Neither the sediment nor liquid portions of the shaft drilling slurry wastewater shall be contaminated, as detectable by visible or olfactory indication (e.g., chemical sheen or smell).

1. Water-only shaft drilling slurry or water slurry with approved flocculants may be infiltrated on-site. Flocculants used shall meet the requirements of Section 9-14.5(1) or shall be chitosan products listed as General Use Level Designation (GULD) on the Department of Ecology's stormwater treatment technologies webpage for construction treatment. Infiltration is permitted if the following requirements are met:

    a. Wastewater shall have a pH of 6.5 – 8.5 prior to discharge.

    b. The source water meets drinking water standards or the Groundwater Quality Criteria listed in WAC 173-200-040.

    c. The amount of flocculant added to the slurry shall be kept to the minimum needed to adequately settle out solids. The flocculant shall be thoroughly mixed into the slurry.

    d. Infiltration locations shall be at least 100 feet away from surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas. Before infiltration begins, there shall be a minimum of 5 feet of unsaturated soil between the soil surface receiving the wastewater for infiltration and the groundwater surface (i.e., saturated soil).

e. The slurry removed from the shaft shall be contained in a leak proof cell or tank for a minimum of 3 hours.

f. Within a 24 hour period, a maximum of 21,000 gallons of slurry wastewater may be infiltrated in an infiltration location. The infiltration rate shall be reduced if needed to prevent wastewater from leaving the infiltration location. The infiltration site shall be monitored regularly during infiltration activity. All wastewater discharged to the ground must fully infiltrate and discharges must stop before the end of each work day.

g. After infiltration activity is complete, loose sediment in the infiltration location that may have resulted from the infiltration activity or the removal of BMPs used to manage infiltration activity shall be stabilized to prevent mobilization by stormwater runoff.

h. Drilling spoils and settled sediments remaining in the containment cell or tank shall be disposed of in accordance with Section 6-19.3(4)F.

i. Infiltration locations shall be marked on the on-site temporary erosion and sediment control (TESC) plan sheets before the infiltration activity begins.

j. Prior to infiltrating water-only shaft drilling slurry or water slurry with approved flocculants, the Contractor shall submit a Shaft Drilling Slurry Wastewater Management and Infiltration Plan as a Type 2 Working Drawing. This Plan shall be kept on-site, adapted if needed to meet the construction requirements, and updated to reflect what is being done in the field. The Working Drawing shall include, at a minimum, the following information:

    i. Plan sheet showing the proposed infiltration location and all surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas within 150 feet.

    ii. The proposed elevation of soil surface receiving the wastewater for infiltration and the anticipated phreatic surface (i.e., saturated soil).

    iii. The source of the water used to produce the slurry.

    iv. The estimated total volume of wastewater to be infiltrated.

    v. The approved flocculant to be used (if any).

    vi. The controls or methods (e.g., trenches, traps, berms, silt fence, dispersion, or discharge metering devices) that will be used to prevent surface wastewater runoff from leaving the infiltration location. The Working Drawing shall include all pertinent design details (e.g., sizing of trenches or traps, placement or height of berms, application techniques) needed to demonstrate the proposed controls or methods are adequate to prevent surface wastewater runoff from leaving the infiltration location.

    vii. The strategy for removing slurry wastewater from the shaft and containing the slurry wastewater once it has been removed from the shaft.

viii. The strategy for monitoring infiltration activity and adapting methods to ensure compliance.

ix. A contingency plan that can be implemented immediately if it becomes evident that the controls in place or methods being used are not adequate.

x. The strategy for cleaning up the infiltration location after the infiltration activity is done. Cleanup shall include stabilizing any loose sediment on the surface within the infiltration area generated as a byproduct of suspended solids in the infiltrated wastewater or soil disturbance associated with BMP placement and removal.

2. Shaft drilling mineral slurry, synthetic slurry, or slurry with polymer additives not approved for infiltration shall be contained and disposed of by the Contractor at an approved disposal facility in accordance with Section 2-03.3(7)C. Spoils that have come into contact with mineral slurry shall be disposed of in accordance with Section 6-19.3(4)F.

8-01.3(1)C4 Management of Off-Site Water

Prior to disruption of the normal watercourse, the Contractor shall intercept the off-site surface water and pipe it either through or around the project site. This water shall not be combined with on-site stormwater. It shall be discharged at its preconstruction outfall point in such a manner that there is no increase in erosion below the site. The Contractor shall submit a Type 2 Working Drawing consisting of the method for performing this Work.

8-01.3(2)A Preparation for Application

This section's content is deleted and replaced with the following two new subsections:

8-01.3(2)A1 Seeding

Areas to be cultivated are shown in the Plans or specified in the Special Provisions. The areas shall be cultivated to the depths specified to provide a reasonably firm but friable seedbed. Cultivation shall take place no sooner than 2 weeks prior to seeding.

All areas to be seeded, including excavated slopes shall be compacted and prepared unless otherwise specified or ordered by the Engineer. A cleated roller, crawler tractor, or similar equipment that forms longitudinal depressions at least 2 inches deep shall be used for compaction and preparation of the surface to be seeded.

The entire area shall be uniformly covered with longitudinal depressions formed perpendicular to the natural flow of water on the slope. The soil shall be conditioned with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.

Prior to seeding, the finished grade of the soil shall be 1 inch below the top of all curbs, junction and valve boxes, walks, driveways, and other Structures. The soil shall be in a weed free and bare condition.

All bags of seed shall be brought to the site in sealed bags and shall have seed labels attached showing the seed meets the Specifications. Seed which has become wet, moldy, or otherwise damaged in transit or storage will not be accepted.

8-01.3(2)A2 Temporary Seeding

A cleated roller, crawler tractor, or similar equipment that forms longitudinal depressions at least 2 inches deep shall be used for compaction and preparation of the surface to be seeded. The entire area shall be uniformly covered with longitudinal depressions formed perpendicular to the natural flow of water on the slope. The soil shall be conditioned with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.

8-01.3(2)B Seeding and Fertilizing

In the list in the second paragraph, item numbers 1-5 are revised to read:

1. A hydro seeder that utilizes water as the carrying agent, and maintains continuous agitation through paddle blades. It shall have an operating capacity sufficient to agitate, suspend, and mix into a homogeneous slurry the specified amount of seed and water or other material. Distribution and discharge lines shall be large enough to prevent stoppage and shall be equipped with a set of hydraulic discharge spray nozzles that will provide a uniform distribution of the slurry.

2. Blower equipment with an adjustable disseminating device capable of maintaining a constant, measured rate of material discharge that will ensure an even distribution of seed at the rates specified.

3. Helicopters properly equipped for aerial seeding.

4. Power-drawn drills or seeders.

5. Areas in which the above methods are impractical may be seeded by hand methods.

8-01.3(2)C Liming

This section including title is deleted in its entirety and replaced with the following:

8-01.3(2)C Vacant

8-01.3(2)D Mulching

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

Distribution of straw mulch material shall be by means that utilizes forced air to blow mulch material on seeded areas.

8-01.3(11) Outlet Protection

In the last sentence, “Section 9-13.6” is revised to read “Section 9-13.1(5)”.

8-01.4 Measurement

In the twelfth paragraph, “liming” is deleted.

8-01.5 Payment

The bid item “Liming”, per acre is deleted.

8-02.AP8

Section 8-02, Roadside Restoration
January 5, 2015

8-02.3(1) Responsibility During Construction

The last sentence of the second paragraph is revised to read:

> This Work shall include keeping the planted and seeded areas free from insect infestation, weeds or unwanted vegetation, litter, and other debris along with retaining the finished grades and mulch in a neat uniform condition.

8-02.3(2) Roadside Work Plan

This section's title is revised to read:

> **Work Plans**

This section's content is deleted in its entirety and replaced with the following new subsections:

8-02.3(2)A Roadside Work Plan

Before starting any Work that disturbs the earth and as described in Sections 8-01, 8-02 and 8-03, the Contractor shall submit a roadside work plan. The roadside work plan shall be submitted as a Type 1 Working Drawing and shall define the Work necessary to provide all Contract requirements, including: wetland excavation, soil preparation, habitat structure placement, planting area preparation, seeding area preparation, bark mulch and compost placement, seeding, planting, plant replacement, irrigation, and weed control in narrative form.

The Roadside Work Plan shall also include a copy of the approved progress schedule.

8-02.3(2)B Weed and Pest Control Plan

The Weed and Pest Control Plan shall be submitted as a Type 1 Working Drawing. The weed and pest control plan shall include scheduling and methods of all control measures required under the Contract or proposed by the Contractor including soil preparation methods to meet the required soil surface conditions in the planting, bark mulch, and wetland areas. The weed control plan shall show general weed control including hand, mechanical and chemical methods, timing, application of herbicides including type, rate, use and timing, mowing, and noxious weed control. Target weeds and unwanted vegetation to be removed shall be identified and listed in the weed control plan.

The plan shall be prepared and signed by a licensed Commercial Pest Control Operator or Consultant when chemical pesticides are proposed. The plan shall include methods of weed control; dates of weed control operations; and the name, application rate, and Material Safety Data Sheets of all proposed herbicides. In addition, the Contractor shall furnish the Engineer with a copy of the current product label for each pesticide and spray adjuvant to be used. These product labels shall be submitted with the weed control plan for approval.

8-02.3(2)C Plant Establishment Plan

The Plant Establishment Plan shall be prepared in accordance with the requirements of Section 8-02.3(13) and submitted as a Type 1 Working Drawing. The Plan shall show the proposed scheduling of activities, materials, equipment to be utilized for the first-year plant establishment, and an emergency contact person. The Plan shall include the management of the irrigation system, when

applicable. Should the plan become unworkable at any time during the first-year plant establishment, the Contractor shall submit a revised plan prior to proceeding with further Work.

8-02.3(3) Weed and Pest Control

This section is supplemented with the following new paragraph:

Grass, including grass applied in accordance with Section 8-01, growing within the mulch ring of a plant shall be considered a weed and be controlled on the project in accordance with the weed and pest control plan.

8-02.3(4) Topsoil

The last sentence of the first paragraph is revised to read:

After the topsoil has been spread, all large clods, hard lumps, and rocks 2 inches in diameter and larger, and litter shall be raked up, removed, and disposed of by the Contractor.

The following new paragraph is inserted after the first paragraph:

Topsoil stockpiled for project use shall be protected to prevent erosion and weed growth. Weed growth on topsoil stockpile sites shall be immediately eliminated in accordance with the approved Weed and Pest Control Plan.

8-02.3(4)C Topsoil Type C

The last sentence is revised to read:

Topsoil Type C shall meet the requirements of Sections 8-02.3(4), 8-02.3(4)B, and 9-14.1(3).

8-02.3(12) Completion of Initial Planting

Item number 4 in the last paragraph is deleted.

8-02.3(13) Plant Establishment

The first sentence of the second paragraph is deleted.

The second paragraph is supplemented with the following new sentence:

The 1 calendar year shall be extended an amount equal to any periods where the Contractor does not comply with the plant establishment plan.

The first sentence of the fourth paragraph is revised to read:

During the first year of plant establishment under PSIPE (Plant Selection Including Plant Establishment), the Contractor shall meet monthly with the Engineer for the purpose of joint inspection of the planting material on a mutually agreed upon schedule.

The last two paragraphs are deleted.

8-02.4 Measurement

This section is supplemented with the following:

Plant selection will be measured per each.

PSIPE __ (Plant Selection Including Plant Establishment) will be measured per each.

8-02.5 Payment

The paragraph following the bid item "Topsoil Type ____", per acre is revised to read:

The unit Contract price per acre for "Topsoil Type ____" shall be full payment for all costs for the specified Work.

The bid item "PSIPE ___", per each and the paragraph following the bid item are revised to read:

"PSIPE ___", per each.

The unit Contract price for "Plant Selection ___", per each, and "PSIPE ___", per each, shall be full pay for all Work necessary for weed control within the planting area, planting area preparation, fine grading, planting, cultivating, plant storage and protection, fertilizer and root dip, staking, cleanup, and water necessary to complete planting operations as specified to the end of first year plant establishment.

The bid item "Plant Establishment - ____ Year" is deleted.

8-22.AP8

Section 8-22, Pavement Marking
January 5, 2015

8-22.3(6) Removal of Pavement Markings

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

Grinding to remove painted markings is only allowed prior to application of a Bituminous Surface Treatment.

8-23.AP8

Section 8-23, Temporary Pavement Markings
January 5, 2015

This section's content is deleted in its entirety and replaced with the following new sub-sections:

8-23.1 Description

The Work consists of furnishing, installing, and removing temporary pavement markings. Temporary pavement markings shall be provided where noted in the Plans; for all lane shifts and detours resulting from construction activities; or when permanent markings are removed because of construction operations.

8-23.2 Materials

Materials for temporary markings shall be paint, plastic, tape, raised pavement markers or flexible raised pavement markers. Materials for pavement markings shall meet the following requirements:

Raised Pavement Markers	9-21
Temporary Marking Paint	9-34.2(6)
Plastic	9-34.3
Glass Beads for Pavement Marking Materials	9-34.4

Temporary Pavement Marking Tape	9-34.5
Temporary Flexible Raised Pavement Markers	9-34.6

8.23.3 Construction Requirements

8-23.3(1) General

The Contractor shall select the type of pavement marking material in accordance with the Contract.

8-23.3(2) Preliminary Spotting

All preliminary layout and marking in preparation for application or removal of temporary pavement markings shall be the responsibility of the Contractor.

8-23.3(3) Preparation of Roadway Surface

Surface preparation for temporary pavement markings shall be in accordance with the manufacturer's recommendations.

8-23.3(4) Pavement Marking Application

8-23.3(4)A Temporary Pavement Markings – Short Duration

Temporary pavement markings – short duration shall meet the following requirements:

Temporary Center Line – A BROKEN line used to delineate adjacent lanes of traffic moving in opposite directions. The broken pattern shall be based on a 40-foot unit, consisting of a 4-foot line with a 36-foot gap if paint or tape is used. If temporary raised pavement markers are used, the pattern shall be based on a 40-foot unit, consisting of a grouping of three temporary raised pavement markers, each spaced 3 feet apart, with a 34 foot gap.

Temporary Edge Line – A SOLID line used on the edges of Traveled Way. The line shall be continuous if paint or tape is used. If temporary raised pavement markers are used, the line shall consist of markers installed continuously at 5-foot spacing.

Temporary Lane Line – A BROKEN line used to delineate adjacent lanes with traffic traveling in the same direction. The broken pattern shall be based on a 40-foot unit, consisting of a 4-foot line with a 36-foot gap, if paint or tape is used. If temporary raised pavement markers are used, the pattern shall be based on a 40-foot unit, consisting of a grouping of three temporary raised pavement markers, each spaced 3 feet apart, with a 34 foot gap.

Lane line and right edge line shall be white in color. Center line and left edge line shall be yellow in color. Edge lines shall be installed only if specifically required in the Contract. All temporary pavement markings shall be retroreflective.

8-23.3(4)A1 Temporary Pavement Marking Paint

Paint used for short duration temporary pavement markings shall be applied in one application at a thickness of 15 mils or 108 square feet per gallon. Glass beads shall be in accordance with Section 8-22.3(3)G.

8-23.3(4)A2 Temporary Pavement Marking Tape

Application of temporary pavement marking tape shall be in conformance with the manufacturer's recommendations.

Black mask pavement marking tape shall mask the existing line in its entirety.

8-23.3(4)A3 Temporary Raised Pavement Markers
Temporary raised pavement markers are not allowed on bituminous surface treatments.

8-23.3(4)A4 Temporary Flexible Raised Pavement Markers
Flexible raised pavement markers are required for new applications of bituminous surface treatments. Flexible raised pavement markers are not allowed on other pavement types unless otherwise specified or approved by the Engineer. Flexible raised pavement markers shall be installed with the protective cover in place. The cover shall be removed immediately after spraying asphaltic material.

8-23.3(4)B Temporary Pavement Markings – Long Duration
Application of paint, pavement marking tape and plastic for long duration pavement markings shall meet the requirements of Section 8-22.3(3); application of raised pavement markers shall meet the requirements of Section 8-09.3; and application of flexible pavement markings shall be in conformance with the manufacturer's recommendations.

8-23.3(4)C Tolerance for Lines
Tolerance for lines shall conform to Section 8-22.3(4).

8-23.3(4)D Maintenance of Pavement Markings
Temporary pavement markings shall be maintained in serviceable condition throughout the project until permanent pavement markings are installed. As directed by the Engineer; temporary pavement markings that are damaged, including normal wear by traffic, shall be repaired or replaced immediately. Repaired and replaced pavement markings shall meet the requirements for the original pavement marking.

8-23.3(4)E Removal of Pavement Markings
Removal of temporary paint is not required prior to paving; all other temporary pavement markings shall be removed.

All temporary pavement markings that are required on the wearing course prior to construction of permanent pavement markings and are not a part of the permanent markings shall be completely removed concurrent with or immediately subsequent to the construction of the permanent pavement markings. Temporary flexible raised pavement markers on bituminous surface treatment pavements shall be cut off flush with the surface if their location conflicts with the alignment of the permanent pavement markings. All other temporary pavement markings shall be removed in accordance with Section 8-22.3(6).

All damage to the permanent Work caused by removing temporary pavement markings shall be repaired by the Contractor at no additional cost to the Contracting Agency.

8-23.4 Measurement
Temporary pavement markings will be measured by the linear foot of each installed line or grouping of markers, with no deduction for gaps in the line or markers and no additional measurement for the second application of paint required for long duration paint lines. Short duration and long duration temporary pavement markings will be measured for the initial installation only.

8-23.5 Payment
Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

"Temporary Pavement Marking – Short Duration", per linear foot.

"Temporary Pavement Marking – Long Duration", per linear foot.

The unit Contract price per linear foot for "Temporary Pavement Marking – Short Duration" and "Temporary Pavement Marking – Long Duration" shall be full pay for all Work.

9-13.AP9

Section 9-13, Riprap, Quarry Spalls, Slope Protection, and Rock for Erosion and Scour Protection and Rock Walls
January 5, 2015

This section's content is deleted.

9-13.1 Loose Riprap

This section's content, including title and subsections, is revised to read the following:

9-13.1 Riprap and Quarry Spalls

9-13.1(1) General

Riprap and quarry spalls shall consist of broken stone or broken concrete rubble and shall be free of rock fines, soil, or other extraneous material. Concrete rubble shall not be contaminated by foreign materials such as fibers, wood, steel, asphalt, sealant, soil, plastic and other contaminants or deleterious material. Concrete rubble that is imported to the job site will require testing and certification for toxicity characteristics per Section 9-03.21(1).

The grading of the riprap shall be determined by the Engineer by visual inspection of the load before it is dumped into place, or, if so ordered by the Engineer, by dumping individual loads on a flat surface and sorting and measuring the individual rocks contained in the load. Should the riprap contain insufficient spalls, as defined in Section 9-13.1(5), the Contractor shall furnish and place supplementary spall material.

Riprap and quarry spalls shall be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather and shall conform to the following requirements for quality.

Aggregate Property	Test Method	Requirement
Degradation Factor	WSDOT T 113	15 minimum
Los Angeles Wear, 500 Rev.	AASHTO T 96	50% maximum
Specific Gravity, SSD	AASHTO T 85	2.55 minimum

9-13.1(2) Heavy Loose Riprap

Heavy loose riprap shall meet the following requirements for grading:

	Minimum Size	Maximum Size
40% to 90%	1 ton (½ cubic yd.)	
70% to 90%	300 lbs. (2 cu. ft.)	
10% to 30%	3 inch	50 lbs. (spalls)

9-13.1(3) Light Loose Riprap
Light loose riprap shall meet the following requirements for grading:

	Size Range	Maximum Size
20% to 90%	300 lbs. to 1 ton (2 cu. ft. to ½ cu. yd.)	
15% to 80%	50 lbs. to 1 ton (⅓ cu. ft. to ½ cu. yd.)	
10% to 20%	3 inch	50 lbs. (spalls)

9-13.1(4) Hand Placed Riprap
Hand placed riprap shall be as nearly rectangular as possible, 60 percent shall have a volume of not less than 1 cubic foot. No stone shall be used which is less than 6 inches thick, nor which does not extend through the wall.

9-13.1(5) Quarry Spalls
Quarry spalls shall meet the following requirements for grading:

Sieve Size	Percent Passing
8″	100
3″	40 max.
¾″	10 max.

9-13.2 Hand Placed Riprap
This section, including title, is deleted in its entirety and replaced with the following:

9-13.2 Vacant

9-13.4 Rock for Erosion Control and Scour Protection
The last sentence is revised to read:

The use of recycled materials and concrete rubble is not permitted for this application.

9-13.6 Quarry Spalls
This section, including title, is deleted in its entirety and replaced with the following:

9-13.6 Vacant

9-14.AP9

Section 9-14, Erosion Control and Roadside Planting
January 5, 2015

9.14.1 Soil
This section, including title, is revised to read:

9-14.1 Topsoil

Topsoil shall not contain any recycled material, foreign materials, or any listed Noxious and Nuisance weeds of any Class designated by authorized State or County officials. Aggregate shall not comprise more than 10% by volume of Topsoil and shall not be greater than two inches in diameter.

9-14.1(2) Topsoil Type B

The last sentence of the second paragraph is deleted.

9-14.2 Seed

This section is revised to read:

Seed of the type specified shall be certified in accordance with WAC 16-302. Seed mixes shall be commercially prepared and supplied in sealed containers. The labels shall show:

(1) Common and botanical names of seed
(2) Lot number
(3) Net weight
(4) Pounds of Pure live seed (PLS) in the mix
(5) Origin of seed

All seed vendors must have a business license issued by supplier's state or provincial Department of Licensing with a "seed dealer" endorsement.

9-14.4(3) Bark or Wood Chips

This section's title is revised to read:

Bark or Wood Chip Mulch

The first paragraph is revised to read:

Bark or wood chip mulch shall be derived from fir, pine, or hemlock species. It shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust shall not be used as mulch. Mulch produced from finished wood products or construction debris will not be allowed.

9-14.4(6) Gypsum

The first sentence is revised to read:

Gypsum shall consist of Calcium Sulfate ($CaSO_4 \cdot 2H_2O$) in a pelletized or granular form.

9-14.4(7) Tackifier

This section is revised to read:

Tackifiers are used as a tie-down for soil, compost, seed, and/or mulch. Tackifiers shall contain no growth or germination-inhibiting materials and shall not reduce infiltration rates. Tackifiers shall hydrate in water and readily blend with other slurry materials.

The Contractor shall provide test results documenting the tackifier meets the requirements for Acute Toxicity, Solvents, and Heavy Metals as required in Table 1 in Section 9-14.4(2). The tests shall be performed at the manufacturer's recommended application rate.

9-14.4(8) Compost
The second paragraph is revised to read:

Compost production and quality shall comply with WAC 173-350.

9-14.4(8)A Compost Submittal Requirements
Item 2 is revised to read:

5. A copy of the Solid Waste Handling Permit issued to the manufacturer by the Jurisdictional Health Department in accordance with WAC 173-350 (Minimum Functional Standards for Solid Waste Handling).

9-14.6(1) Description
Item number 3 in the fourth paragraph is revised to read:

6. Live pole cuttings shall have a diameter between 2 inches and 3.5 inches. Live poles shall have no more than three branches which must be located at the top end of the pole and those branches shall be pruned back to the first bud from the main stem.

9-14.6(2) Quality
The second and third paragraphs in this section are revised to read:

All plant material shall comply with State and Federal laws with respect to inspection for plant diseases and insect infestation. Plants must meet Washington State Department of Agriculture plant quarantines and have a certificate of inspection. Plants originating in Canada must be accompanied by a phytosanitary certificate stating the plants meet USDA health requirements.

All plant material shall be purchased from a nursery licensed to sell plants in their state or province.

9-34.AP9

Section 9-34, Pavement Marking Material
January 5, 2015

9-34.2 Paint
The second paragraph is revised to read:

Blue and black paint shall comply with the requirements of yellow paint in Section 9-34.2(4) and Section 9-34.2(5), with the exception that blue and black paints do not need to meet the requirements for titanium dioxide, directional reflectance, and contrast ratio.

9-34.4 Glass Beads for Pavement Marking Materials
In the third paragraph, the table titled “Metal Concentration Limits” is revised to read:

Metal Concentration Limits		
Element	**Test Method**	**Max. Parts Per Million (ppm)**
Arsenic	EPA 3052 SW-846 6010C	10.0
Barium	EPA 3052 SW-846 6010C	100.0
Cadmium	EPA 3052 SW-846 6010C	1.0
Chromium	EPA 3052 SW-846 6010C	5.0
Lead	EPA 3052 SW-846 6010C	50.0
Silver	EPA 3052 SW-846 6010C	5.0
Mercury	EPA 3052 SW-846 7471B	4.0

9-34.5 Temporary Pavement Marking Tape

This section is revised to read:

Biodegradable tape with paper backing is not allowed.

This section is supplemented with the following new sub-sections:

9-34.5(1) Temporary Pavement Marking Tape – Short Duration

Temporary pavement marking tape for short duration shall conform to ASTM D4592 Type II except that black tape, black mask tape and the black portion of the contrast removable tape, shall be non-reflective.

9-34.5(2) Temporary Pavement Marking Tape – Long Duration

Temporary pavement marking tape for long duration shall conform to ASTM D4592 Type I. Temporary pavement marking tape for long duration, except for black tape, shall have a minimum initial coefficient of retroreflective luminance of 200 $mcd*m^{-2}*lx^{-1}$ when measured in accordance with ASTM E 2832 or ASTM E 2177. Black tape, black mask tape and the black portion of the contrast removable tape, shall be non-reflective.

9-34.6 Temporary Raised Pavement Markers

This section's title is revised to read:

Temporary Flexible Raised Pavement Markers

The second paragraph is deleted.

9-35.AP9

Section 9-35, Temporary Traffic Control Materials
August 4, 2014

9-35.0 General Requirements
The following item is deleted from the list of temporary traffic control materials:

Barrier Drums

The last sentence of the second paragraph is revised to read:

Certification for crashworthiness according to NCHRP 350 or the Manual for Assessing Safety Hardware (MASH) will be required as described in Section 1-10.2(3).

9-35.2 Construction Signs
The first sentence is revised to read:

Construction signs shall conform to the requirements of the MUTCD and shall meet the requirements of NCHRP Report 350 for Category 2 devices or MASH.

9-35.7 Traffic Safety Drums
The third paragraph is revised to read:

Drums and light units shall meet the crashworthiness requirements of NCHRP 350 or MASH as described in Section 1-10.2(3).

9-35.8 Barrier Drums
This section including title is deleted in its entirety and replaced with the following:

9-35.8 Vacant

9-35.12 Transportable Attenuator
In the first paragraph, the fourth sentence is revised to read:

The Contractor shall provide certification that the transportable attenuator complies with NCHRP 350 Test level 3 or MASH Test Level 3 requirements.

9-35.13 Tall Channelizing Devices
In the sixth paragraph, the last sentence is revised to read:

The method of attachment must ensure that the light does not separate from the device upon impact and light units shall meet the crashworthiness requirements of NCHRP 350 or MASH as described in Section 1-10.2(3).

SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS

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INTRODUCTION TO THE SPECIAL PROVISIONS

(July 31, 2007 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction,* 2014 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 the Amendments to the Standard Specifications and 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 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 date of the GSP and its source, as follows:

(May 18, 2007 APWA GSP)
(August 7, 2006 WSDOT GSP)
(April 2, 2007 R&E GSP)
(NWR February 5, 2007)

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
- *City of Ferndale Development Standards*

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

1

DIVISION 1
GENERAL REQUIREMENTS

DESCRIPTION OF WORK
(March 13, 1995 WSDOT GSP)

This contract provides for replacing aging concrete culverts under Brown Road with a box culvert. Work will include installation of a box culvert; precast retaining walls; removal of existing pavement; grading; placing streambed gravel, gravel base, and crushed surfacing; hot mix asphalt paving; and other work in accordance with the Contract Plans, Special Provisions, the Standard Specifications, including the amendments thereto, and Standard Plans.

1-01.3 Definitions
(March 8, 2013 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, Amendments, or WSDOT General Special Provisions, to the terms "State", "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 "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 final payment form established by the Contracting Agency.

The venue of all causes of action arising from the advertisement, award, execution, and performance of the contract shall be in the Superior Court of the County where the Contracting Agency's headquarters are located.

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")	5	Furnished automatically upon award.
Contract Provisions	5	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	3	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.

1-02.4(1) General

(March 17, 2010 R&E GSP)

Section 1-02.4(1) is supplemented with the following:

If the Bidder finds any discrepancy in, or omission from the specifications or plans, or if there is any doubt as to their meaning, the Bidder shall promptly notify Reichhardt & Ebe Engineering, Inc. (360) 354-3687. Any addenda issued during the time of bidding will be numbered consecutively and will be incorporated into these contract documents. The Bidder shall be responsible to ascertain, prior to submittal of a bid proposal that all addenda issued have been received, and are acknowledged on the "Bid Proposal Signature and Addendum Acknowledgment" form. Addendums will only be issued to those contractors appearing on the Plan Holders List at Reichhardt & Ebe Engineering, 423 Front Street, Lynden WA. It will be the responsibility of the contractor to ensure their name appears on the Plan Holders List.

Any interpretation or correction of the bid documents will be made only by addendum, and a copy of such addendum will be mailed or delivered to each person whose name appears on the Plan Holders List. The Contracting Agency will not be responsible for any other explanations or interpretations of the bid documents. No oral interpretations by the Contracting Agency of any provision in the bid documents will be considered binding.

Pre-Bid Conference

Due to the nature of the project, the Contracting Agency will hold one pre-bid conference for all proposal holders for this project. Subcontractors or other plan holders are encouraged to attend.

Those prospective bidders wanting to take part in the Pre-Bid Conference shall meet at the Ferndale City Hall, 2095 Main Street, Ferndale, Washington 98248. The meeting will start on **May 7, 2015, at 2 PM**. A jobsite visit may follow upon request. Attendance at this Pre-Bid Conference is not mandatory.

1-02.4(2) Subsurface Information

(March 8, 2013 APWA GSP)

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

> The Summary of Geotechnical Conditions and the boring logs, if and when included as an appendix to the Special Provisions, shall be considered as part of the Contract.

1-02.5 Proposal Forms

(June 27, 2011 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 D/M/WBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.
>
> The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if 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

(June 27, 2011 APWA GSP)

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.
5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last paragraph, and replace it with the following:

> 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 copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any D/W/MBE requirements are to be satisfied through such an agreement.

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.

(February 1, 2008, R&E GSP)

Section 1-02.7 is supplemented with the following:

All bid bonds shall be made payable to the City of Ferndale.

1-02.9 Delivery of Proposal

(August 15, 2012 APWA GSP, Option A)

Delete this section and replace it with the following:

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.

If the project has FHWA funding and requires DBE Written Confirmation Documents or Good Faith Effort Documentation, then to be considered responsive, the Bidder shall submit with their Bid Proposal, written Confirmation Documentation from each DBE firm listed on

the Bidder's completed DBE Utilization Certification, form 272-056A EF, as required by Section 1-02.6.

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.

1-02.12 Public Opening of Proposals

(May 4, 2012 APWA GSP)

Delete this section and replace it with the following:

Proposals will be opened and publicly read at the time indicated in the Call for Bids, after the deadline(s) for submitting all elements of the Bid Proposal including DBE Written Confirmation Documents and/or Good Faith Effort Documentation, unless the Bid opening has been delayed or canceled. Bidders, their authorized agents, and other interested parties are invited to be present.

1-02.13 Irregular Proposals

(March 13, 2012 APWA GSP)

Revise item 1 to read:

1. A proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The authorized proposal form furnished by the Contracting Agency is not used or is altered;
   c. The completed proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
   d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
   e. A price per unit cannot be determined from the Bid Proposal;
   f. The Proposal form is not properly executed;
   g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
   h. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
   i. The Bidder fails to submit written confirmation from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidders 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;
   j 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 was made;
   k. The Bid Proposal does not constitute a definite and unqualified offer to meet the

material terms of the Bid invitation; or

l. More than one proposal is submitted for the same project from a Bidder under the same or different names.

(December 29, 2008 R&E GSP)
Item 1a is supplemented with the following:

"Bidders do not have to be pre-qualified."

1-02.14 Disqualification of Bidders
(March 8, 2013 APWA GSP, Option B)

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; or does not meet the following Supplemental Criteria:

1. **Delinquent State Taxes**

A. Criterion: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.

B. Documentation: The Bidder shall not be listed on the Washington State Department of Revenue's "Delinquent Taxpayer List" website: http://dor.wa.gov/content/fileandpaytaxes/latefiling/dtlwest.aspx , or if they are so listed, they must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

2. **Federal Debarment**

A. Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.

B. Documentation: The Bidder shall not be listed as having an "active exclusion" on the U.S. government's "System for Award Management" database (www.sam.gov).

3. **Subcontractor Responsibility**

A. Criterion: The Bidder's standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder's subcontract form shall also include a requirement that each of its subcontractors shall have and

document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also "responsible" subcontractors as defined by RCW 39.06.020.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

4. **Prevailing Wages**

A. Criterion: The Bidder shall not have a record of prevailing wage violations as determined by WA Labor & Industries in the five years prior to the bid submittal date, that demonstrates a pattern of failing to pay workers prevailing wages, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of all prevailing wage violations in the five years prior to the bid submittal date, along with an explanation of each violation and how it was resolved. The Contracting Agency will evaluate these explanations and the resolution of each complaint to determine whether the violation demonstrate a pattern of failing to pay its workers prevailing wages as required.

5. **Claims Against Retainage and Bonds**

A. Criterion: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:

- Name of project
- The owner and contact information for the owner;
- A list of claims filed against the retainage and/or payment bond for any of the projects listed;
- A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

6. **Public Bidding Crime**

A. Criterion: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.

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

7. **Termination for Cause / Termination for Default**

A. Criterion: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

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

8. **Lawsuits**

A. Criterion: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency

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

As evidence that the Bidder meets the mandatory and supplemental responsibility criteria stated above, the apparent two lowest Bidders must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets all of the mandatory and supplemental criteria together with supporting documentation including but not limited to that detailed

above (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with all mandatory and supplemental responsibility criteria. The Contracting Agency reserves the right to request such documentation from other Bidders as well, and to request further documentation as needed to assess Bidder responsibility. The Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may (but is not required to) consider mitigating factors in determining whether the Bidder complies with the requirements of the supplemental criteria.

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

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

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

1-02.15 Pre Award Information

(August 14, 2013 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.

(December 29, 2008 R&E GSP)

Section 1-02.15 is supplemented with the following:

8. Evidence of financial resources and experience,
9. Organization and equipment the Bidder has available for the performance of the contract by the Bidder and each proposed subcontractor.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

(January 23, 2006 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.

1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this section to read:

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

Within 10 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

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

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

1-03.4 Contract Bond

(December 8, 2014 APWA GSP)

Revise the first paragraph to read:

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).

1-04 SCOPE OF THE WORK

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

(March 13, 2012 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. Amendments to the Standard Specifications,
6. Standard Specifications,
7. Contracting Agency's Standard Plans or Details (if any), and
8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.6 Variation in Estimated Quantities

(May 25, 2006 APWA GSP; may not be used on FHWA-funded projects)

Supplement this Section with the following:

The quantities for:

Sawcut ACP
Embankment Compaction
Structure Excavation Cl A Including Haul
Water
Gravel Base
Crushed Surfacing Top Course
HMA Class 1/2" PG 64-22
Seeded Lawn Installation
Check Dam
Silt Fence
Paint Line
Streambed Aggregate Mix

have been entered into the Proposal only to provide a common proposal for bidders. Actual quantities will be determined in the field as the work progresses, and will be paid at the original bid price, regardless of final quantity. These bid items shall not be subject to the

provisions of 1-04.6 of the Standard Specifications.

1-05 CONTROL OF WORK

1-05.4 Conformity with and Deviations from Plans and Stakes

(March 30, 2007 R&E GSP)

Section 1-05.4 is supplemented with the following:

Survey stakes will be provided by the Contracting Agency in accordance with this Section, as supplemented by the following:

1. Clearing stakes (no vertical control) will be placed at the approximate limits of clearing prior to the Contractor's clearing and grubbing operations.

2. Cut/fill stakes will be placed after completion of clearing and grubbing. The Contractor shall designate a qualified supervising grade checker for the project. This grade checker shall meet with the Engineer prior to the beginning of grading operations in order to develop a mutually agreeable staking and notation system for the project.

3. Offset stakes and grade hubs will be provided for enclosed drain lines, sanitary sewer mains, water mains, manhole structures and fire hydrants, according to the system agreed on by the grade checker Engineer.

4. The Engineer will not provide grade hubs within the traveled way on any section of road concurrent with the Contractor's hauling operations on that particular section of road.

5. Grade hubs will be provided only for the top of the ballast course. In order to eliminate unnecessary destruction of grade hubs, these hubs will not be placed within the traveled way until grading has been completed to plus or minus 0.05 feet, based on cut stake information, and until the roadway where the hubs are to be placed has been compacted to the satisfaction of the Engineer.

6. Staking for curb and gutter will be set on intervals of 25 feet. Curb and gutter grades must conform to within plus or minus 0.02 feet of elevations shown on the Project Plans. Deviation from this specification will be cause for rejection of non-conforming work. Asphalt finish graded must conform to within plus or minus 0.03 feet of elevations shown on the Project Plans.

7. Any additional survey stakes not specified herein or any replacement of survey stakes provided, will be accomplished by the Engineer at the Contractor's expense. The City of Ferndale may require payment from the Contractor for such additional or redundant surveying in an amount not to exceed the labor and equipment costs directly assignable to the additional work. Such costs may be deducted from payments due the Contractor in accordance with the provisions of Section 1-05.4.

8. Any claim by the Contractor for extra compensation by reason of alterations or

reconstruction work allegedly due to error in the Engineer's line and grade will not be considered unless the original control points set by the Engineer still exist.

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

1-05.14 Cooperation with Other Contractors

(March 13, 1995 WSDOT GSP)

Section 1-05.14 is supplemented with the following:

Other Contracts or Other Work

It is anticipated that the following work adjacent to or within the limits of this project will be performed by others during the course of this project and will require coordination of the work:

BNSF Grade Crossing Construction Project. Construction work for improvement to the existing railroad crossing located east of the Brown Road Culvert Replacement Project.
Project Limits: Beginning of Project to the End of Project

It is anticipated that the BNSF contractor will be working within the project limits during the construction of the Brown Road Culvert Replacement Project. The BNSF contractor's work will generally consist of, but not be limited to, adding a new track, upgrading the existing electrical system, excavation, backfilling, grading, hauling equipment and material in and out of the project site, and other facilities construction. **Access from east of this project may be intermittently interrupted when BNSF closes the railroad crossing as part of their work.**

Frontier Communications (Communications): Utility Construction
Project Limits: Beginning of Project to the End of Project
Relocating and adjusting their facilities to accommodate project improvement. Existing utilities may be impacted as a result of the Contractor's work.

Puget Sound Energy (Power): Utility Construction
Project Limits: Beginning of Project to the End of Project
Relocating and adjusting their facilities to accommodate project improvement. Existing utilities may be impacted as a result of the Contractor's work.

1-05.15 Method of Serving Notices

(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project 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 in paper format, hand delivered or sent via mail delivery service to the Project 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:

1-05.17 Oral Agreements

(October 1, 2005 AWPA GSP)

No oral agreement or conversation with any officer, agent, or employee of the Contracting Agency, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Contracting Agency, unless subsequently put in writing and signed by the Contracting Agency.

1-06 CONTROL OF MATERIALS

1-06.4 Handling and Storing Materials

(February 1, 2008 R&E GSP)

Section 1-06.4 is supplemented with the following:

The Contractor shall make arrangements for storage of equipment and materials.

No staging area is provided by the Contracting Agency.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to Be Observed

(October 1, 2005 APWA GSP)

Supplement this section with the following:

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

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

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

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

(August 4, 2011 R&E GSP)

Confined Space

Confined spaces are known to exist at the following locations:

*** All existing storm drain facilities affected by the project and all proposed storm drain facilities***

The Contractor shall be fully responsible for the safety and health of all on-site workers and compliant with Washington Administrative Code (WAC 296-809).

The Contractor shall prepare and implement a confined space program for each of the confined spaces identified above. The Contractors Confined Space program shall be sent to the contracting agency at least **5** days prior to the Contractor beginning work in or adjacent to the confined space. No work shall be performed in or adjacent to the confined space until the plan is submitted to the Engineer as required. The Contractor shall communicate with the Project Engineer to ensure a coordinated effort for providing and maintaining a safe worksite for both the Contracting Agency's and Contractor's workers when working in or near a confined space.

All costs to prepare and implement the confined space program shall be included in the bid prices for the various items associated with the confined space work.

1-07.2 State Taxes

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

1-07.2 State Sales Tax

(June 27, 2011 APWA GSP)

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

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

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

1-07.2(1) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2) State Sales Tax — Rule 170

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

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

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

1-07.2(3) Services

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

1-07.6 Permits and Licenses

Section 1-07.6 is supplemented with the following:

(September 20, 2010)

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. All contacts with the permitting agency concerning the below-listed permit(s) shall be through the Engineer. 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. Copies of these permits are required to be onsite at all times.

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
Department of the Army Section 404 Nationwide 14	Corps of Engineers Seattle District	NWS-2014-1153
Hydraulic Project Approval	Department of Fish & Wildlife	2015-4-33+01

1-07.7 Load Limits

(March 13, 1995 WSDOT GSP)

Section 1-07.7 is supplemented with the following:

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.

1-07.13 Contractor's Responsibility for Work

1-07.13(4) Repair of Damage

(August 6, 2001 WSDOT GSP)

Section 1-07.13(4) is revised to read:

The Contractor shall promptly repair all damage to either temporary or permanent work as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2) or 1-07.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay or disruption of work.

1-07.15 Temporary Water Pollution/Erosion Control

(February 1, 2008 R&E GSP)

Section 1-07.15 is supplemented with the following:

Erosion Control shall include but not be limited to preventing storm water which has come in contact with disturbed or excavated areas from entering the storm drainage system. The contractor will not allow flow from existing ditches or ground water to come in contact with disturbed or excavated areas. The contractor shall be required to take any means necessary to prevent, control and stop water pollution or erosion within the project as shown on the Plans.

1-07.17 Utilities and Similar Facilities

(April 2, 2007 WSDOT GSP)

Section 1-07.17 is supplemented with the following:

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:

Puget Sound Energy, 1660 Park Lane, Burlington, WA 98233
Jane Major, (360)-766-5571

Frontier Communications, 595 Pease Road, Burlington, WA 98233
Barb Robinson, (360) 757-7624

Comcast Cable, 400 Sequoia Drive, Bellingham, WA 98226
Bill Inama (360) 527-8241
Thomas Hall (253) 439-8955

Cascade Natural Gas, 1910 Racine Street, Bellingham, WA 98229
Brandon Haugnes, (360)-733-5986

Black Rock Cable, Inc., 3229 Northshore Rd., Bellingham, WA 98226
Randy Wilson, (360) 734-7930

City of Ferndale Public Works, 2095 Main Street, Ferndale, WA 98248
Bo Westford, (360)-384-4006

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 24, 2011 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall obtain the insurance described in this section from insurers approved by the State Insurance Commissioner pursuant to RCW Title 48. The insurance must be provided by an insurer with a rating of A-: VII or higher in the A.M. Best's Key Rating Guide, which is licensed to do business in the state of Washington (or issued as a surplus line by a Washington Surplus lines broker). The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer (including financial condition), terms and coverage, the Certificate of Insurance, and/or endorsements.

B. The Contractor shall keep this insurance in force during the term of the contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated (see C. 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 Final Completion 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 insurance policies shall contain a "cross liability" provision.

E. The Contractor's and all subcontractors' insurance coverage shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or insurance pool coverage.

F. 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.

G. Upon request, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s).

H. The Contractor shall not begin work under the contract until the required insurance has been obtained and approved by the Contracting Agency.

I. 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.

J. 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.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Professional Liability and Workers Compensation, shall name the following listed entities as additional insured(s):

- 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, whether primary, excess, contingent or otherwise, 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(3) describes limits lower than those maintained by the Contractor.

1-07.18(3) Subcontractors

Contractor shall ensure that each subcontractor of every tier obtains and maintains at a minimum the insurance coverages listed in 1-07.18(5)A and 1-07.18(5)B. Upon request of the Contracting Agency, the Contractor shall provide evidence of such insurance.

1-07.18(4) Evidence of Insurance

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. The certificate and endorsements must conform to the following requirements:

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. A statement of additional insured status on an ACORD Certificate of Insurance shall <u>not</u> satisfy this requirement.
3. Any other amendatory endorsements to show the coverage required herein.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve the Contractor from liability in excess of such limits. 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 shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

A policy of Commercial General Liability Insurance, including:

Per project aggregate
Premises/Operations Liability
Products/ Completed Operations – for a period of one year following final acceptance of the work.
Personal/Advertising Injury
Contractual Liability
Independent Contractors Liability
Stop Gap / Employers' Liability
Explosion, Collapse, or Underground Property Damage (XCU)
Blasting (only required when the Contractor's work under this Contract includes exposures to which this specified coverage responds)

Such policy must provide the following minimum limits:

$1,000,000	Each Occurrence
$2,000,000	General Aggregate
$1,000,000	Products & Completed Operations Aggregate
$1,000,000	Personal & Advertising Injury, each offence

Stop Gap / Employers' Liability

$1,000,000	Each Accident
$1,000,000	Disease - Policy Limit
$1,000,000	Disease - Each Employee

1-07.18(5)B Automobile Liability

Automobile Liability for owned, non-owned, hired, and leased vehicles, with an MCS 90 endorsement and a CA 9948 endorsement attached if "pollutants" are to be transported. Such policy (ies) must provide the following minimum limit:

$1,000,000	combined single limit

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.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction under Traffic

(January 2, 2012 WSDOT GSP)

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

Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's

operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.
Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.
Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance From Traveled Way (Feet)
35 mph or less	10 *
40 mph	15
45 to 55 mph	20
60 mph or greater	30

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

(August 7, 2006 WSDOT GSP)
Lane closures are subject to the following restrictions:

*** Unless noted on the Detour Plans, a one lane closure will be allowed during working hours.***

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

No lane closures will be allowed on a holiday or holiday weekend, or after 12:00 PM (noon) on a day prior to a holiday or holiday weekend. Holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend.

(December 8, 2008 R&E GSP)

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

Construction vehicles using a closed traffic lane shall travel only in the normal direction of traffic flow unless expressly allowed in an approved traffic control plan. Construction vehicles shall be equipped with flashing or rotating amber lights.

Work over an open lane of traffic will not be allowed, unless a plan for the protection of the traveling public from objects falling onto the traveled way is approved by the Engineer. This protection shall remain in place during construction and meet minimum vertical clearance for the highway.

Controlled Access

No special access or egress will be allowed the Contractor other than normal legal movements or as shown in the plans.

Pedestrian Access

The Contractor shall keep all pedestrian routes and access point (including sidewalks and crosswalks when located within the project limits) open and clear at all times unless permitted otherwise by the Engineer in an approved traffic control plan.

Signs and Traffic Control Devices

All signs and traffic control devices for the permitted closures shall only be installed during the hours specified on the plans. Construction signs, if placed earlier than the specified hours of closure, shall be turned or covered so as not to be visible to motorists.

Hours of Darkness

The Contractor shall, at no additional cost to the Contracting Agency, make all arrangements for operations during hours of darkness. A portable illumination system, which will adequately illuminate the entire work area shall be provided. Flagger stations and advance warning signs shall be illuminated with a minimum **150-watt** floodlight and to the satisfaction of the Engineer. Flares are for emergency use and are not considered a proper method of illumination.

Hour Adjustment

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closures hours.

Advance Notification

The Contractor shall be responsible for notifying private property owners, or tenants, five (5) working days in advance of scheduled interruptions of access to private roads or driveways. The Contractor shall notify the Engineer three (3) working days in advance of scheduled interruptions of access to private road or driveways. The Contractor shall only interrupt access to one half of any private road or driveway. The Contractor shall notify private

property owners, or tenants, by having a representative of the Contractor personally contact the private property owner or tenant. If the property owner or tenant is not available, the Contractor shall leave a door hanger notice indicating the commencement date of work, duration of work, the type of work being done, and the Contractor's and Engineer's phone number and address for questions and concerns. The Engineer shall be provided adequate time to review, comment, and approve the door hanger notice prior to the Contractor placing any notices. Access shall be restored as soon as possible, but not later than the end of each working day. Any exception will only be allowed with the approval of the private property owner, or tenant, and the Engineer. All costs involved with public notification shall be incidental to the various bid items.

The Contractor shall notify the Engineer in writing 5 working days in advance of any lane closure, sidewalk closure, or both.

Public Notification

The Contractor shall notify the local fire, police, emergency service, and city engineering departments; transit companies; and the affected school district(s) in writing a minimum of 5 working days prior to each closure. The Contractor shall furnish copies of these notifications to the Engineer.

1-07.24 Rights of Way

(October 1, 2005 APWA GSP)

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

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

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

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

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

Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

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

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

1-07.26 Personal Liability of Public Officers

(February 1, 2008 R&E GSP)

Section 1-07.26 is revised to read:

Neither the Mayor, the Ferndale City Council, employees of the City, or the Engineer shall be personally liable for any acts or failure to act in connection with the Contract, it being understood that in such matters, they are acting solely as agents of the City of Ferndale.

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

(October 10, 2008 APWA GSP)

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

1. To review the initial progress schedule;

2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. 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 **$$noon on the working day$$** 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

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 that a written agreement between the Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has been executed.

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 (Form 421-012), and
2. Contractor and Subcontractor or Lower Tier Subcontractor Certification.

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.

1-08.3(2)A Type A Progress Schedule

(March 13, 2012 APWA GSP)

Revise this section to read:

The Contractor shall submit **$$3$$** copies of a Type A Progress Schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

1-08.4 Prosecution of Work

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

1-08.4 Notice to Proceed and Prosecution of Work

(June 27, 2011 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.

(August 7, 2006)
The Contractor shall begin work no earlier than ******June 1, 2015 ***,** unless otherwise approved in writing by the Contracting Agency.

(February 1, 2008 R&E GSP)
Section 1-08.4 is supplemented with the following:

Project Meetings
The Engineer shall be responsible for preparation of agenda, preparation of minutes and distribution of documentation. One set of the documentation will be sent to each participant. All meetings will be held at on-site, unless otherwise agreed upon.

Progress Meetings
Regular Progress Meetings shall be schedule by the Engineer. Progress Meetings shall be held weekly or as otherwise schedule by the Engineer.

The Progress Meeting agenda shall include, but not be limited to:

1. Review minutes of previous meeting, amend minutes if necessary, and accept minutes.
2. Review unresolved questions and issues from previous Progress Meetings and further consider those questions and issues.

3. Review new questions and issues regarding delays, coordination with other agencies, changed conditions or work scope, interferences, utilities, and requests for information (RFI's).
4. Review corrective measures to regain projected schedule
5. Review status of submittals, RFI's, change issues, as-built documentation, and other correspondence.
6. Review effects of proposed changes on progress schedule and coordination
7. Contractor to present updated look-ahead / as-built schedule describing activities to occur in the upcoming three weeks, and to document the as-built schedule for work accomplished since the prior meeting. Contractor to present the updated schedule at each regular weekly progress meeting.

Coordination Meetings
Coordination Meetings will commence after the NTP has been issued. The purpose of the Coordination Meetings is to coordinate the Contractor's Work with the work being done concurrently at the Site by others. Coordination meetings will be scheduled in conjunction with progress meetings when appropriate.

Additional Meetings
Additional meetings will be scheduled as necessary for the completion of various portions of the Work. Meetings will include pre-installation, pre-testing or other purpose as required by the specifications, conditions on the jobsite, or as requested by the Engineer or the project team.

All costs involved with the various meetings shall be incidental to the various bid items.

1-08.5 Time for Completion

(March 13, 1995 WSDOT GSP)

Section 1-08.5 is supplemented with the following:

This project shall be physically completed within **30** working days.

(March 8, 2013 APWA GSP, Option A)
Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day. The first working day shall be as noted on the Notice to Proceed.

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 any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of

any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, 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. Quarterly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
   d. Final Contract Voucher Certification
   e. Property owner releases per Section 1-07.24

1-08.7 Maintenance during Suspension

(October 1, 2005 APWA GSP)

Revise the second paragraph to read:

At no expense to the Contracting Agency, the Contractor shall provide through the construction area a safe, smooth, and unobstructed roadway, sidewalk, and path for public use during suspension (as required in Section 1-07.23 or the Special Provisions). This may include a temporary road or detour.

1-09 MEASUREMENT AND PAYMENT

1-09.2 Weighing Equipment

1-09.2(1) General Requirements for Weighing Equipment

(February 1, 2008 R&E GSP)

Section 1-09.2(1) is supplemented with the following:

Truck certified weight tickets must be machine-printed with gross, tare and net weights. Additional information required on each weight ticket: Truck Number, Driver's Name, Date,

Load Time and Date, Load Site, Unload Time and Date, Unload Site. No handwritten weight tickets will be accepted.

At the Engineer's request, the Contractor shall provide the Engineer with a list of hauling vehicles and the licensed legal or permitted gross weight for each vehicle.

1-09.6 Force Account

(October 10, 2008 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 Engineer.

(February 1, 2008 R&E GSP)

Section 1-09.6 is supplemented with the following:

No claim for force account shall be allowed except upon written order by the Engineer prior to the performance of the work. The Contractor shall submit the required force account documentation to the Engineer on a daily basis unless agreed otherwise. The Contractor and the Engineer shall review all work or material to be paid for under force account on a daily basis unless agreed otherwise. The Contractor may propose corrections to the force account quantities and shall supply supporting documentation to the Engineer within 2 working days, unless agreed otherwise, of having reviewed the force account quantities with the Engineer.

1-09.9 Payments

(March 13, 2012 APWA GSP)

Supplement this section with the following:

Lump sum item breakdowns are not required when the bid price for the lump sum item is less than $20,000.

(March 13, 2012 APWA GSP)

Delete the first four paragraphs and replace them with the following:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum

breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

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 payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

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

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

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

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

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

1-09.13 Claims Resolution

1-09.13(3)A Administration of Arbitration

(October 1, 2005 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 are located. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the contract as a basis for decisions.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.1 General

(March 17, 2010 R&E GSP)

Section 1-10.1 is supplemented with the following:

During grading operations, the elevation difference between the portion of the traveled way open to traffic and the adjoining portion of roadway shall be tapered at 10:1 or greater to allow cross traffic.

In addition, for any modifications to the access provisions, the Contractor shall furnish satisfactory documentation that the affected property owners concur with the proposed change. The Contractor shall be responsible to coordinate with and make the necessary arrangements to accommodate the access requirements of the affected property owners and the public services.

If a modification to traffic control is deemed necessary by the Engineer, the contractor shall immediately implement any requested modification(s). The need for flashing warning lights shall be as determined by the Engineer. The cost of modifications to the tragic control plans as directed by the Engineer shall be considered incidental to the Contract.

The Contractor shall determine and place signs in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and the Plans. A traffic control plan shall be submitted to the Engineer for review and approval prior to the beginning of construction.

1-10.2 Traffic Control Management

(February 4, 2008 R&E GSP)

Section 1-10.2 is supplemented with the following:

Before beginning work on the project, the Contractor shall designate a Traffic Control Supervisor. The Contractor shall provide the Engineer with a list of names and phone numbers of not more than six supervisory employees that may be called for traffic control, as needed, during working or non-working hours. The Contractor shall have at least one of these employees available at any time.

If the Contractor's employees are not available in a timely manner to take care of emergency traffic control work, Contracting Agency forces will perform this work on behalf of the Contractor. If Contracting Agency forces provide emergency traffic control, the costs to the Contracting Agency will be deducted from progress payments due the Contractor in accordance with Section 1-10.1 of the Standard Specifications.

1-10.2(1) General

(December 1, 2008 WSDOT GSP)

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

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. 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

Evergreen Safety Council
401 Pontius Ave. N.
Seattle, WA 98109
1-800-521-0778 or
(206) 382-4090

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

1-10.2(2) Traffic Control Plans
(February 4, 2008 R&E GSP)

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

The Series K WSDOT Standard Plans are included in the contract documents as an appendix. These standard plans and the Traffic Control Plans included in the Contract Documents shall be considered as the project TCP's. The contractor may choose to submit alternate TCP's for approval as outlined in this section.

Any modifications to existing plans or new traffic plans shall be submitted to the Engineer for review and approval a minimum of five (5) working days prior to institution of the plan.

1-10.3 Traffic Control Labor, Procedures and Devices

1-10.3(3) Traffic Control Devices
(February 4, 2008 R&E GSP)

Section 1-10.3 is supplemented with the following:

As may be indicated in the Signing Plan or Traffic Control Plan, the Contractor may be required to install signs, warning lights, or both, on barricades.

1-10.4 Measurement
(August 2, 2004 WSDOT GSP)

Lump Sum Bid for Project (No Unit Items)

Section 1-10.4(1) is supplemented with the following:

The proposal contains the item "Project Temporary Traffic Control," lump sum. The provisions of Section 1-10.4(1) shall apply.

DIVISION 2
EARTHWORK

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description
(February 4, 2008 R&E GSP)

Section 2-01.1 is supplemented with the following:

This item also includes any clearing and grubbing necessary for the construction of driveways and the reconstruction of intersecting roads shown on the plans.

Clearing and Grubbing work includes removal and disposal of topsoil to a depth of 6-inches and trees as shown on the plans. In addition to natural materials, clearing and grubbing shall also include removing and disposing of all refuse and any remaining structures, obstructions, trees and/or tree stumps within the right-of-way excluding contiguous pavement or structures identified under "Removal of Structures and Obstructions", as directed by the Engineer.

2-01.2 Disposal of Useable Material and Debris
(February 4, 2008 R&E GSP)

Section 2-01.2 is supplemented with the following:

Unless otherwise provided in the specifications, all material removed under this item shall become the property of the Contractor.

2-01.2(1) Disposal Method No. 1 - Open Burning
(February 4, 2008 R&E GSP)

Section 2-01.2(1) is supplemented with the following:

Disposal method No. 1 shall not be permitted within the project limits.

2-01.2(3) Disposal Method No. 3 - Chipping
(March 17, 2010 R&E GSP)
Section 2-01.2(3) is supplemented with the following:

Revise the fourth sentence to read:

"All chips shall become the property of the Contractor and shall be removed".

2-01.3 Construction Requirements

2-01.3(1) Clearing

(February 4, 2008 R&E GSP)

Section 2-01.3(1) is supplemented with the following:

8. The Contractor shall clear all areas staked and flagged by the Engineer prior to the placement of cut/fill stakes, offset stakes or grade hubs.
9. Tree trimming shall be sequenced so that overhanging limbs are removed prior to commencing construction activities. Construction activities include equipment staging, materials storage, and worker-vehicle parking.
10. When tree roots are encountered during construction activities, the Contractor shall carefully expose all roots greater than1 inch diameter, either by hand or gently with the machine bucket, and then cut cleanly with lopper or saw. Pulling and wrenching of the roots shall not be allowed.

2-01.3(2) Grubbing

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

f. Stumps shall be removed except where doing so would damage water, sewer lines or other utilities. Voids left by stump removal shall be backfilled with a granular material and compacted in accordance with Section 2-03.3(14)C. Unless otherwise noted, all materials removed shall become the property of the Contractor and shall be disposed of outside the project limits.
g. If equipment outriggers are placed between the proposed sidewalk and the trees, the Contractor shall place plywood or large wood chips to spread out the weight of the outriggers.

2-01.5 Payment

(February 4, 2008 R&E GSP)

Section 2-01.5 is supplemented with the following:

"Clearing and Grubbing," lump sum. No additional payment shall be made for haul. Any other clearing and grubbing not specifically identified as being paid for elsewhere will be considered incidental to this bid item and no other payment shall be made.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description

(September 15, 2008 R&E GSP)

Section 2-02.1 is supplemented with the following:

Also included will be existing asphalt concrete pavement, chip seal, cement concrete curbs, gutter, sidewalk, driveways, retaining walls, culverts, ecology blocks, guardrail and posts, plugging drainage pipes, landscaping structures, fire hydrants, fences, and other structures necessary to complete the work indicated on the plans or as directed by the Engineer. Equipment, labor, and materials necessary to perform the work as specified shall be considered a portion of this work. All material shall be hauled offsite to a permitted, Contractor provided disposal site in accordance with Section 2-03.3(7)C. No payment will be made for haul.

2-02.3 Construction Requirements
(February 4, 2008 R&E GSP)

Section 2-02.3 is supplemented with the following:

Utility Removal
Cavities left by removal of features by other parties, i.e., utility poles or other obstructions, shall be backfilled and compacted by the Contractor in accordance with Section 2-03.3(14)C.

Use of Explosives
Explosives shall not be used in the demolition.

2-02.3(2) Removal of Bridges, Box Culverts, and other Drainage Structures
(August 4, 2009 R&E GSP)
Section 2-02.3(2) is supplemented with the following:

Removal of Structures
Where shown in the Plans, or at other locations as determined by the Engineer, the Contractor shall remove structures regardless of the size or type. Each structure shall be removed in its entirety.

Voids left by structure removal shall be backfilled and compacted in accordance with Section 2-03.3(14)C.

All materials removed shall become the property of the Contractor and shall be disposed of outside the project limits.

2-02.3(3) Removal of Pavement, Sidewalks, Curbs and Gutters
(March 9, 2008 R&E GSP)
Section 2-02.3(3) is supplemented with the following:

Delete Item 1. No on-site burial of pavement, sidewalks, curbs and gutters, is allowed.

Item 3 is supplemented with the following: "At locations where the existing concrete is to remain, the horizontal sawcut line shall not vary more than 1/8 inch along the edge of a 10-foot straightedge placed on the surface parallel to the horizontal sawcut line."

Removal of Asphalt Concrete Pavement and Portland Cement Concrete Pavement
The approximate thicknesses of the pavement are:

Refer to the "Geotechnical Engineering Reports" contained in the appendix.

Removal of Cement Concrete Curb, Gutter and Sidewalk
The Contractor shall use a sawcut to delineate the curb, gutter and sidewalk to be removed from curb, gutter and sidewalk to remain. The Contractor shall take care to avoid damaging adjacent curb, gutter and sidewalk to remain. Any damage caused to the curb, gutter and sidewalk to remain, as a result of the Contractor's operations, shall be repaired to the satisfaction of the Engineer at no additional cost to the Contracting Agency.

2-02.4 Measurement

(February 4, 2008 R&E GSP)

Section 2-02.4 is supplemented with the following:

Saw-cut ACP will be measured by the linear foot-inch along the line and slope of the cut prior to sawcutting and as staked by the Engineer.

2-02.5 Payment

(February 4, 2008 R&E GSP)

Section 2-02.5 is supplemented with the following:

The lump sum contract price for "Removal of Structures and Obstructions" shall be full compensation for all tools, equipment, materials, and labor to excavate and dispose of the above materials, including Haul and disposal fees. Removal of any structures and obstructions readily apparent by visual inspection from the ground surface and not identified elsewhere will be considered incidental to this bid item.

The unit contract price per linear foot-inch for "Saw-cut ACP" as indicated on the Bid Proposal shall be full compensation for all labor, including hand removal if required, material, tools and equipment required to complete the Bid Items in accordance with Section 1-04.1.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.1 Description

Section 2-03.1 is supplemented with the following:

The work described in this section, regardless of the nature or type of the materials encountered includes excavating and grading the roadway and areas for curb, gutter and sidewalk, driveways, excavating in borrow pits, excavating below grade, excavating channels, removing slide materials and disposing of all excavated material. This work also includes stockpiling, placing and compacting Engineer approved materials generated during

roadway excavation at locations shown on the Plans or as directed by the Engineer. Any excavation or embankment required to maintain positive drainage to or from drainage ditches or swales will be considered incidental to this bid item. This item also includes any excavation required to construct new driveway grades.

Excess material shall become the property of the contractor for disposal. This work may include temporary stockpiling of material as dictated by the contractors operations. No specific stockpile sites are provided within the project limits, however on-site stockpiling may be permitted as approved by the Engineer. The costs for stockpiling shall be included in the bid items in this section.

2-03.3(7)C Contractor-Provided Disposal Site

Section 2-03.3(7)C is supplemented with the following:

Before completing any filling outside of the project limits, the Contractor, or property owner desiring to receive the fill, shall acquire all permits and approvals required for the use of the disposal site.

2-03.3(10) Selected Material

Section 2-03.3(10) is supplemented with the following:

As indicated in the contract, existing suitable excavation materials, shall be used as embankment, unless otherwise directed by the Engineer.

2-03.3(14) Embankment Construction

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

This item consists of compacting embankments constructed in accordance with Section 2-03.3(14) using excavated material. The Engineer shall approve all embankment material and compaction equipment prior to their use by the Contractor. Roadway Excavation material shall not be placed above subgrade anywhere within the roadway section unless approved by the Engineer.

2-03.3(14)C Compacting Earth Embankments

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

Only Method B is allowed.

2-03.3 (14)E Unsuitable Foundation Excavation

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

Prior to any backfilling, the Contractor shall proof roll the subgrade with a loaded dump truck, large self-propelled vibrating roller, or equivalent piece of equipment, to verify stability of the subgrade. The associated cost to proof roll the roadway will be considered incidental to the unit contract prices of this Contract.

2-03.4 Measurement

Section 2-03.4 is supplemented with the following

Unsuitable Foundation Excavation Including Haul shall be measured beginning 2 feet below the roadway excavation lower limits to the depth of excavation as directed by the Engineer. There is no limit to the depth of excavation to be paid under this item.

Groundwater may be encountered within the project boundary. No payment will be made for dewatering or material replacement. When the Engineer requires excavated material to be removed, stockpiled, and moved again, the material will be measured to the neat line of that removed from the stockpile. No separate measurement or payment will be made for stockpiled materials.

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 with the volume of planing bituminous pavement and asphalt concrete pavement deducted. Control stakes will be set during construction to provide the Contractor with all essential information for the construction of excavation and embankments.

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

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

Copies of the ground cross-section notes will be available for the bidder's inspection, before the opening of bids, at the Engineer's office.

Upon award of the contract, copies of the original ground cross-sections will be furnished to the successful bidder on request to the Engineer.

Removal of Asphalt Concrete Pavement will not be measured under this bid item. Pavement removal shall be paid under the bid items “Removal of Structures and Obstructions”.

"Embankment Compaction" includes loading, hauling, stockpiling, placing, grading, and compacting suitable excavated material generated under any roadway excavation within the Project limits.

2-03.5 Payment

Section 2-03.5 is supplemented with the following:

The unit contract price per cubic yard for "Roadway Excavation Including Haul" shall be compensation for all labor, materials, tools and equipment necessary to excavate, shape, load,

stockpile for later embankment or otherwise dispose of surplus or unsuitable material off-site as specified herein. This item shall include the cost of compacting and proof rolling the subgrade.

"Embankment Compaction" includes loading, hauling, stockpiling, placing, grading, and compacting suitable excavated material generated under any roadway excavation within the Project limits.

2-04 HAUL

2-04.4 Measurement

(February 5, 2008 R&E GSP)

Section 2-04.4 is revised to read:

No specific unit of measurement shall apply. All costs involved for haul shall be incidental to and included in the various bid items.

2-04.5 Payment

(February 5, 2008 R&E GSP)

Section 2-04.5 is deleted in its entirety.

2-07 WATERING

2-07.4 Measurement

(September 15, 2008 R&E GSP)

Section 2-07.4 is supplemented with the following:

The Contractor shall provide water distribution records including truck tickets and operator time records if requested by the Engineer. The Contractor will not be allowed to use City water from fire hydrant without first renting a backflow preventer and meter from the City. Use of City water must be pre-approved by the Public Works Department. If Contracting Agency water is used, water meter records will be recorded and used as the basis for payment.

2-09 STRUCTURE EXCAVATION

2-09.3 Construction Requirements

Select excavated material, as approved by the Engineer, shall be used as backfill. If the Engineer determines that native material is not suitable for trench backfill, import gravel shall be used and payment shall be made per Section 4-02.5.

2-09.3(4) Construction Requirements, Structure Excavation, Class B

Section 2-09.3(4) is supplemented with the following:

All trenches shall be backfilled and completed by the end of the day. No payment shall be made for backfill of native materials. Gravel base shall be used for backfill unless the Engineer approves the use of native material.

The following new Section is created:

2-13 SELECTED GRADING

2-13.1 Description

This work includes final adjustments to the streambed to create a low flow channel and to the stream banks (including around stream structures) to account for the natural variability of the materials delivered to the site.

2-13.3 Construction Requirements

Before Selected Grading, the Contractor shall perform the excavation, and streambed gravel installation as required by Section 8-33. No Select Grading shall be performed before the Engineer has approved the stream grading and structure and gravel installation. The Contractor shall provide the Engineer and the Washington Department of Fish and Wildlife Area Habitat Biologist (AHB) 72-hours notice prior to the Selected Grading and schedule a day for the AHB and Engineer to be on site. Selected Grading shall be directed in the field by the Engineer.

2-13.5 Measurement

Work performed under the item "Selected Grading" shall be measured in accordance with Section 1-09.6 Force Account.

2-13.5 Payment

"Selected Grading", per Force Account.

The price per Force Account for "Selected Grading" shall be full pay for all material, labor, tools, equipment and incidentals required.

DIVISION 4
BASES

4-02 GRAVEL BASE

4-02.2 Materials
(February 5, 2008 R&E GSP)

Section 4-02.2 is replaced with:

Material shall meet the requirements of Section 9-03.10 Gravel Base as modified. Refer to revised Section 9-03.10 Aggregate for Gravel Base.

4-02.4 Measurement
(January 31, 2011 R&E GSP)

The first paragraph of Section 4-02.4 is revised to read:

"Gravel Base" shall be measured by the ton.

4-02.5 Payment
(February 5, 2008 R&E GSP)

Section 4-02.5, delete the second paragraph and replace with the following:

"Gravel Base" per ton.

Section 4-02.5 is supplemented with the following:

Proof rolling of material at the direction of the Engineer will be considered incidental to this bid item.

4-04 BALLAST AND CRUSHED SURFACING

4-04.4 Measurement
(February 5, 2008 R&E GSP)

Section 4-04.4 is revised as follows:

The second paragraph is revised to read:

"Crushed Surfacing Top Course", shall be measured by the ton.

4-04.5 Payment
(February 5, 2008 R&E GSP)

Section 4-04.5, 1st item is revised as follows:

"Crushed Surfacing Top Course", per ton.

DIVISION 5
SURFACE TREATMENTS AND PAVEMENTS

5-04 HOT MIX ASPHALT

5-04.3 Construction Requirements

(February 25, 2008 R&E GSP)
Section 5-04.3 is supplemented with the following:

All castings within paved areas shall be adjusted to finished grade after the final lift of paving as shown on the plans and paid per Section 7-05.5.

5-04.3(3)A Material Transfer Device / Vehicle

(January 16, 2014 APWA GSP)

The first paragraph of this section is revised to read:

Additionally, a material transfer device or vehicle (MTD/V) is not required at the following locations **$$Project Limits$$.**

5-04.3(5)A Preparation Of Existing Surfaces

(March 9, 2010 R&E GSP)

Section 5-04.3(5)A is supplemented with the following:

Tack coat shall be uniformly applied to cover the face of the gutter abutting the HMA with a thin film of residual asphalt free of streaks and bare spots.

The Contractor shall limit the amount of tack coat placed to that amount that will be fully covered by the asphalt overlay at the end of each work shift.

(NWR February 9, 2004)
The Contractor shall ensure that the asphalt for tack coat does not enter into State waters, including wetlands.

In accordance with Section 1-07.15(1) **Spill Prevention, Control and Countermeasures Plan** (SPCC), as part of the SPCC the Contractor shall address the mitigating measures to be taken in the event that the paving operation is suspended or terminated prior to the asphalt for tack coat being fully covered.

5-04.3(5)C Crack Sealing

(February 25, 2008 R&E GSP)

Section 5-04.3(5)C is supplemented with the following:

All joints shall be sealed with using Rubberized Asphalt meeting the requirement of section 9-04.10.

5-04.3(7)A2 Statistical or Nonstatistical Evaluation

Delete this section and replace it with the following:

5-04.3(7)A2 Nonstatistical Evaluation
(January 16, 2014 APWA GSP)

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Be submitted to the Project Engineer on WSDOT Form 350-042
- 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) and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with WSDOT Test Method T 718 or based on historic anti-strip and aggregate source compatibility from WSDOT lab testing. Anti-strip evaluation of HMA mix designs utilized that include RAP will be completed without the inclusion of the RAP.

At or prior to the preconstruction meeting, the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The proposed mix design indicated on a WSDOT mix design/anti-strip report that is within one year of the approval date
- The proposed HMA mix design submittal (Form 350-042) with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The proposed mix design by a qualified City or County laboratory mix design report that is within one year of the approval date.

The mix design will 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 Material Reference Laboratory (AMRL) program.

At the discretion of the Engineer, agencies may accept mix designs verified beyond the one year verification period with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

5-04.3(8)A1 General
(January 16, 2014 APWA GSP)

Delete this section and replace it with the following:

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

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

contract documents.

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 Project Engineer and must be made in accordance with Section 9-03.8(7).

Commercial evaluation may be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, 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. Commercial HMA can be accepted by a contractor certificate of compliance letter stating the material meets the HMA requirements defined in the contract.

5-04.3(8)A4 Definition of Sampling Lot and Sublot

(January 16, 2014 APWA GSP)

Section 5-04.3(8)A4 is supplemented with the following:

For HMA in a structural application, sampling and testing for total project quantities 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:

i. If test results are found to be within specification requirements, additional testing will be at the engineers discretion.

ii. If test results are found not to be within specification requirements, additional testing as needed to determine a CPF shall be performed.

5-04.3(8)A5 Test Results

(January 16, 2014 APWA GSP)

The first paragraph of this section is deleted.

5-04.3(8)A6 Test Methods

(January 16, 2014 APWA GSP)

Delete this section and replace it with the following:

Testing of HMA for compliance of Va will be at the option of the Contracting Agency. If tested, compliance of Va will be use WSDOT Standard Operating Procedure 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 WAQTC FOP for AASHTO T 27/T 11.

5-04.3(9) Spreading And Finishing

(February 25, 2008 R&E GSP)

Section 5-04.3(9) is supplemented with the following:

During grading operations, the elevation difference between the portion of the traveled way open to traffic and the adjoining portion of roadway shall be tapered at 10:1 or greater to allow cross traffic.

5-04.3(14) Planing Bituminous Pavement
(March 9, 2010 R&E GSP)

Section 5-04.3(14) is supplemented with the following:

Transverse Joints
Unless specifically directed by the Engineer, all connections to existing asphalt shall be by a vertical sawcut abutting the pavements together and heated prior to mat construction. All joints of new hot mix asphalt to an existing pavement shall be sealed with an appropriate asphalt joint sealer. The Contractor shall construct and maintain a temporary hot mix asphalt wedge in accordance with Section 5-04.3(12) across the entire width of the transverse edge when traffic is allowed prior to paving. The wedge shall be constructed before opening the lane to traffic. The Contractor shall remove the wedge immediately prior to paving.

Beveled Edge Planing
A beveled edge shall be constructed in areas with a planed depth of more than 0.20 foot that will not be paved during the same work shift.

The Contractor shall use a beveled cutter on the mandrel of the planing equipment, or other approved method(s), to eliminate the vertical edge(s). The beveled edge(s) shall be constructed at a 4:1 slope.

5-04.5(1)B Price Adjustments for Quality of HMA Compaction
(January 16, 2014 APWA GSP)

Delete this section and replace it with the following:

The maximum CPF of a compaction lot is 1.00.

For each compaction lot of HMA when the CPF is less than 1.00, a Nonconforming 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 the NCCF, the quantity of HMA in the lot in tons and the unit contract price per ton of the mix.

DIVISION 6
STRUCTURES

6-02 Concrete Structures

6-02.1 Description

Section 6-02.1 is supplemented with the following:

This Work consists of the construction of all Structures (and their parts) made of portland cement concrete with or without reinforcement, including Precast Reinforced Concrete Inverted Three Sided structures and Precast Retaining Wall structures.

6-02.3 Construction Requirements

6-02.3(28) Precast Concrete Panels
Supplement this section with the following:

Precast Concrete Inverted Three Sided Structures and Cantilevered Retaining Walls

Manufacturing Plant Quality control Program
The manufacturing plant of precast reinforced concrete inverted three sided structures and cantilevered retaining wall shall be certified by one of the organizations specified in section 6-02.3(28).

Design Criteria
The precast reinforced concrete inverted three sided structures and cantilevered retaining wall shall be designed in accordance with the WSDOT Geotechnical Design Manual (M46-03) and the current AASHTO LFRD Bridge Design specifications, including an HS-25 vehicular live load. Live load for the Extreme Event-I limit state shall be applied in accordance with WSDOT Bridge Design Manual LRFD (M23-50) section 3.5.

For precast reinforced concrete inverted three sided structures with span lengths greater than 20 feet, the AASHTO LRFD Bridge Design Specification Section 12.6.1 exemption from seismic loading shall not apply, and such inverted three sided structures shall be designed for seismic loads in accordance with other provisions of the current AASHTO LRFD Bride Design Specifications. FHWA publication no. FHWA-NHI-09-010 Technical Manual for Design and Construction of Road Tunnels Civil Elements, dated November 2008, may also be used as a design specification reference for the seismic design requirement.

Precast reinforced concrete inverted three sided structures and the cantilevered retaining wall shall be precast rigid frames with monolithic lower corners internally reinforced for moment and shear resistance, except as otherwise noted. Connecting separate and individually precast concrete panels together to form the specified three sided frame geometry is acceptable provided the following additional requirements is satisfied:

1. The structure system shall provide moment and shear resistance from the lateral load from backfill is placed full width and full height at one side only of the three sided structure.

6-02.3(28)A Shop Drawings

The third paragraph is supplemented with the following:

Precast Reinforced Concrete Inverted Three Sided Structure and Cantilevered Retaining Wall

For inverted three sided structures and cantilevered retaining wall, the Contractor shall submit design calculations and shop drawings to the Engineer for the approval.

The contractor shall affirm with the design calculations submitted and the shop drawings for the Engineer's approval that the inverted three sided structure and cantilevered retaining wall conforms to the specified design criteria. The design calculations shall include, but not be limited to, analysis of the following elements:

1. Flexure (substructure and superstructure)
2. Compression in the walls.
3. Shear (substructure and superstructure)
4. Factored bearing pressure versus factored soil bearing resistance for all appropriate limit states.
5. Deflection
6. Minimum and maximum reinforcement ratios
7. Distribution of flexural reinforcement
8. Live load distribution

For inverted three sided structure and cantilevered retaining wall, in addition to items 1 through 8 under shop drawing content requirements, the following shop drawing details shall be submitted:

1. Footing and slab base details.
2. Retaining wall details
3. Erection and backfill procedures
4. Complete, site specific, itemized bar list for all steel reinforcement

All design calculations and shop drawings for the precast reinforced inverted three sided structures and cantilevered retaining wall shall be stamped and signed by a professional engineer in accordance with section 6-01.9.

6-02.3(28) B Casting

Supplement this section with the following:

Precast Reinforced Concrete Inverted Three Sided Structure and Cantilevered Retaining Wall

Whenever the minimum finished backfill depth above the top of the structure is less than 1'-0", either all steel reinforcing bars in the span unit shall be epoxy coated or, the minimum concrete cover dimension from the face of concrete to the face of the top mat of steel

reinforcing bars shall be 2-1/2".

Whenever the minimum concrete cover dimension from the face of concrete to the face of the top mat of steel reinforcing bars is less than 1-1/2", the top mat of steel reinforcing bars in the span unit shall be epoxy coated in accordance with sections 6-02.3(24)H and 9-07.3

The contractor may strip forms from precast reinforced concrete inverted three sided structures and cantilevered retaining wall after the concrete reaches a minimum compressive strength of 3,000 psi, provided the precast reinforced concrete inverted three sided structure and cantilevered retaining wall remains in the casting bed in accordance with Section 6-02.3(28)G as supplemented in these Special Provisions. All damage from stripping is the contractor's responsibility.

6-02.3(28) E Finishing

Supplement this section with the following:

Precast Reinforced Concrete Inverted Three Sided Structure and Cantilevered Retaining Wall

The Contractor shall not move inverted three sided structure sections and cantilevered retaining wall from the casting bed into storage until the concrete reaches a minimum compressive strength of 70 percent of the final design strength specified in the shop drawing and design calculations submittal.

The contractor shall mark the following information, using waterproof paint, on the inside of a vertical leg of each section of the structure:

1. Design loads
2. Span and rise dimension
3. Job number
4. Fabrication date
5. Manufacture's name and trademark

6-02.3(28) G Handling and storage

Supplement this section with the following:

Precast Reinforced Concrete Inverted Three Sided Structure and Cantilevered Retaining Wall

The contractor shall not move inverted three sided structure sections and cantilevered retaining wall from the casting bed into storage until the concrete reaches a minimum compressive strength of 70% of the final design strength specified in the shop drawing and design calculation submittal.

The contractor shall pick, move, and store the inverted three sided structure sections and cantilevered retaining wall in the cast position until the concrete reaches a minimum compressive strength equal to the final design strength specified in the shop drawing and design calculation submittal.

6-02.3(28) H Shipping

Supplement this section with the following:

Precast Reinforced Concrete Inverted Three Sided Structure and Cantilevered Retaining Wall

Prior to shipping, the precast reinforced concrete inverted three sided structure and cantilevered retaining wall fabricator shall furnish the inspector a complete documentation package for each structure.

1. Concrete batch tickets.
2. Concrete cylinder break results.
3. Material certifications
4. Copies of all changes from the plans and specifications.

6-02.3(28) I Erection

Supplement this section with the following:

The contractor shall erect and backfill precast reinforced concrete inverted three sided structures and cantilevered retaining wall in accordance with the erection sequence specified in the shop drawings reviewed by the Engineer.

6-02.4 Measurement

Section 6-02.4 is supplemented with the following:

No specific unit of measurement will apply to the lump sum item of Inverted 3 Sided Box Culvert.

No specific unit of measurement will apply to the lump sum item of Precast Cantilevered Retaining Wall.

6-02.5 Payment

Section 6-02.5 is supplemented with the following:

“Inverted 3 Sided Box Culvert ”, lump sum.

For the purpose of payment, such culvert items as adhesive, concrete inserts, foam backing rod, grout, lifting loops, premolded joint filler, etc., for which there is no pay item included in the proposal, are considered as culvert minor items as shown and noted in the Plans and as outlined in these specifications shall be included in the lump sum contract price for "Inverted 3 Sided Box Culvert".

“Precast Cantilevered Retaining Wall”, lump sum.

For the purpose of payment, such culvert items as adhesive, concrete inserts, foam backing rod, grout, lifting loops, premolded joint filler, etc., for which there is no pay item included in the proposal, are considered as retaining wall minor items as shown and noted in the Plans and as outlined in these specifications shall be included in the lump sum contract price for "Precast Cantilevered Retaining Wall".

DIVISION 8
MISCELLANEOUS CONSTRUCTION

8-01 EROSION CONTROL AND WATER POLLUTION CONROL

8-01.4 Measurement

(March 18, 2010, 2008 R&E GSP)

Section 8-01.4 is supplemented with the following:

No specific unit of measure shall apply to the lump sum item "ESC Lead."

8-01.5 Payment

(March 18, 2010 R&E GSP)

Section 8-01.5 is supplemented with the following:

The first item, "ESC Lead", is revised to read:

"ESC Lead", lump sum.

The fifth item, "Check Dam" of section 8-01.5 is revised to read;

"Check Dam", per linear foot. The unit contract price per linear foot for check dam shall include all costs for removal and disposal of accumulated debris, check dam maintenance, and check dam removal and disposal.

The eleventh item, "Silt Fence" of Section 8-01.5 is revised to read:

"Silt Fence", per linear foot. The unit contract price per liner foot for silt fence shall include all costs for removal and disposal of accumulated debris, silt fence maintenance, and silt fence removal and disposal.

8-02 ROADSIDE RESTORATION

8-02.1 Description

Section 8-02.1 is supplemented with the following:

Furnish all labor, materials and equipment necessary for installation of planting and installation of topsoil and soil amendments, including but not limited to the preparation of the ground surface, installation of soil amendments, application of fertilizer, installation of seed, and chemicals as necessary in areas shown on the Plans, as specified in this document, or as directed by the Engineer in accordance with these specifications.

The extent and location of seeding work includes all areas in this project, except new plant beds and paved areas, which are disturbed by construction, grading, pavement removal, utility installation and any other of the Contractor's operations or as directed by the Engineer in accordance with these specifications.

The Contractor shall provide 48 hours notice to the Engineer when an inspection is desired.

8-02.3 Construction Requirements

8-02.3(4) Topsoil

(March 18, 2010 R&E GSP)

Section 8-02.3, revise the 1st sentence of this Section to read:

Topsoil shall be evenly spread over the specified areas to a depth of four (4) inches or as otherwise directed by the Engineer. The soil shall be cultivated to a depth of 6 inches. After the topsoil has been spread, all large clods, hard lumps, and rocks 3 inches in diameter and larger, and litter shall be raked up, removed, and disposed of by the Contractor. The area shall then be rolled with a landscape roller in at least 1 direction at a velocity not to exceed 2 feet per second. Spread topsoil after subgrade preparation is complete. Topsoil shall not be placed when the ground or topsoil is frozen, inundated with water, or in a condition detrimental to the Work.

8-02.3(4)A Topsoil Type A

(April 21, 2010 R&E GSP)

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

Topsoil Type A shall be used for seeded lawn installation.

8-02.3(11) Bark or Wood Chip Mulch

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

Wood Cellulose mulch shall be applied at a rate of 2,000 pounds per acre. To improve germination of seeds, this rate may be increased with approval by the Engineer.

8-02.3(16) Lawn Installation

(January 31, 2011 R&E GSP)

Section 8-02.3(16) is supplemented with the following:

The Contractor shall perform lawn installation in accordance with the following: Immediately prior to seeded lawn installation, a nominal four (4) inch depth of "Topsoil Type A" shall be placed in the areas requiring seeded lawn installation or as directed by the Engineer. Peat moss mulch shall be applied to a depth of 1/4 inch over newly seeded lawn area. The area shall then be rolled with a landscape roller in at least 1 direction at a velocity not to exceed 2 feet per second. Alternatively, a seed of fabric mulch mat shall be installed as approved by the Engineer.

"Seeded Lawn Installation" will be paid where construction, filling excavation, and grading have disturbed unimproved areas. This will generally consist of areas behind the sidewalk where no established lawns or landscaping currently exist. "Seeded Lawn Installation" shall be placed on all exposed soil disturbed by construction or any area directed by Engineer. "Seeded Lawn Installation" shall also be placed on all fill and cut areas outside roadway surface width, within the project limits.

The intent of seeding is to produce viable roadside vegetation toward the end of preventing erosion. If seeding has not germinated satisfactorily at the time of final acceptance, this work will be considered defective according to Section 1-05.7 of the Standard Specifications. The Engineer may require the Contractor to post security equal to 200% of the amount bid for seeding in order to secure performance of this germination specification. This security shall be in a form acceptable to the City and may be required prior to release of retainage of this project. Said security shall not be released until satisfactory germination has occurred. Any erosion, which in the opinion of the Engineer, occurs directly as a result of insufficient seed germination shall be repaired by the Contractor at no additional expense to the City. Any such repairs shall be completed prior to project acceptance or release of security as identified herein. Satisfactory germination is defined as a minimum of 300 stems per square foot. Any area in which two consecutive one square foot plots sampled fall below this standard will be considered defective and shall be corrected by the Contractor."

The dates for seeding outlined in Section 8-02.3(16)A of the Standard Specifications will be considered guidelines rather than requirements for this item. The Contractor shall use professional judgment and consider factors such as weather and soil moisture to obtain satisfactory germination."

Immediately after hydroseeding, the Contractor shall remove hydroseed overspray from all features other than the intended seeding area."

Binding Agents

Tacking agents and soil binders shall be provided in accordance with Section 8-01.3(2)E.

8-02.4 Measurement

(February 7, 2008 R&E GSP)

Section 8-02.4, is supplemented with the following:

No separate measurement will be made for topsoil, composted mulch, water and fertilizer, and binding agent, where applied for “Seeded Lawn Installation”.

(January 31, 2011 R&E GSP)

Section 8-02.4, is supplemented with the following:

Work performed under the item “Landscape Restoration” shall be measured in accordance with Section 1-09.6 Force Account.

8-02.5 Payment

(February 7, 2008 R&E GSP)

Section 8-02.5 is supplemented with the following:

The unit contract price per square yard for "Seeded Lawn Installation" shall be full compensation for all labor, materials (topsoil, fertilizer, mulch, soil amendments, binding agents, and water), tools and equipment necessary to perform the work as specified herein. All other items in this Section, not specified on the Bid Proposal form shall be included in

the cost of "Seeded Lawn Installation". The unit price shall be full compensation for multiple applications in areas required by the Engineer as the work progresses.

Payment for "Landscape Restoration" shall be on a force account basis as per Section 1-09. For the purpose of providing a common proposal for all bidders, and for that purpose only, the Contracting Agency has established the amount of force account for this item and has entered the amount in the bid proposal to become a part of the total bid by the Contractor.

8-22 PAVEMENT MARKING

8-22.1 Description

Section 8-22.1 is supplemented with the following:

Also included in this item is the complete removal of existing and temporary pavement markings that will conflict with the new channelization. This work shall be incidental to the various bid items of the Contract, and no additional compensation will be made.

8-22.3 Construction Requirements

(February 11, 2008 R&E GSP)

Section 8-22.3 is supplemented with the following:

Pavement markings shall be applied with appropriate templates to avoid non-uniform edges and unwanted drippings. Any such non-conforming pavement markings will be removed and replaced at the Contractors expense.

8-22.3(1) Preliminary Spotting

Section 8-22.3(1) is supplemented with the following:

The Contractor shall notify the Engineer three (3) working days in advance of scheduled preliminary spotting.

The following new Section is created:

8-30 POTHOLE EXISTING UNDERGROUND UTILITY

8-30.1 Description

When directed by the Engineer or shown on the Plans, this work shall consist of potholing existing underground utilities. The Contractor shall perform utility investigations or coordinate with utility companies as required. At the direction of the Engineer, the Contractor shall perform exploratory excavations or provide hand potholing as required to collect as-built utility information. The Contractor shall verify the depth and location of existing underground utilities. The Contractor shall immediately notify the Engineer if field conditions differ from that shown on the Plans. The Contractor shall give the owner advance notice of four (4) working days, prior to conducting such investigations.

8-30.4 Measurement

Measurement for potholing existing underground utilities will be by the unit for each pothole.

8-30.5 Payment

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

"Pothole Existing Underground Utility", per each.
The unit contract price per each for "Pothole Existing Underground Utility" shall be full compensation for all equipment, labor, and materials to locate the existing utility, verify the utilities' vertical and horizontal location, and restoring the disturbed area.

The following new Section is created:

8-31 REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES

8-31.1 Description

This work shall consist of the repair of existing public and private facilities, and the correction, repair, removal, or construction of items as directed by the Engineer. This shall not exempt the contractor from protecting known existing facilities, or from the responsibility for repair of such known existing facilities.

8-31.3 Construction Requirements

The contractor shall obtain written or verbal approval from the Engineer, prior to proceeding with any repair of existing or private facilities. Work performed without approval from the Engineer will not be compensated.

The Contractor and the Contracting Agencies' representative or Engineer shall reconcile the hours of work for labor and equipment on a daily basis for the purpose of tracking all work under this item. The Contractor shall supply the Engineer with material invoices for all materials incorporated into this work in a timely manner. Invoices shall be original or copies of original invoices from the material supplier.

8-31.4 Measurement

Work performed under the item "Repair Existing Public and Private Facilities" shall be measured in accordance with Section 1-09.6 Force Account.

8-31.5 Payment

Payment for the item "Repair Existing Public and Private Facilities" shall be full compensation for all labor, tools, equipment, materials and subcontractor work needed to complete individual items of work as directed by the engineer. This item shall be paid in

accordance with Section 1-09.6 Force Account.

The following new Section is created:

8-32 UNANTICIPATED SITE WORK

8-32.1 Description

Unanticipated site work shall be performed at locations designated by the Engineer, and at locations proposed by the Contractor and approved by the Engineer.

8-32.3 Construction Requirements

The Contractor and the Contracting Agencies' representative or Engineer shall reconcile the hours of work for labor and equipment on a daily basis for the purpose of tracking all work under this item. The Contractor shall supply the Engineer with material invoices for all materials incorporated into this work in a timely manner. Invoices shall be original or copies of original invoices from the material supplier.

8-32.4 Measurement

Work performed under the item "Unanticipated Site Work" shall be measured in accordance with Section 1-09.6 Force Account.

8-32.5 Payment

Payment will be made in accordance with Section 1-04.1, for the following bid item: "Unanticipated Site Work," by force account as provided in Section 1-09.6. To provide a common proposal for all bidders, the Contracting Agency has entered an amount in the proposal to become a part of the Contractor's total bid.

The following new Section is created:

8-33 STREAMBED GRAVEL INSTALLATION

8-33.1 Description

This work consists of installation of all streambed gravel (streambed aggregate mix) in the stream channel and the culvert.

8-33.2 Materials

Materials shall meet the requirements of the following sections:

Streambed Aggregate Mix	9-03.11

8-33.3 Construction Requirements

Before placing streambed gravel, the Contractor shall perform the stream grading as required.

Streambed gravel shall be installed to the extents shown on the plans. The finished grade of the streambed gravel shall match the final streambed grading elevations shown on the plans. Placement of streambed gravel shall be done before the final grading. (Note: Depending on the construction sequence of the culvert, there may be limited vertical clearance between the culvert bed and the top inside face of the culvert structure for installation of the streambed gravel.

8-33.4 Measurement

"Streambed Aggregate Mix" will be measured by the cubic yard of streambed gravel actually placed.

8-33.5 Payment

Payment shall include all labor and materials for furnishing, hauling, and placing streambed gravel in accordance with the plans and specifications.

"Streambed Aggregate Mix", per cubic yard.
The contract unit price for "Streambed Aggregate Mix" shall be full compensation for all labor, materials, and equipment necessary to complete the work as specified, including any necessary grading required to place material, to the satisfaction of the engineer.

The following new Section is created:

8-34 TEMPORARY STREAM BYPASS SYSTEM

8-34.1 Description

This work consists of installation of gravel bag berms, temporary bypass pipe, and miscellaneous appurtenances to isolate the stream banks during in-channel grading and excavation. This work shall also consist of the disposal of all material regardless of its nature or type.

8-34.2 Materials

Materials shall meet the requirements of the following sections:

Clear Plastic Covering	9-14.5(3)
Streambed Gravel	9-03.11
Gravel Bags	9-37
Fish Screen	9-38

8-34.3 Construction Requirements

8-34.3(1) General

The Contractor shall provide, install, and maintain the temporary stream bypass system as shown on the plans. Sediment must not be conveyed downstream during the construction period. The bypass pipe shall meet the size and material requirements shown on the plans. The bypass system and any dewatering measures required must be in operation prior to any work done within the stream channel. The bypass pipe shall outlet to a sediment mat to avoid erosion of the streambed.

Fish Removal

The Contractor shall provide for and coordinate with an experienced, local fisheries Biologist for fish removal of the stream reach being isolated by the temporary stream bypass system. The fisheries Biologist shall perform the following tasks:

1. Fish shall be removed from the stream reach to be diverted by first installing fish screens upstream and downstream of the in-water work area.

2. During dewatering of the reach, fish stranded in remaining pools shall be removed with dip nets and if necessary, by conducting four-pass electrofishing. If Chinook are found during the fish removal activities, electrofishing should cease immediately. Electrofishing must be conducted according to the NMFS (2000) Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act.

3. Upon removal, fish should be transported in clean buckets half-filled with stream water and immediately reintroduced into the stream downstream of the project site. Fish transportation equipment should be ready and on the job site in advance.

The temporary stream bypass system shall be relocated as required to allow installation of the culvert, retaining walls, to vegetate disturbed areas, and for landscape installation and restoration.

See the Hydraulic Project Approval (HPA) included in the Appendix of this specification for additional information on the temporary stream bypass requirements.

8-34.3(2) Emergency Procedures

The Contractor shall provide pumps, generators, hoses, and personnel as backup to the bypass piping in the event the piping becomes non-operational pumps may be required during construction. Pumps shall be continuously monitored at night and during no-working hours in the event of a power failure.

Emergency bypass pump intake shall be screened in order to protect juvenile fish. The area of the screen shall be a minimum of seven (7) square feet and be fully submerged. Screen types shall be of the following:
Perforated Plate

0.0938 in maximum opening diameter or maximum slot width.

Profile Bar

0.069 inch maximum width opening.

Woven Wire

0.087 inch maximum in the narrowest direction.

The Contractor shall inspect and remove any debris accumulated on the face of the screen.

8-34.3(3) Alternate Temporary Stream Bypass Plan

The Contractor may submit an alternate temporary stream bypass plan to the Engineer for approval. The plan must include all elements for isolating the stream banks during in-channel grading and excavation. The alternate temporary stream bypass plan must be prepared and stamped by a licensed engineer.

8-34.3(3) Final Temporary Stream Bypass Removal

The final removal of the temporary stream shall be staged such that flow is metered into the constructed stream channel. Metering shall be performed such that one-quarter of the existing flow is released into the stream channel for 24-hours. Subsequent metering in one-quarter of total flow increments over 24-hour periods shall be performed up to full channel flow.

8-34.4 Measurement

No unit of measure shall apply to the lump sum price for Temporary Stream Bypass System. All costs associated with installation of the temporary stream bypass system including, but not limited to all HPA requirements, fish nets, fish screens, sediment mats, fish removal, bypass piping and pumps and all related work required to safely bypass stream flows, shall be included in the lump sum contract item.

8-34.5 Payment

"Temporary Stream Bypass System", per Lump Sum.

The lump sum price for "Temporary Stream Bypass System" shall be full compensation for furnishing all labor, materials, tools, and equipment necessary or incidental to furnish, install, maintain, remove, and disposal of all materials, including all costs associated with HPA requirements, fish nets, fish screens, sediment mats, fish removal, bypass piping and pumps and all related work required to safely bypass stream flows.

DIVISION 9
MATERIALS

9-03 AGGREGATES

9-03.8 Aggregates for Hot Mix Asphalt

9-03.8(2) HMA Test Requirements

(March 10, 2010 APWA GSP)

Section 9-03.8(2) is supplemented with the following:

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be 1 million.

9-03.8(7) HMA Tolerances and Adjustments

(March 10, 2010 APWA GSP)

Delete Item 1 and replace it with the following:

1. **Job Mix Formula Tolerances**. After the JMF is determined as required in 5-04.3(7)A, the constituents of the mixture at the time of acceptance shall conform to the following tolerances:

	Nonstatistical Evaluation	**Commercial Evaluation**
Aggregate, percent passing		
1", ¾", ½", and 3/8" sieves	±6%	±8%
U.S. No. 4 sieve	±6%	±8%
U.S. No. 8 sieve	±6%	±8%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%

These tolerance limits constitute the allowable limits as described in Section 1-06.2. The tolerance limit for aggregate shall not exceed the limits of the control points section, except the tolerance limits for sieves designated as 100% passing will be 99-100. The tolerance limits on sieves shall only apply to sieves with control points.

9-03.10 Aggregate for Gravel Base

(December 28, 2009 R&E GSP)

Section 9-03.10 is revised to read:

Gravel base shall consist of granular material, either naturally occurring or processed. It shall be essentially free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will

compact readily and the maximum particle size shall not exceed ½ of the depth of the layer being placed.

Gravel base shall meet the following requirements for grading and quality when placed in hauling vehicles for delivery to the roadway or during manufacture and placement into a temporary stockpile. The exact point of acceptance will be determined by the Engineer.

Sieve Size	Percent Passing
4" square	100
1-1/2" square	70-100
1/2" square	35-80
U.S. No. 4	15-50
U.S. No. 40	20 max
U.S. No. 200	5.0 max

Sand Equivalent shall be 40 min.

All percentages are by weight.

Gravel base material retained on a No. 4 sieve shall contain not more than 0.20 percent by weight of wood waste.

9-03.11 Streambed Aggregates

(March 19, 2012 R&E GSP)

Section 9-03.11 is supplemented with the following:

"Streambed Aggregate Mix" shall conform to the following gradings and mix proportions:

Streambed Aggregate	Percent of "Streambed Aggregate Mix" by Mass
9-03.11(1) Streambed Sediment	50
9-03.11(2) Streambed Cobbles (12" Cobbles)	40
9-03.11(3) Streambed Boulders (One Man)	10

The grading of the Cobbles and Boulders shall be approved by the engineer or WDFW representative by visual inspection of the load before it is mixed. The Streambed Aggregate Mix shall also be approved by the engineer or WDFW representative prior to placement of material.

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.1 Soil

9-14.1(1) Topsoil Type A

General: Topsoil shall be free draining, fertile, friable sandy loam, and shall supply the following composition requirements: weed and seed free; pH between 5.5 and 7.5; maximum particle size to 1/2 inch, with 97% to 100% passing the 3/8 inch screen; soluble salts shall not exceed 4.0 mmho/cm; free of clay lumps, litter and toxic matter harmful to plant growth. Components shall conform to the requirements indicated. Percentages below are by volume. Mixing of the soil components shall not occur on site.

	Sand	Compost	Sandy Loam
Topsoil for turf, rough grass and plant bed areas	34%	33%	33%

Top Sand: Conform to the following analysis using Tyler Standard Screens - Equivalent U.S. Series Number:

Sieve Size	Percent Passing by Weight
#4	100%
#10	95-100%
#16	85-100%
#30	75-90%
#60	15-30%
#100	0-5%
#200 (wet sieve)	0-1.5%

Composted Mulch: Material shall be derived from aerobic decomposition of recycled plant waste fully composted; material shall be composted on a paved surface and shall have a moisture content of between 20% and 40%; no visible free water or dust shall be produced when handling the material; fresh sawdust or fresh wood by products shall not have been added after the composting process has begun. No recycled sanican waste shall be used. Yard waste shall be from permitted composting facility. Pure organic matter content shall be between 30% and 50% by weight. 100% of composted yard waste shall pass the 7/16 inch screen and a minimum 50% shall pass the 1/4" screen. Material shall be maintained at a 15% oxygen level throughout the composting process.

Sandy Loam: Shall be derived from the "A" horizon of naturally occurring, free draining, friable soils. Soils with a high clay content will be rejected. Submit separate sample for approval prior to mixing.

9-14.2 Seed

Section 9-14.2 is supplemented with the following:

Grass seed for Seeded Lawn Installation shall be a blended seed mixture of non-leafy grasses of a commercial grade for home lawn use. The composition, proportion, and quality shall be subject to the advance approval of the Engineer. Grass seed mixtures for playgrounds, pastures, roadside seeding, or other non-residential use shall not be allowed. The approved grass seed mixture shall be applied to the rate of five pounds per 1,000 square feet.

9-14.3 Fertilizer

Section 9-14.3 is supplemented with the following:

The Contractor shall supply a commercially available starter fertilizer designed by the manufacturer for use in new lawn installation applications. The fertilizer formula and application rate shall provide the following types and amounts of nutrients at a minimum:

Total Nitrogen as N - One pound per thousand square feet

Available Phosphoric Acid as P_20_5 - One pound per thousand square feet

Soluble Potash as K_20 - One pound per thousand square feet.

50-60 percent of the total nitrogen shall be derived from ureaform or ureformaldehyde. The remainder may be derived from any source.

9-37 Gravel Bags

Section 9-37 is added as follows:

Gravel bags shall be 17" x 27" Polypropylene bags filled with streambed sediment meeting the requirements of 9-03.11(1).

The following new Section is created:

9-38 Fish Screens

Section 9-38 is added as follows:

Material for fish screens shall be 6-16 or 6-14 (six squares per inch, 14 or 16 gauge) woven wire mesh.

(January 5, 2015)
Standard Plans
The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 14-046, effective August 4, 2014 is made a part of this contract.

The Standard Plans are revised as follows:

A-40.20
Plan Title, Bridge Transverse Joint Seals is revised to read: Bridge Paving Joint Seals
Note 3, replace the phrase "sawing out" with "saw cutting"
Add Note 4. For Details 1, 2, 3, and 4 the item "HMA Sawcut and Seal" shall be used for payment. For Details 5 and 6, the item "Paved Panel Joint Seal" shall be used for payment. For Detail 7, the item "Sealing Existing Longitudinal and Transverse Joint" shall be used for payment.
Details 5 and 6, callout "Waterproofing Membrane (Deck Seal)" delete "(Deck Seal)"

A-50.10
Sheet 2 of 2, Plan, with Single Slope Barrier, reference C-14a is revised to C-70.10

A-50.20
Sheet 2 of 2, Plan, with Anchored Barrier, reference C-14a is revised to C-70.10

A-50.30
Sheet 2 of 2, Plan (top), reference C-14a is revised to C-70.10

A-60.10
Sheet 2, Section B, callout, WAS-"New Tie Bar ~ #5 x 30" (IN) Epoxy Coated Reinforcing Bar" is revised to read: "New Tie Bar ~ #5 x 30" (IN)"

B-10.20 and B-10.40
Substitute "step" in lieu of "handhold" on plan

B-15.60
Table, Maximum Knockout Size column, 120" Diam., 42" is revised to read; 96"

B-25.20
Add Note 7. See Standard Specification Section 8-04 for Curb and Gutter requirements

B-55.20
Metal Pipe elevation, title is revised to read; "Metal Pipe and Steel Rib Reinforced Polyethylene Pipe"

B-90.40
Offset & Bend details, add the subtitle, "Plan View" above titles

C-16a
Note 1, reference C-28.40 is revised to C-20.10

C-16b
Note 3, reference C-28.40 is revised to C-20.10
F-10.12

Section Title, was – "Depressed Curb Section" is revised to read: "Depressed Curb and Gutter Section"

G-50.10
Delete – Plan View (bottom center of sheet)
Delete – Mounting Bracket and Steel Strap Detail

G-60.10
Sheet 4, Screen Detail, callout – "drill and Tap for ¼" diameter Cap Screw – Spacing approx. 9" o.c. ASTM F593, w/S.S. washer Liberally coat the threads with Anti-seize compound (TYP.)" is revised to read: "*Drill and Tap ¼" (IN) Diam. x 1" (IN) Cap Screw with washer ~ space approx.. 9" o.c. ~ Liberally coat threads with Anti-seize compound (TYP.)"

Add Boxed note: * Bolts, Nuts, and washers ~ ASTM F593 or A193 Type 304 or Type 316 Stainless Steel (S.S.)

G-60.20
Side View, callout, "Anchor Rod ~ 1-3/4" Diam. x 4'-4" Threaded 8" Min. Each End; W/ 2 Washers & 4 Heavy Hex Nuts ~ Galvanize Exposed Anchor Rod End for 1'-0" Min." is revised to read; "Anchor Rod ~ 1-3/4" Diam. x 4'-4" Threaded 8" Min. Each End; W/ 2 Washers & 6 Heavy Hex Nuts ~ Galvanize Exposed Anchor Rod End for 1'-0" Min."

G-60.30
End View, callout, "Anchor Rod ~ 1-3/4" Diam. x 4'-4" Threaded 8" Min. Each End; W/ 2 Washers & 4 Heavy Hex Nuts ~ Galvanize Exposed Anchor Rod End for 1'-0" Min." is revised to read; "Anchor Rod ~ 1-3/4" Diam. x 4'-4" Threaded 8" Min. Each End; W/ 2 Washers & 6 Heavy Hex Nuts ~ Galvanize Exposed Anchor Rod End for 1'-0" Min."

G-70.10
Sheet 4, Screen Detail, callout – "drill and Tap for ¼" diameter Cap Screw – Spacing approx. 9" o.c. ASTM F593, w/S.S. washer Liberally coat the threads with Anti-seize compound (TYP.)" is revised to read: "*Drill and Tap ¼" (IN) Diam. x 1" (IN) Cap Screw with washer ~ space approx.. 9" o.c. ~ Liberally coat threads with Anti-seize compound (TYP.)"

Add Boxed note: * Bolts, Nuts, and washers ~ ASTM F593 or A193 Type 304 or Type 316 Stainless Steel (S.S.)

H-70.20
Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

J-3b
Sheet 2 of 2, Plan View of Service Cabinet, Boxed Note, "SEE STANDARD PLAN J-6C…" is revised to read: "SEE STANDARD PLAN J-10.10…"
Sheet 2 of 2, Plan View of Service Cabinet Notes, references to Std. Plan J-9a are revised to J-60.05 (3 instances).

Sheet 2 of 2, "Right Side of Service Cabinet" detail, callout, "1 5/8" x 2 7/16" 12 GA. SLOTTED STEEL CHANNEL BRACKETS (3 REQ'D), EMBED 12"MIN. IN FOUNDATION."
Is revised to read: "1-5/8" x 3-1/4", 12 GA. BACK TO BACK SLOTTED STEEL CHANNEL BRACKETS (3 REQ'D), EMBED 12" MIN. IN FOUNDATION"

J-10.22
Key Note 4, “Test with (SPDT Snap Action, Positive close 15 Amp – 120/277 volt “T” rated). Is revised to read: “Test Switch (SPDT snap action, positive close 15 amp – 120/277 volt “T” rated).”

J-20.11
Sheet 2, Foundation Detail, Elevation, callout – “Type 1 Signal Pole” is revised to read: “Type PS or Type 1 Signal Pole”
Sheet 2, Foundation Detail, Elevation, add note below Title, “(Type 1 Signal Pole Shown)”

J-22.15
Ramp Meter Signal Standard, elevation, dimension 4’ - 6” is revised to read; 6’-0”

J-28.50
Section D, callout, was – Backup Strip (ref. to key note 3) is revised to read; “Continuous Backup Strip (ref. to key note 3)”
Key Note 3, was – ¼” Thick, or No thinner than pole wall thickness. Tack weld or seal weld to Base plate. Is revised to read; “1/4” Thick, or No thinner than Pole wall thickness. Tack weld in root or continuous seal weld to Base plate or Pole wall.”

J-28.70
Detail C, dimension, 2” MAX. is revised to read: 1” MAX.
Detail D, dimension, 2” MAX. is revised to read: 1” MAX.

J-29.10
Galvanized Welded Wire Mesh detail, callout – “Drill and Tap for ¼” Diam. Cap Screw, 3 Places, @ 9” center, all 4 edges S.S. Screw, ASTM F593 and washer”
Is revised to read;
“*Drill and Tap ¼” (IN) Diam. x 1” (IN) Cap Screw with washer ~ space approx.. 9” o.c. ~ Liberally coat threads with Anti-seize compound (TYP.)”

Add Boxed note: * Bolts, Nuts, and washers ~ ASTM F593 or A193 Type 304 or Type 316 Stainless Steel (S.S.)

J-29.15
Title, “Camera Pole Standard” is revised to read; “Camera Pole Standard Details”

J-29-16
Title, “Camera Pole Standard Details” is revised to read; “Camera Pole Details”

J-60.14
All references to J-16b (6x) are revised to read; J-60.11

J-90.10
Section B, callout, “Hardware Mounting Rack ~ S. S. 1-5/8” Slotted Channel” is revised to read: “Hardware Mounting Rack (Typ.) ~ Type 304 S. S. 1-5/8” Slotted Channel”

J-90.20

Section B, callout, “Hardware Mounting Rack (Typ.) ~ S. S. 1-5/8” Slotted Channel” is revised to read: “Hardware Mounting Rack (Typ.) ~ Type 304 S. S. 1-5/8” Slotted Channel”

K-80.10
Sign Installation (Fill Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN.
Sign Installation (Sidewalk and Curb Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN.
Sign Installation (Behind Traffic Barrier Section), Delete dimensions - 6’ TO 12’ MIN. and 6’ MIN.
Sign with Supplemental Plaque Installation (Fill Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN.
Sign Installation (Ditch Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN. Delete dimension – 6’ MIN.

K-80.30
In the NARROW BASE, END view, the reference to Std. Plan C-8e is revised to Std. Plan K-80.35

L-20.10
Sheet 1, Type 3 elevation view, callout, was “Knuckled Selvage (Typ.)” located at the top of the fence elevation, is revised to read; “Twisted and Braided (Typ.)”
Sheet 2, Type 3, elevation view, callout, was “End or Corner (Brace) Post” is revised to read; “End or Corner Post”
Sheet 2, Type 4, elevation view, callout, was “End or Corner (Brace) Post” is revised to read; “End or Corner Post”

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-10.20-00.....10/5/07
A-10.30-00.....10/5/07
A-20.10-00.....8/31/07
A-30.10-00.....11/8/07
A-30.15-00.....11/8/07
A-30.30-01.....6/16/11
A-30.35-00.....10/12/07
A-40.00-00.....8/11/09
A-40.10-02.....6/2/11
A-40.15-00.....8/11/09
A-40.20-02.....5/29/13
A-40.50-01.....6/2/11
A-50.10-00…...11/17/08
A-50.20-01…....9/22/09
A-50.30-00…...11/17/08
A-50.40-00…...11/17/08
A-60.10-02.....6/17/14
A-60.20-02.....6/2/11
A-60.30-00.....11/8/07
A-60.40-00.....8/31/07

B-5.20-01.....6/16/11
B-5.40-01.....6/16/11
B-5.60-01.....6/16/11
B-10.20-01.....2/7/12
B-10.40-00.....6/1/06
B-10.60-00.....6/8/06
B-15.20-01.....2/7/12
B-15.40-01.....2/7/12
B-15.60-01.....2/7/12
B-20.20-02.....3/16/12
B-20.40-03.....3/16/12
B-20.60-03.....3/15/12
B-25.20-01.....3/15/12
B-25.60-00.....6/1/06
B-30.10-01.....4/26/12
B-30.20-02.....4/26/12
B-30.30-01.....4/26/12
B-30.50-01.....4/26/12
B-30.70-03.....4/26/12
B-30.80-00.....6/8/06
B-30.90-01.....9/20/07
B-35.20-00.....6/8/06
B-35.40-00.....6/8/06
B-40.20-00.....6/1/06
B-40.40-01.....6/16/10
B-45.20-00.....6/1/06
B-45.40-00.....6/1/06
B-50.20-00.....6/1/06
B-55.20-00.....6/1/06
B-60.20-00.....6/8/06
B-60.40-00.....6/1/06
B-65.20-01.....4/26/12
B-65.40-00.....6/1/06
B-70.20-00.....6/1/06
B-75.20-01.....6/10/08
B-75.50-01.....6/10/08
B-75.60-00.....6/8/06
B-80.20-00.....6/8/06
B-80.40-00.....6/1/06
B-82.20-00.....6/1/06
B-85.10-01.....6/10/08
B-85.20-00.....6/1/06
B-85.30-00.....6/1/06
B-85.40-00.....6/8/06
B-85.50-01.....6/10/08
B-90.10-00.....6/8/06
B-90.20-00.....6/8/06
B-90.30-00.....6/8/06
B-90.40-00.....6/8/06
B-90.50-00.....6/8/06
B-95.20-01.....2/3/09

B-30.40-01.....4/26/12

B-70.60-00.....6/1/06

B-95.40-00.....6/8/06

C-1.....6/16/11
C-1a.....10/14/09
C-1b.....6/16/11
C-1c.....5/30/97
C-1d.....10/31/03
C-2.....1/6/00
C-2a.....6/21/06
C-2b.....6/21/06
C-2c.....6/21/06
C-2d.....6/21/06
C-2e.....6/21/06
C-2f.....3/14/97
C-2g.....7/27/01
C-2h.....3/28/97
C-2i.....3/28/97
C-2j.....6/12/98
C-2k.....7/27/01
C-2n.....7/27/01
C-2o.....7/13/01
C-2p.....10/31/03
C-3.....7/2/12
C-3a.....10/4/05
C-3b.....6/27/11
C-3c.....6/27/11
C-4b.....6/8/06
C-4e.....10/23/14
C-4f.....7/2/12

C-6.....5/30/97
C-6a.....10/14/09
C-6c.....1/6/00
C-6d.....5/30/97
C-6f.....7/25/97
C-7.....6/16/11
C-7a.....6/16/11
C-8.....2/10/09
C-8a.....7/25/97
C-8b.....6/27/11
C-8e.....2/21/07
C-8f.....6/30/04
C-10.....6/3/10
C-16a.....6/3/10
C-16b.....6/3/10
C-20.10-02.....6/11/14
C-20.14-03.....6/11/14
C-20.15-02.....6/11/14
C-20.18-02.....6/11/14
C-20.19-02.....6/11/14
C-20.40-04.....6/11/14
C-20.41-00.....6/30/14
C-20.42-04.....6/11/14
C-20.45.01.....7/2/12
C-22.14-03.....6/11/14
C-22.16-04.....6/11/14
C-22.40-04.....10/23/14
C-22.41-01.....10/23/14
C-22.45-01.....10/23/14

C-23.60-03.....6/11/14
C.24.10-01.....6/11/14
C-25.18-04.....6/11/14
C-25.20-05.....7/2/12
C-25.22-04.....7/2/12
C-25.26-02.....7/2/12
C-25.80-03.....6/11/14
C-40.14-02.....7/2/12
C-40.16-02.....7/2/12
C-40.18-02.....7/2/12
C-70.10-01.....6/17/14
C-75.10-01.....6/11/14
C-75.20-01.....6/11/14
C-75.30-01.....6/11/14
C-80.10-01.....6/11/14
C-80.20-01.....6/11/14
C-80.30-01.....6/11/14
C-80.40-01.....6/11/14
C-80.50-00.....4/8/12
C-85.10-00.....4/8/12
C-85.11-00.....4/8/12
C-85.14-01.....6/11/14
C-85.15-01.....6/30/14
C-85.16-01.....6/17/14
C-85-18-01.....6/11/14
C-85.20-01.....6/11/14
C-90.10-00.....7/3/08

D-2.04-00.....11/10/05
D-2.06-01.....1/6/09
D-2.08-00.....11/10/05
D-2.14-00.....11/10/05
D-2.16-00.....11/10/05
D-2.18-00.....11/10/05
D-2.20-00.....11/10/05
D-2.32-00.....11/10/05
D-2.34-01.....1/6/09
D-2.36-03.....6/11/14
D-2.42-00.....11/10/05
D-2.44-00.....11/10/05
D-2.60-00.....11/10/05
D-2.62-00.....11/10/05
D-2.46-01.....6/11/14

D-2.48-00.....11/10/05
D-2.64-01.....1/6/09
D-2.66-00.....11/10/05
D-2.68-00.....11/10/05
D-2.80-00.....11/10/05
D-2.82-00.....11/10/05
D-2.84-00.....11/10/05
D-2.86-00.....11/10/05
D-2.88-00.....11/10/05
D-2.92-00.....11/10/05
D-3.09-00.....5/17/12
D-3.10-01……5/29/13
D-3.11-03……6/11/14
D-3.15-02……6/10/13
D-3.16-02……5/29/13

D-3.17-01……5/17/12
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-10.20-00.....7/8/08
D-10.25-00.....7/8/08
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-15.10-01.....12/2/08
D-15.20-02.....6/2/11
D-15.30-01.....12/02/08

E-1.....2/21/07
E-2.....5/29/98

E-4.....8/27/03
E-4a.....8/27/03

F-10.12-03.....6/11/14
F-10.16-00.....12/20/06

F-10.62-02.....4/22/14
F-10.64-03.....4/22/14

F-40.15-02.....6/20/13
F-40.16-02.....6/20/13

F-10.18-00.....6/27/11
F-10.40-02.....6/21/12
F-10.42-00.....1/23/07

F-30.10-03.....6/11/14
F-40.12-02.....6/20/13
F-40.14-02.....6/20/13

F-45.10-01.....6/21/12
F-80.10-03.....6/11/14

G-10.10-00.....9/20/07
G-20.10-01.....6/11/14
G-22.10-02.....6/17/14
G-24.10-00.....11/8/07
G-24.20-01.....2/7/12
G-24.30-01.....2/7/12
G-24.40-04.....6/17/14
G-24.50-03.....6/17/14

G-24.60-03.....6/17/14
G-25.10-04.....6/10/13
G-30.10-03.....6/17/14
G-50.10-01.....6/20/13
G-60.10-02.....6/10/13
G-60.20-01.....6/27/11
G-60.30-01.....6/27/11
G-70.10-02.....6/10/13

G-70.20-02....6/10/13
G-70.30-02.....6/10/13
G-90.10-01…..5/11/11
G-90.20-02…..3/22/13
G-90.30-02…..3/22/13
G-90.40-01…..10/14/09
G-95.10-01.....6/2/11
G-95.20-02.....6/2/11
G-95.30-02.....6/2/11

H-10.10-00.....7/3/08
H-10.15-00.....7/3/08
H-30.10-00.....10/12/07

H-32.10-00.....9/20/07
H-60.10-01.....7/3/08
H-60.20-01.....7/3/08

H-70.10-01.....2/7/12
H-70.20-01.....2/16/12
H-70.30-02.....2/7/12

I-10.10-01.....8/11/09
I-30.10-02.....3/22/13
I-30.15-02.....3/22/13
I-30.16-00.....3/22/13
I-30.17-00.....3/22/13

I-30.20-00.....9/20/07
I-30.30-01.....6/10/13
I-30.40-01.....6/10/13
I-30.60-00.....5/29/13
I-40.10-00.....9/20/07

I-40.20-00.....9/20/07
I-50.20-01.....6/10/13
I-60.10-01.....6/10/13
I-60.20-01.....6/10/13
I-80.10-01.....8/11/09

J-3.....8/1/97

J-3b.....3/4/05
J-3c.....6/24/02
J-10.....7/18/97
J-10.10-02……6/11/14
J-10.15-01.....6/11/14
J-10.22-00.....5/29/13
J-15.10-01.....6/11/14
J-15.15-01……6/11/14

J-20.10-03.....6/30/14
J-20.11-02.....6/30/14
J-20.15-03.....6/30/14
J-20.16-02.....6/30/14
J-20.20-02.....5/20/13
J-20.26-01.....7/12/12
J-21.10-04.....6/30/14

J-21.15-01.....6/10/13
J-21.16-01.....6/10/13
J-21.17-01.....6/10/13
J-21.20-01.....6/10/13
J-22.15-01.....6/10/13
J-22.16-02.....6/10/13
J-26.10-02…..3/15/12

J-26.15-01…..5/17/12
J-26.20-00…..6/11/14
J-27.10-00…..3/15/12
J-27.15-00…..3/15/12
J-28.10-01.....5/11/11
J-28.22-00.....8/07/07
J-28.24-00.....8/07/07
J-28.26-01.....12/02/08
J-28.30-03.....6/11/14
J-28.40-02.....6/11/14
J-28.42-01.....6/11/14
J-28.43-00.....6/11/14
J-28.45-02.....6/11/14
J-28.50-02.....6/2/11
J-28.60-01.....6/2/11
J-28.70-01.....5/11/11
J-29.10-00.....6/27/11
J-29.15-00.....6/27/11
J-29.16-01.....6/20/13
J-40.10-03……5/20/13

J-40.20-02……6/11/14
J-40.30-03……5/20/13
J-40.35-01……5/29/13
J-40.36-01……5/20/13
J-40.37-01……5/20/13
J-40.38-01.....5/20/13
J-40.39-00……5/20/13

J-40.40-00……5/20/13

J-50.10-00…….6/3/11
J-50.11-00…….6/3/11
J-50.12-00…….6/3/11
J-50.15-00…….6/3/11
J-50.16-01…….3/22/13
J-50.20-00…….6/3/11
J-50.25-00…….6/3/11
J-50.30-00…….6/3/11
J-60.05-00…….6/16/11

J-60.11-00…….5/20/13
J-60.12-00…….5/20/13
J-60.13-00…….6/16/10
J-60.14-00……6/16/10
J-75.10-01……5/11/11
J-75.20-00……2/10/09
J-75.30-01…….5/11/11
J-75.40-01……6/11/14
J-75.41-00……6/11/14
J-75.45-01……6/11/14
J-90.10-01…….6/27/11
J-90.20-01…….6/27/11
J-90.21-00……6/30/14

K-70.20-00.....2/15/07
K-80.10-00.....2/21/07

K-80.20-00.....12/20/06
K-80.30-00.....2/21/07
K-80.35-00.....2/21/07
K-80.37-00.....2/21/07

L-10.10-02.....6/21/12
L-20.10-02.....6/21/12
L-30.10-02.....6/11/14
L-40.10-02.....6/21/12
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

M-1.20-03.....6/24/14
M-1.40-02.....6/3/11
M-1.60-02.....6/3/11
M-1.80-03.....6/3/11
M-2.20-02.....6/3/11
M-3.10-03.....6/3/11
M-3.20-02.....6/3/11
M-3.30-03.....6/3/11
M-3.40-03.....6/3/11
M-3.50-02.....6/3/11
M-5.10-02.....6/3/11
M-7.50-01.....1/30/07
M-9.50-02.....6/24/14
M-9.60-00…….2/10/09
M-11.10-01.....1/30/07
M-15.10-01.....2/6/07
M-17.10-02.....7/3/08
M-20.10-02.....6/3/11
M-20.20-01.....1/30/07
M-20.30-02.....10/14/09
M-20.40-03.....6/24/14
M-20.50-02.....6/3/11
M-24.20-01.....5/31/06
M-24.40-01.....5/31/06
M-24.50-00.....6/16/11
M-24.60-04.....6/24/14
M-40.10-03.....6/24/14
M-40.20-00...10/12/07
M-40.30-00.....9/20/07
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-60.20-02.....6/27/11
M-65.10-02.....5/11/11
M-80.10-01.....6/3/11
M-80.20-00.....6/10/08
M-80.30-00.....6/10/08

CONTRACT FORMS
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CONTRACT
FOR:
BROWN ROAD CULVERT REPLACEMENT PROJECT
FERNDALE, WASHINGTON

This Contract, made and entered into this ____ day of _____, 2015 by and between the City of Ferndale, hereinafter called the "Owner" and _____, hereinafter called the "Contractor".

WITNESSETH:

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

1. The Contractor shall do all of the work and furnish all of the labor, materials, tools and equipment for the construction of the improvements and shall perform any changes in the work, all in full compliance with the contract documents entitled "BROWN ROAD CULVERT REPLACEMENT PROJECT, Ferndale, Washington".

   The "Bid Proposal", "Specifications and Conditions", "Contract Forms", and the "Plans" sections contained in said contract documents are hereby referred to and by reference made a part hereof.

2. The Owner hereby promises and agrees with the Contractor to employ, and does employ the Contractor to furnish the labor, materials, tools and equipment, and to and cause to be done the above-described work, and to complete and finish the same in accordance with the said contract documents and the terms and conditions herein contained, and hereby contracts to pay for the same, according to the said contract documents, including the schedule of estimated quantities, and unit and lump sum prices in the Bid Proposal, the approximate sum of _____, the total amount of bid, subject to the actual quantity of work performed, at the time and in the manner and upon the conditions provided for in this contract.

3. The Contractor for himself, and for his agents, successors, assigns, subcontractors and/or employees, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.

4. The Owner hereby appoints and the Contractor hereby accepts Reichhardt & Ebe Engineering, Inc., hereinafter referred to as the Engineer, as the City's representative for the purpose of administering the provisions of this Contract, including the Owner's right to receive and act on all reports and documents related to this Contract, to request and receive additional information from the Contractor, to assess the general performance of the Contractor under this Contract, to determine if the contracted services are being performed in accordance with Federal, State or local laws, and to administer any other right granted to the Owner under this Contract. The Owner expressly reserves the right to terminate this

Contract as provided in the contract documents, and also expressly the reserves the right to commence civil action for the enforcement of this contract.

5. This Contract contains terms and conditions agreed upon by the parties. The parties agree that there are no other understandings, oral or otherwise, regarding the subject matter of this Contract.

6. The Contractor agrees to comply with all applicable Federal, State, City or municipal standards for the licensing, certification, operation of facilities and programs, and accreditation and licensing of individuals.

7. The Contractor shall not assign or subcontract any portion of the work provided for under the terms of this Contract without obtaining prior written approval of the Engineer. All terms and conditions of this Contract shall apply to any approved subcontract or assignment related to this Contract.

8. The parties intend that an independent Contractor-Owner relationship will be created by this Contract. The Owner is interested only in the results to be achieved, the implementation of the work will lie solely with the Contractor. The Contractor will be solely and entirely responsible for its acts and for the acts of its agents, employees, servants, subcontractors, or otherwise during the performance of this Contract. In the performance of the work herein contemplated, the Contractor is an independent Contractor with regard to the performance of the details of the work; however, the components of and the results of the work contemplated herein must meet the approval of the Engineer and shall be subject to the Engineer's general rights of inspection and review to secure the satisfactory completion thereof.

9. The Contractor agrees and covenants to indemnify, defend, and save harmless, the Owner and the City of Ferndale and those persons who were, now are, or shall be duly elected or appointed officials or members of employees thereof, hereinafter referred to as the "Owner" or "City" against and from any loss, damage, costs, charge, expense, liability, claims, demands or judgments, of whatsoever kind or nature, whether to persons or to property, arising wholly or partially out of any act, action, neglect, omission, or default on the part of the Contractor, his agents, successors, assignees, subcontractors and/or employees, except only such injury or damage as shall have been caused by or resulted from the sole negligence of the City. In case any suit or cause of action shall be brought against the Owner or the City on account of any act, action, neglect, omission, or default on the part of the Contractor, his agents, successors, assignees, subcontractors and/or employees the Contractor hereby agrees and covenants to assume the defense thereof and to pay any and all costs, charges, attorney's fees and other expenses and any and all judgments that may be incurred or obtained against the City.

In the event the Owner is required to institute legal action and/or participate in the legal action to enforce this Indemnification and Hold Harmless Clause, the Contractor agrees to pay the Owner or City's legal fees, costs and disbursements incurred in establishing the right to indemnification. If the claim, suit, or action for injuries, death, or damages as

provided for in the preceding paragraphs of this specification is caused by or results from the concurrent negligence of (a) the indemnitee or the indemnitee's agents or employees and (b) the indemnitor or the indemnitor's agents for employees the indemnity provisions provided for in the preceding paragraphs of this specification shall be valid and enforceable only to the extent of the indemnitor's negligence.

Contractor hereby specifically and expressly waives any immunity under Industrial Insurance, Title 51 RCW and acknowledges that this waiver was mutually negotiated by the parties herein. In the event of litigation between the parties to enforce the rights under this paragraph, reasonable attorney's fees shall be allowed to the prevailing party.

10. This Contract has been and shall be construed as having been made and delivered within the State of Washington and it is mutually understood and agreed by each party hereto that this Contract shall be governed by the laws of the State of Washington, both as to interpretation and performance. Any action in law, suit and equity or judicial proceedings for the enforcement of this contract, or any provisions thereof, shall be instituted and maintained in the courts of competent jurisdiction located in City of Ferndale, Washington.

11. The failure of the Owner to insist upon strict performance of any of the covenants and agreements of this Contract or to exercise any option herein conferred in any one or more instances shall not be construed to be a waiver or relinquishment of any such, or any other covenants or agreements, but the same shall be and remain in full force and effect.

12. It is understood and agreed by the parties hereto that if any part of this agreement is determined to be illegal, the validity of the remaining portions shall be construed as if the agreement did not contain the particular illegal part.

13. No change or addition to this Contract shall be valid or binding upon either party unless such change or addition shall be in writing, executed by both parties.

14. In the event that funding from State, Federal, or other sources is withdrawn, reduced, or limited in any way after the effective date of this Agreement, and prior to its normal completion, the Owner may summarily terminate this Agreement as to the funds withdrawn, reduced, or limited notwithstanding any other termination provisions of this Agreement. If the level of funding withdrawn, reduced or limited is so great that the Owner deems that the continuation of the programs covered by this Agreement is no longer in the best interest of the City, the Owner may summarily terminate this Agreement in whole notwithstanding any other termination of this Agreement. Termination under this section shall be effective upon receipt of written notice as specified herein.

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

Executed by the Contractor this _____day of _____, 2015.

CITY OF FERNDALE:

By: _____
City Administrator / Mayor

STATE OF WASHINGTON)
) ss.
COUNTY OF WHATCOM)

On this _____ day of _____, 2015, before me personally appeared _____to me personally known to be the person described in and who executed the above instrument and who acknowledged to me the act of signing thereof.

NOTARY PUBLIC, in and for the
State of Washington, residing at:

My Commission Expires:_____

CONTRACTOR:

By: _____

Title: _____

STATE OF WASHINGTON)
) ss.
COUNTY OF WHATCOM)

On this _____ day of _____, 2015, before me personally appeared_____ to me personally known to be the person described in and who executed the above instrument and who acknowledged to me the act of signing thereof.

NOTARY PUBLIC, in and for the
State of Washington, residing at:

My Commission Expires:_____

PERFORMANCE BOND
to the
City of Ferndale

KNOW ALL MEN BY THESE PRESENTS, That we_____ _____ the Contractor named in the Contract hereinafter referred to as PRINCIPAL, and_____as SURETY, are jointly and severally held and firmly bound to the City of Ferndale, hereinafter referred to as OWNER named in said Contract BROWN ROAD CULVERT REPLACEMENT PROJECT, Ferndale, Washington, for the penal sum of, _____DOLLARS ($_____), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, assigns, administrators and successors jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that Whereas, the Principal entered into a contract with the Owner, dated the _____day of _____, 2015, for such construction work with the City of Ferndale, Washington.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform all of the provisions and fulfill all of the undertakings, covenants, terms, conditions and agreements of said contract during the period of the original contract and any extensions thereof that may be granted by the Owner, with or without notices to the surety; and during the life of any guaranty required under the contract; and shall also well and truly perform and fulfill all of the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made; notice of which modifications to the surety being hereby waived, shall indemnify and save harmless owner from all cost and damage by reason of the principal's default of failure to do so, and shall pay the State of Washington sales and use taxes, and amounts due said state pursuant to Titles 50 and 51 of the Revised Code of Washington then this obligation to be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bonded parties have executed this instrument under their separate seals this _____ day of _____, 2015, the name and corporate seal of each corporate party hereto affixed, and these presents duly signed by its undersigned representatives pursuant to authority of its governing body.

_____
Corporate Seal: PRINCIPAL

ATTEST: (If Corporation)

By:_____

Title:_____

_____
SURETY

Corporate Seal:

By:_____

Title:_____

PAYMENT BOND
to the
City of Ferndale

KNOW ALL MENT BY THESE PRESENTS: that

_____
(Name of Contractor)

_____
(Address of Contractor)

a _____ , hereinafter called Principal,
(Corporation, Partnership or Individual)

and_____
(Name of Surety)

_____
(Address of surety)

hereinafter called **SURETY**, are held and firmly bound unto_____

_____
(Name of Owner)

_____
(Address of Owner)

hereinafter called **OWNER**, in the penal sum of _____Dollars, $(_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the **OWNER**, dated the _____day of _____20___, a copy of which is hereto attached and made a part hereof for the construction of:

_____

_____

_____

_____

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, **SUBCONTRACTORS**, and corporations furnishing materials for or performing labor in the prosecution of the **WORK** provided for in such contract, and any authorized extension or modification thereof including all amounts due for materials, lubricants, oil, gasoline, coal, and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such **WORK,** and all Insurance premiums on said **WORK,** and for all labor, performed in such **WORK** whether by **SUBCONTRACTOR** or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said **SURETY** for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the **WORK** to be performed thereunder or the **SPECIFICATIONS** accompanying the same shall in any wise affect its obligation on this **BOND,** and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to

the **WORK** or to the **SPECIFICATIONS.**

PROVIDED, FURTHER, that no final settlement between the **OWNER** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in_____counterparts, each on of which
(number)
shall be deemed an original, this the _____day of _____

ATTEST:

_____
Principal

_____
(Principal) Secretary

(**SEAL)** **By** _____(s)

_____
(Address)
_____

_____
Witness as to Principal
_____
(Address)

_____ _____
(Surety)

ATTEST: **By** _____
(Attorney –in-Fact)

_____ _____
Witness as to Surety (Address

_____ _____
(Address)

NOTE: Date of **BOND** must not be prior to date of Contract.
If **CONTRACTOR** is Partnership, all partners should execute **BOND.**

IMPORTANT: Surety companies executing **BONDS** must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the **PROJECT** is located.

CITY OF FERNDALE
RETAINAGE INVESTMENT OPTION

CONTRACTOR: _____

PROJECT NAME: _____

DATE: _____

Pursuant to Chapter 60.28 RCW, you may choose how your retainage under this contract will be held and invested. Please complete and sign this form indicating your preference. If you fail to do so, the City of Ferndale (City) will hold your retain age as described in "Current Expense", option 1 below.

_____1. Current Expense: The City will retain your money in its Current Expense Fund Account until thirty days following final acceptance of the improvement or work as completed. You will not receive interest earned on this money.

_____2. Interest Bearing Account: The City will deposit retainage checks in an interest-bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until after the final acceptance of the improvement or work as completed or until agreed to by both parties. Interest on the account will be paid to you.

BONDS AND SECURITIES ACCEPTABLE BY THE CITY OF FERNDALE:

1. Bills, certificates, notes or bonds of the United States.
2. Other obligations of the United States or its agencies.
3. Indebtedness of the Federal national Mortgage Association.
4. Time Deposits in commercial banks.

Designate below the type of investment selected:

_____
_____
_____

_____3. Bond-in-Lieu: With the consent of the City, the contractor may submit a bond for all or any portion of the amount of funds retained by the City in a form acceptable to the City and from a bonding company meeting standards established by the City, if any. Unless otherwise indicated, the contractor elects to submit a bond for the entire 5% retainage amount. Such bond and any proceeds there from shall be made subject to all claims and liens and in the same manner and priority as set forth for retained percentages in Chapter 60.28 RCW. Whenever the City accepts a bond-in-lieu of retained funds from a contractor, the contractor shall accept like bonds from any subcontractors or suppliers from which the contractor has retained funds. The contractor shall then release the funds retained from the subcontractor or supplier, to the subcontractor or supplier, within thirty days of the contractor's receipt of the retained funds from the City.

Retainage is normally released 30 - 45 days after final acceptance of work by the City, or following receipt Employment Security / Department of Revenue clearance, whichever takes longer.

_____

(Contractor's Signature) Date

Title: _____

APPENDICES
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APPENDIX A
STATE PREVAILING WAGE RATES
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State of Washington
Department of Labor & Industries
Prevailing Wage Section - Telephone 360-902-5335
PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 4/1/2015

County	Trade	Job Classification	Wage	Holiday	Overtime	Note
Whatcom	Asbestos Abatement Workers	Journey Level	$42.67	5D	1H	
Whatcom	Boilermakers	Journey Level	$44.35		1	
Whatcom	Brick Mason	Brick And Block Finisher	$44.46	5A	1M	
Whatcom	Brick Mason	Journey Level	$51.32	5A	1M	
Whatcom	Brick Mason	Pointer-Caulker-Cleaner	$51.32	5A	1M	
Whatcom	Building Service Employees	Janitor	$9.47		1	
Whatcom	Building Service Employees	Shampooer	$9.47		1	
Whatcom	Building Service Employees	Waxer	$9.47		1	
Whatcom	Building Service Employees	Window Cleaner	$9.47		1	
Whatcom	Cabinet Makers (In Shop)	Journey Level	$24.89		1	
Whatcom	Carpenters	Acoustical Worker	$52.32	5D	4C	
Whatcom	Carpenters	Bridge, Dock And Wharf Carpenters	$52.32	5D	4C	
Whatcom	Carpenters	Carpenter	$52.32	5D	4C	
Whatcom	Carpenters	Carpenters on Stationary Tools	$52.45	5D	4C	
Whatcom	Carpenters	Creosoted Material	$52.42	5D	4C	
Whatcom	Carpenters	Floor Finisher	$52.32	5D	4C	
Whatcom	Carpenters	Floor Layer	$52.32	5D	4C	
Whatcom	Carpenters	Scaffold Erector	$52.32	5D	4C	
Whatcom	Cement Masons	Journey Level	$52.38	7A	1M	
Whatcom	Divers & Tenders	Diver	$105.37	5D	4C	8A
Whatcom	Divers & Tenders	Diver On Standby	$59.50	5D	4C	
Whatcom	Divers & Tenders	Diver Tender	$54.82	5D	4C	
Whatcom	Divers & Tenders	Surface Rcv & Rov Operator	$54.82	5D	4C	
Whatcom	Divers & Tenders	Surface Rcv & Rov Operator Tender	$51.07	5A	4C	
Whatcom	Dredge Workers	Assistant Engineer	$54.75	5D	3F	
Whatcom	Dredge Workers	Assistant Mate (Deckhand)	$54.33	5D	3F	
Whatcom	Dredge Workers	Boatmen	$54.75	5D	3F	
Whatcom	Dredge Workers	Engineer Welder	$55.79	5D	3F	

Whatcom	Dredge Workers	Leverman, Hydraulic	$56.92	5D	3F	
Whatcom	Dredge Workers	Mates	$54.75	5D	3F	
Whatcom	Dredge Workers	Oiler	$54.33	5D	3F	
Whatcom	Drywall Applicator	Journey Level	$52.32	5D	1H	
Whatcom	Drywall Tapers	Journey Level	$29.63		1	
Whatcom	Electrical Fixture Maintenance Workers	Journey Level	$13.82		1	
Whatcom	Electricians - Inside	Cable Splicer	$62.37	7H	1E	
Whatcom	Electricians - Inside	Construction Stock Person	$30.95	7H	1D	
Whatcom	Electricians - Inside	Journey Level	$58.23	7H	1E	
Whatcom	Electricians - Motor Shop	Craftsman	$15.37		1	
Whatcom	Electricians - Motor Shop	Journey Level	$14.69		1	
Whatcom	Electricians - Powerline Construction	Cable Splicer	$69.95	5A	4D	
Whatcom	Electricians - Powerline Construction	Certified Line Welder	$63.97	5A	4D	
Whatcom	Electricians - Powerline Construction	Groundperson	$43.62	5A	4D	
Whatcom	Electricians - Powerline Construction	Heavy Line Equipment Operator	$63.97	5A	4D	
Whatcom	Electricians - Powerline Construction	Journey Level Lineperson	$63.97	5A	4D	
Whatcom	Electricians - Powerline Construction	Line Equipment Operator	$53.81	5A	4D	
Whatcom	Electricians - Powerline Construction	Pole Sprayer	$63.97	5A	4D	
Whatcom	Electricians - Powerline Construction	Powderperson	$47.55	5A	4D	
Whatcom	Electronic Technicians	Journey Level	$25.09		1	
Whatcom	Elevator Constructors	Mechanic	$82.67	7D	4A	
Whatcom	Elevator Constructors	Mechanic In Charge	$89.40	7D	4A	
Whatcom	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	$13.67		1	
Whatcom	Fence Erectors	Fence Erector	$22.97		1	
Whatcom	Flaggers	Journey Level	$36.17	7A	3I	
Whatcom	Glaziers	Journey Level	$54.91	7L	1Y	
Whatcom	Heat & Frost Insulators And Asbestos Workers	Journeyman	$61.18	5J	1S	
Whatcom	Heating Equipment Mechanics	Journey Level	$19.85		1	
Whatcom	Hod Carriers & Mason Tenders	Journey Level	$44.00	7A	3I	
Whatcom	Industrial Power Vacuum Cleaner	Journey Level	$9.47		1	
Whatcom	Inland Boatmen	Boat Operator	$54.57	5B	1K	
Whatcom	Inland Boatmen	Cook	$50.95	5B	1K	
Whatcom	Inland Boatmen	Deckhand	$51.19	5B	1K	
Whatcom	Inland Boatmen	Deckhand Engineer	$52.18	5B	1K	
Whatcom	Inland Boatmen	Launch Operator	$53.40	5B	1K	
Whatcom	Inland Boatmen	Mate	$53.40	5B	1K	

Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$9.73		1	
Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$11.48		1	
Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$12.78		1	
Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$9.47		1	
Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$10.53		1	
Whatcom	Insulation Applicators	Journey Level	$52.32	5D	4C	
Whatcom	Ironworkers	Journeyman	$61.62	7N	1O	
Whatcom	Laborers	Air, Gas Or Electric Vibrating Screed	$42.67	7A	3I	
Whatcom	Laborers	Airtrac Drill Operator	$44.00	7A	3I	
Whatcom	Laborers	Ballast Regular Machine	$42.67	7A	3I	
Whatcom	Laborers	Batch Weighman	$36.17	7A	3I	
Whatcom	Laborers	Brick Pavers	$42.67	7A	3I	
Whatcom	Laborers	Brush Cutter	$42.67	7A	3I	
Whatcom	Laborers	Brush Hog Feeder	$42.67	7A	3I	
Whatcom	Laborers	Burner	$42.67	7A	3I	
Whatcom	Laborers	Caisson Worker	$44.00	7A	3I	
Whatcom	Laborers	Carpenter Tender	$42.67	7A	3I	
Whatcom	Laborers	Caulker	$42.67	7A	3I	
Whatcom	Laborers	Cement Dumper-paving	$43.46	7A	3I	
Whatcom	Laborers	Cement Finisher Tender	$42.67	7A	3I	
Whatcom	Laborers	Change House Or Dry Shack	$42.67	7A	3I	
Whatcom	Laborers	Chipping Gun (under 30 Lbs.)	$42.67	7A	3I	
Whatcom	Laborers	Chipping Gun(30 Lbs. And Over)	$43.46	7A	3I	
Whatcom	Laborers	Choker Setter	$42.67	7A	3I	
Whatcom	Laborers	Chuck Tender	$42.67	7A	3I	
Whatcom	Laborers	Clary Power Spreader	$43.46	7A	3I	
Whatcom	Laborers	Clean-up Laborer	$42.67	7A	3I	
Whatcom	Laborers	Concrete Dumper/chute Operator	$43.46	7A	3I	
Whatcom	Laborers	Concrete Form Stripper	$42.67	7A	3I	
Whatcom	Laborers	Concrete Placement Crew	$43.46	7A	3I	
Whatcom	Laborers	Concrete Saw Operator/core Driller	$43.46	7A	3I	
Whatcom	Laborers	Crusher Feeder	$36.17	7A	3I	
Whatcom	Laborers	Curing Laborer	$42.67	7A	3I	
Whatcom	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	$42.67	7A	3I	

Whatcom	Laborers	Ditch Digger	$42.67	7A	3I	
Whatcom	Laborers	Diver	$44.00	7A	3I	
Whatcom	Laborers	Drill Operator (hydraulic,diamond)	$43.46	7A	3I	
Whatcom	Laborers	Dry Stack Walls	$42.67	7A	3I	
Whatcom	Laborers	Dump Person	$42.67	7A	3I	
Whatcom	Laborers	Epoxy Technician	$42.67	7A	3I	
Whatcom	Laborers	Erosion Control Worker	$42.67	7A	3I	
Whatcom	Laborers	Faller & Bucker Chain Saw	$43.46	7A	3I	
Whatcom	Laborers	Fine Graders	$42.67	7A	3I	
Whatcom	Laborers	Firewatch	$36.17	7A	3I	
Whatcom	Laborers	Form Setter	$42.67	7A	3I	
Whatcom	Laborers	Gabian Basket Builders	$42.67	7A	3I	
Whatcom	Laborers	General Laborer	$42.67	7A	3I	
Whatcom	Laborers	Grade Checker & Transit Person	$44.00	7A	3I	
Whatcom	Laborers	Grinders	$42.67	7A	3I	
Whatcom	Laborers	Grout Machine Tender	$42.67	7A	3I	
Whatcom	Laborers	Groutmen (pressure)including Post Tension Beams	$43.46	7A	3I	
Whatcom	Laborers	Guardrail Erector	$42.67	7A	3I	
Whatcom	Laborers	Hazardous Waste Worker (level A)	$44.00	7A	3I	
Whatcom	Laborers	Hazardous Waste Worker (level B)	$43.46	7A	3I	
Whatcom	Laborers	Hazardous Waste Worker (level C)	$42.67	7A	3I	
Whatcom	Laborers	High Scaler	$44.00	7A	3I	
Whatcom	Laborers	Jackhammer	$43.46	7A	3I	
Whatcom	Laborers	Laserbeam Operator	$43.46	7A	3I	
Whatcom	Laborers	Maintenance Person	$42.67	7A	3I	
Whatcom	Laborers	Manhole Builder-mudman	$43.46	7A	3I	
Whatcom	Laborers	Material Yard Person	$42.67	7A	3I	
Whatcom	Laborers	Motorman-dinky Locomotive	$43.46	7A	3I	
Whatcom	Laborers	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Bla	$43.46	7A	3I	
Whatcom	Laborers	Pavement Breaker	$43.46	7A	3I	
Whatcom	Laborers	Pilot Car	$36.17	7A	3I	
Whatcom	Laborers	Pipe Layer Lead	$44.00	7A	3I	
Whatcom	Laborers	Pipe Layer/tailor	$43.46	7A	3I	
Whatcom	Laborers	Pipe Pot Tender	$43.46	7A	3I	
Whatcom	Laborers	Pipe Reliner	$43.46	7A	3I	
Whatcom	Laborers	Pipe Wrapper	$43.46	7A	3I	
Whatcom	Laborers	Pot Tender	$42.67	7A	3I	
Whatcom	Laborers	Powderman	$44.00	7A	3I	

Whatcom	Laborers	Powderman's Helper	$42.67	7A	3I	
Whatcom	Laborers	Power Jacks	$43.46	7A	3I	
Whatcom	Laborers	Railroad Spike Puller - Power	$43.46	7A	3I	
Whatcom	Laborers	Raker - Asphalt	$44.00	7A	3I	
Whatcom	Laborers	Re-timberman	$44.00	7A	3I	
Whatcom	Laborers	Remote Equipment Operator	$43.46	7A	3I	
Whatcom	Laborers	Rigger/signal Person	$43.46	7A	3I	
Whatcom	Laborers	Rip Rap Person	$42.67	7A	3I	
Whatcom	Laborers	Rivet Buster	$43.46	7A	3I	
Whatcom	Laborers	Rodder	$43.46	7A	3I	
Whatcom	Laborers	Scaffold Erector	$42.67	7A	3I	
Whatcom	Laborers	Scale Person	$42.67	7A	3I	
Whatcom	Laborers	Sloper (over 20")	$43.46	7A	3I	
Whatcom	Laborers	Sloper Sprayer	$42.67	7A	3I	
Whatcom	Laborers	Spreader (concrete)	$43.46	7A	3I	
Whatcom	Laborers	Stake Hopper	$42.67	7A	3I	
Whatcom	Laborers	Stock Piler	$42.67	7A	3I	
Whatcom	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$43.46	7A	3I	
Whatcom	Laborers	Tamper (multiple & Self-propelled)	$43.46	7A	3I	
Whatcom	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	$43.46	7A	3I	
Whatcom	Laborers	Toolroom Person (at Jobsite)	$42.67	7A	3I	
Whatcom	Laborers	Topper	$42.67	7A	3I	
Whatcom	Laborers	Track Laborer	$42.67	7A	3I	
Whatcom	Laborers	Track Liner (power)	$43.46	7A	3I	
Whatcom	Laborers	Traffic Control Laborer	$38.68	7A	3I	8R
Whatcom	Laborers	Traffic Control Supervisor	$38.68	7A	3I	8R
Whatcom	Laborers	Truck Spotter	$42.67	7A	3I	
Whatcom	Laborers	Tugger Operator	$43.46	7A	3I	
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$64.99	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$70.02	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$73.70	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$79.40	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$81.52	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$86.62	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$88.52	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$90.52	7A	3I	8Q

Whatcom	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$92.52	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Guage and Lock Tender	$44.10	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Miner	$44.10	7A	3I	8Q
Whatcom	Laborers	Vibrator	$43.46	7A	3I	
Whatcom	Laborers	Vinyl Seamer	$42.67	7A	3I	
Whatcom	Laborers	Watchman	$32.87	7A	3I	
Whatcom	Laborers	Welder	$43.46	7A	3I	
Whatcom	Laborers	Well Point Laborer	$43.46	7A	3I	
Whatcom	Laborers	Window Washer/cleaner	$32.87	7A	3I	
Whatcom	Laborers - Underground Sewer & Water	General Laborer & Topman	$42.67	7A	3I	
Whatcom	Laborers - Underground Sewer & Water	Pipe Layer	$43.46	7A	3I	
Whatcom	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	$11.50		1	
Whatcom	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	$11.50		1	
Whatcom	Landscape Construction	Landscaping Or Planting Laborers	$11.50		1	
Whatcom	Lathers	Journey Level	$52.32	5D	1H	
Whatcom	Marble Setters	Journey Level	$51.32	5A	1M	
Whatcom	Metal Fabrication (In Shop)	Fitter	$13.81		1	
Whatcom	Metal Fabrication (In Shop)	Laborer	$9.47		1	
Whatcom	Metal Fabrication (In Shop)	Machine Operator	$13.81		1	
Whatcom	Metal Fabrication (In Shop)	Welder	$13.81		1	
Whatcom	Millwright	Journey Level	$30.79		1	
Whatcom	Modular Buildings	Journey Level	$9.47		1	
Whatcom	Painters	Journey Level	$37.80	6Z	2B	
Whatcom	Pile Driver	Journey Level	$52.57	5D	4C	
Whatcom	Plasterers	Journey Level	$50.42	7Q	1R	
Whatcom	Playground & Park Equipment Installers	Journey Level	$9.47		1	
Whatcom	Plumbers & Pipefitters	Journey Level	$63.57	5A	1G	
Whatcom	Power Equipment Operators	Asphalt Plant Operators	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Assistant Engineer	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Barrier Machine (zipper)	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Batch Plant Operator, Concrete	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Bobcat	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Brokk - Remote Demolition Equipment	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Brooms	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Bump Cutter	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Cableways	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Chipper	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Compressor	$51.97	7A	3C	8P

Whatcom	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Finish Machine -laser Screed	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Conveyors	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 200 Tons To 300 Tons, Or 250' Of Boom (including Jib With Attachments)	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: Friction 100 Tons Through 199 Tons	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: Friction Over 200 Tons	$56.92	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: Over 300 Tons Or 300' Of Boom (including Jib With Attachments)	$56.92	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Crusher	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Deck Engineer/deck Winches (power)	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Derricks, On Building Work	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Dozers D-9 & Under	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Drilling Machine	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	$51.97	7A	3C	8P

Whatcom	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Gradechecker/stakeman	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Guardrail Punch	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Horizontal/directional Drill Locator	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Horizontal/directional Drill Operator	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Hydralifts/boom Trucks Over 10 Tons	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Loaders, Overhead Under 6 Yards	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Loaders, Plant Feed	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Loaders: Elevating Type Belt	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Locomotives, All	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Material Transfer Device	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Mechanics, All (leadmen - $0.50 Per Hour Over Mechanic)	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators	Motor Patrol Grader - Non-finishing	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Motor Patrol Graders, Finishing	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Pavement Breaker	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Pile Driver (other Than Crane Mount)	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$54.33	7A	3C	8P

Whatcom	Power Equipment Operators	Posthole Digger, Mechanical	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Power Plant	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Pumps - Water	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Rigger And Bellman	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Rollagon	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Roller, Other Than Plant Mix	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Roto-mill, Roto-grinder	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Saws - Concrete	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Scrapers - Concrete & Carry All	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Service Engineers - Equipment	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Shotcrete/gunite Equipment	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators	Slipform Pavers	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Spreader, Topsider & Screedman	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Subgrader Trimmer	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Bucket Elevators	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Crane Over 175'in Height, Base To Boom	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators	Transporters, All Track Or Truck Type	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Trenching Machines	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	$54.75	7A	3C	8P

Whatcom	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators	Truck Mount Portable Conveyor	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators	Welder	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators	Wheel Tractors, Farmall Type	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators	Yo Yo Pay Dozer	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Bobcat	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Brooms	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cableways	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Chipper	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Compressor	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Conveyors	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 Tons To 300 Tons, Or 250' Of Boom (including Jib With Attachments)	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With	$55.24	7A	3C	8P

		Attachments)				
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction 100 Tons Through 199 Tons	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction Over 200 Tons	$56.92	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: Over 300 Tons Or 300' Of Boom (including Jib With Attachments)	$56.92	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Crusher	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Guardrail Punch	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks Over 10 Tons	$54.33	7A	3C	8P

Whatcom	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Mechanics, All (leadmen - $0.50 Per Hour Over Mechanic)	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Grader - Non-finishing	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders, Finishing	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Power Plant	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	$55.24	7A	3C	8P

Whatcom	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Rigger And Bellman	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Rollagon	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$55.79	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Crane Over 175'in Height, Base To Boom	$56.36	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	$55.79	7A	3C	8P

Whatcom	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	$54.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$54.75	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Welder	$55.24	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$51.97	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$54.75	7A	3C	8P
Whatcom	Power Line Clearance Tree Trimmers	Journey Level In Charge	$45.75	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Spray Person	$43.38	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$45.75	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Tree Trimmer	$40.84	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$30.74	5A	4A	
Whatcom	Refrigeration & Air Conditioning Mechanics	Journey Level	$23.95		1	
Whatcom	Residential Brick Mason	Journey Level	$51.32	5A	1M	
Whatcom	Residential Carpenters	Journey Level	$23.81		1	
Whatcom	Residential Cement Masons	Journey Level	$27.28		1	
Whatcom	Residential Drywall Applicators	Journey Level	$25.00		1	
Whatcom	Residential Drywall Tapers	Journey Level	$23.91		1	
Whatcom	Residential Electricians	Journey Level	$37.65		1	
Whatcom	Residential Glaziers	Journey Level	$13.79		1	
Whatcom	Residential Insulation Applicators	Journey Level	$13.96		1	
Whatcom	Residential Laborers	Journey Level	$20.00		1	
Whatcom	Residential Marble Setters	Journey Level	$51.32	5A	1M	
Whatcom	Residential Painters	Journey Level	$17.43		1	
Whatcom	Residential Plumbers & Pipefitters	Journey Level	$28.26		1	
Whatcom	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$37.72	5A	1G	
Whatcom	Residential Sheet Metal Workers	Journey Level (Field or Shop)	$33.04	7J	1I	
Whatcom	Residential Soft Floor Layers	Journey Level	$23.46		1	
Whatcom	Residential Sprinkler Fitters (Fire Protection)	Journey Level	$13.23		1	
Whatcom	Residential Stone Masons	Journey Level	$51.32	5A	1M	

Whatcom	Residential Terrazzo Workers	Journey Level	$9.47		1	
Whatcom	Residential Terrazzo/Tile Finishers	Journey Level	$14.00		1	
Whatcom	Residential Tile Setters	Journey Level	$9.47		1	
Whatcom	Roofers	Journey Level	$25.27		1	
Whatcom	Sheet Metal Workers	Journey Level (Field or Shop)	$57.51	7F	1E	
Whatcom	Shipbuilding & Ship Repair	Boilermaker	$39.82	7M	1H	
Whatcom	Shipbuilding & Ship Repair	Carpenter	$15.16		1	
Whatcom	Shipbuilding & Ship Repair	Crane Operator	$16.04		1	
Whatcom	Shipbuilding & Ship Repair	Electrician	$15.18		1	
Whatcom	Shipbuilding & Ship Repair	Heat & Frost Insulator	$61.18	5J	1S	
Whatcom	Shipbuilding & Ship Repair	Inside Machinist	$16.70		1	
Whatcom	Shipbuilding & Ship Repair	Laborer	$23.38		1	
Whatcom	Shipbuilding & Ship Repair	Outside Machinist	$14.69		1	
Whatcom	Shipbuilding & Ship Repair	Painter	$15.16		1	
Whatcom	Shipbuilding & Ship Repair	Pipefitter	$15.18		1	
Whatcom	Shipbuilding & Ship Repair	Sheet Metal	$20.26		1	
Whatcom	Shipbuilding & Ship Repair	Welder/burner	$15.21		1	
Whatcom	Sign Makers & Installers (Electrical)	Journey Level	$16.03		1	
Whatcom	Sign Makers & Installers (Non-Electrical)	Journey Level	$14.23		1	
Whatcom	Soft Floor Layers	Journey Level	$42.41	5A	3D	
Whatcom	Solar Controls For Windows	Journey Level	$9.47		1	
Whatcom	Sprinkler Fitters (Fire Protection)	Journey Level	$52.93	7J	1R	
Whatcom	Stage Rigging Mechanics (Non Structural)	Journey Level	$13.23		1	
Whatcom	Stone Masons	Journey Level	$51.32	5A	1M	
Whatcom	Street And Parking Lot Sweeper Workers	Journey Level	$15.00		1	
Whatcom	Surveyors	All Classifications	$36.16	Null	1	
Whatcom	Telecommunication Technicians	Journey Level	$42.07	7E	1E	
Whatcom	Telephone Line Construction - Outside	Cable Splicer	$36.96	5A	2B	
Whatcom	Telephone Line Construction - Outside	Hole Digger/Ground Person	$20.49	5A	2B	
Whatcom	Telephone Line Construction - Outside	Installer (Repairer)	$35.40	5A	2B	
Whatcom	Telephone Line Construction - Outside	Special Aparatus Installer I	$36.96	5A	2B	
Whatcom	Telephone Line Construction - Outside	Special Apparatus Installer II	$36.19	5A	2B	
Whatcom	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	$36.96	5A	2B	
Whatcom	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$34.34	5A	2B	

Whatcom	Telephone Line Construction - Outside	Telephone Lineperson	$34.34	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television Groundperson	$19.45	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television Lineperson/Installer	$25.89	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television System Technician	$30.97	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television Technician	$27.77	5A	2B	
Whatcom	Telephone Line Construction - Outside	Tree Trimmer	$34.34	5A	2B	
Whatcom	Terrazzo Workers	Journey Level	$46.96	5A	1M	
Whatcom	Tile Setters	Journey Level	$46.96	5A	1M	
Whatcom	Tile, Marble & Terrazzo Finishers	Finisher	$37.79	5A	1B	
Whatcom	Traffic Control Stripers	Journey Level	$17.41		1	
Whatcom	Truck Drivers	Asphalt Mix	$30.15		1	
Whatcom	Truck Drivers	Dump Truck	$19.32		1	
Whatcom	Truck Drivers	Dump Truck And Trailer	$19.32		1	
Whatcom	Truck Drivers	Other Trucks	$14.48		1	
Whatcom	Truck Drivers	Transit Mixer	$16.81		1	
Whatcom	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$15.00		1	
Whatcom	Well Drillers & Irrigation Pump Installers	Oiler	$9.47		1	
Whatcom	Well Drillers & Irrigation Pump Installers	Well Driller	$18.02		1	

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

   O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

   P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

   Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

   R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

   S. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays and all other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

   V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

   W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

   X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

   Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

   Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two times the hourly rate of wage.

F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

H. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

W. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar ($1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

3. C. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays shall be paid at double the hourly rate of wage. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

D. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 15% over the hourly rate of wage. All other hours worked after 6:00 am on Saturdays, shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.

F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

I. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions during a five day work week (Monday through Friday,) or a four day-ten hour work week (Tuesday through Friday,) then Saturday may be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

B. All hours worked over twelve (12) hours per day and all hours worked on holidays shall be paid at double the hourly rate of wage.

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

4. D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).

5. K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (8).

N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

6. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (8).

E. Paid Holidays: New Year's Day, Day Before Or After New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, Christmas Day, And A Half-Day On Christmas Eve Day. (9 1/2).

G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And Christmas Eve Day (11).

H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).

T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

6. Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday And Saturday After Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

7. K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day 10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

T. Paid Holidays: New Year's Day, The Day After Or Before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, and The Day After Or Before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Note Codes

8. A. In addition to the hourly wage and fringe benefits, the following depth premiums apply to depths of fifty feet or more:
Over 50' To 100' -$2.00 per Foot for Each Foot Over 50 Feet
Over 100' To 150' -$3.00 per Foot for Each Foot Over 100 Feet
Over 150' To 220' -$4.00 per Foot for Each Foot Over 150 Feet
Over 220' -$5.00 per Foot for Each Foot Over 220 Feet

8. C. In addition to the hourly wage and fringe benefits, the following depth premiums apply to depths of fifty feet or more:
Over 50’ To 100' -$1.00 per Foot for Each Foot Over 50 Feet
Over 100' To 150' -$1.50 per Foot for Each Foot Over 100 Feet
Over 150' To 200' -$2.00 per Foot for Each Foot Over 150 Feet
Over 200' -Divers May Name Their Own Price

D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

P. Workers on hazmat projects receive additional hourly premiums as follows -Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, And Class D Suit $0.50.

Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

R. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

APPENDIX B – GEOTECH

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March 26, 2015
Project No. 15-0061

Rechhardt & Ebe Engineering
PO Box 978
Lynden, WA 98264

Attn.: Luis Ponce, P.E.

Re: Geotechnical Exploration Report
Proposed Culvert Replacement
California Creek
Brown Road East of Malloy Avenue
Ferndale, WA 98248

Dear Mr. Ponce:

As requested, GeoTest Services, Inc. (GTS) is pleased to submit this report summarizing the results of our geotechnical evaluation for the proposed California Creek culvert improvements, located along Brown Road east of Malloy Avenue in Ferndale, Washington (see Vicinity Map, Figure 1).

PURPOSE AND SCOPE OF SERVICES

The purpose of this evaluation was to establish general subsurface conditions beneath the site from which conclusions and recommendations pertaining to project design could be formulated. Specifically, our scope of services included the following tasks:

- Exploration of the subsurface soil and groundwater conditions by advancing two boring explorations with a subcontracted drill rig to depths of approximately 21.5 feet below ground surface (BGS).

- Laboratory testing on representative samples in order to classify and evaluate the engineering characteristics of the soils encountered.

- Provide this written report containing a description of subsurface conditions, exploration logs, findings and recommendations pertaining to the planned culvert replacement below the existing road surface on Brown Road east of Malloy Avenue. GTS has provided recommendations for site preparation and earthwork, fill and compaction, wet weather earthwork, seismic design, foundation recommendations, temporary and permanent slopes, geotechnical consultation and construction monitoring.

PROJECT DESCRIPTION

We understand that the planned improvements will include replacing the current concrete pipe culverts with a new concrete box culvert extending below the existing road surface on Brown Road east of Malloy Avenue. The proposed culvert is a 14 foot wide, 3-sided concrete box culvert. At the time of this report, construction plans have not been fully developed and our

recommendations are based on our conversations with the design team, the client, and our past experience with similar projects. GTS expects that the new culvert will require soil cuts and a partial, temporary removal of the existing road to allow for construction access.

SITE CONDITIONS

This section discusses the general surface and subsurface conditions observed at the project site during the time of our field investigation. Interpretations of the site conditions are based upon the results of our review of available information, site reconnaissance, subsurface explorations, laboratory testing, and our experience in the project vicinity.

Surface Conditions

The project site currently supports two existing culverts that service California Creek. The site is located on Brown Road approximately 500 feet east of the intersection of Brown Road and Malloy Avenue. The site is relatively flat with the exception of the roadway and creek embankments. Vegetation in the vicinity of the project site primarily consists of blackberries, grasses, apparent wetland plants and mature deciduous trees.

Subsurface Soil Conditions

Subsurface conditions were explored by advancing 2 exploration borings, B-1 and B-2, on March 9, 2015 with a subcontracted drill rig. Boring explorations were advanced to a depth of approximately 21.5 feet BGS. To allow for the advancement of borings, an approximately 9 inch diameter asphalt section was removed at each boring location to expose the underlying soils. The asphalt was removed using a drill head tip that was advanced with the drill rig. The pavement thickness was measured at the locations of the borings. Upon completion, both of the boring locations were backfilled and the upper approximately 6 inches of the boring were filled with cold patch asphalt. Please refer to the attached Site and Exploration Plan, Figure 2, for approximate boring locations.

Disturbed but representative samples were obtained during drilling by using the Standard Penetration Test (SPT) procedure in accordance with American Society for Testing and Materials ASTM D1586 during the explorations. This test and sampling method consists of driving a standard 2-inch, outside-diameter, split-barrel sampler a distance of 18 inches into the soil with a 140-pound hammer free-falling 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. If a total of 50 is recorded within one 6-inch interval, the blow count is recorded as the number of blows for the corresponding number of inches of penetration. The resistance, or N-value, provides a measure of the relative density of granular soils or the relative consistency of cohesive soils; these values are reported on the attached boring logs.

Beneath the asphalt, subsurface conditions generally consisted of a brown, very gravelly sand/very sandy gravel, interpreted as previously placed fill/probable pit-run, to depths of approximately 3 and 4 feet BGS in borings B-1 and B-2, respectively. A soft, brown, very sandy silt, interpreted as alluvium, was encountered underlying the previously placed fill material to depths of approximately 12 and 7 feet BGS in borings B-1 and B-2, respectively. At approximately 12 and 7 feet BGS in borings B-1 and B-2, respectively, the alluvium deposits transition from a very sandy silt to a very loose to dense, brown, very silty to silty sand. The brown, very silty to silty sand alluvium deposits extended to the full depth of our boring

explorations. More detailed descriptions of the subsurface conditions encountered at each boring location are included in the logs attached with this report.

General Geologic Conditions

General geologic information for the project site was obtained from the *Geologic map of western Whatcom County, Washington (Easterbrook, 1976)* published by the U.S. Geological Services. According to this map, near surface soils in the vicinity of the project consist of Sand and Gravel overlying Bellingham Drift (Qbg).

According to Easterbrook, the Sand and Gravel overlying Bellingham Drift is generally composed of loose moderately well-sorted, stratified sand and gravel with a thickness up to 10 feet. These deposits were probably formed by waves reworking the Bellingham Drift and removing the majority of the fine sediments. Bellingham Drift is a glaciomarine drift deposit described as blue-grey, unsorted, unstratified pebbly sandy silt to pebbly clay. Glaciomarine drift is described as being deposited directly onto the sea floor from debris melted out of floating ice.

Near surface deposits were representative of the mapped deposits.

Groundwater

At the time of our subsurface investigation on March 9, 2015, groundwater seepage was encountered at depths of approximately 8 feet and 7.5 feet BGS in Borings B-1 and B-2, respectively. No distinct mottled horizon, potentially indicative of a seasonal-high groundwater elevation, was noted.

The groundwater conditions reported on the exploration logs are for the specific locations and dates indicated, and therefore may not necessarily be indicative of other locations and/or times. Groundwater levels are not static and it is anticipated that groundwater conditions will vary depending on local subsurface conditions, season, precipitation, changes in land use both on and off site, and other factors.

CONCLUSIONS AND RECOMMENDATIONS

Based upon evaluation of the data collected during this investigation, it is our opinion that the subsurface conditions at the site are suitable for the proposed concrete box culvert beneath Brown Road, provided the recommendations contained herein are incorporated into the project design. Due to the presence of relatively loose sandy silts encountered to a depth of approximately 10 feet to reach suitable native soils. We recommend that the existing soils be excavated to a minimum of 10 feet BGS and the installation of the culvert be supported by a suitable base of imported, properly compacted structural fill placed over suitable native soils

We also recommend that the new concrete culvert and amount of soil used as backfill for the proposed culvert and roadway embankments weigh equal to or less than the existing culvert and embankment soil so that there is not a net pressure increase on the underlying soils. Adding additional weight increases the likelihood for post-construction settlements due to surcharging of the underlying soils. GeoTest is available to further assist with the analysis of the fill weights, balance ratios and the proposed new culvert design and materials selection, upon request. Installation of the culvert is likely to require temporary de-watering and/or re-routing of California Creek during construction.

Seismic Design Considerations

The Pacific Northwest is seismically active and the site could be subject to ground shaking from a moderate to major earthquake. Consequently, moderate levels of earthquake shaking should be anticipated during the design life of the project, and the proposed structure should be designed to resist earthquake loading using appropriate design methodology.

For structures designed using the seismic design provisions of the 2012 International Building Code, the underlying Alluvium interpreted to underlie the site within the upper 100 feet classifies as Site Class D according to Site Class Definitions, Table 1613.5.2. The corresponding values for calculating a design response spectrum for the assumed soil profile type is considered appropriate for the site.

Please reference the following values for seismic structural design purposes:

Conterminous 48 States – 2012 International Building Code
Zip Code 98248
Central Latitude = 48.884656º, Central Longitude = -122.592764º

Short Period (0.2 sec) Spectral Acceleration

Maximum Considered Earthquake (MCE) Value of S_s = 0.941 (g)
Site Response Coefficient, F_a = 1.124 (Site Class D)
Adjusted spectral response acceleration for Site Class D, $S_{MS} = S_s \times F_a = 1.057$ (g)
Design spectral response acceleration for Site Class D, $S_{DS} = 2/3 \times SM_s = 0.705$ (g)

One Second Period (1 sec) Spectral Acceleration

Maximum Considered Earthquake (MCE) Value of S_1 = 0.370 (g)
Site Response Coefficient, F_v = 1.661 (Site Class D)
Adjusted spectral response acceleration for Site Class D, $S_{M1} = S_1 \times F_v = 0.614$ (g)
Design spectral response acceleration for Site Class D, $S_{D1} = 2/3 \times SM_1 = 0.409$ (g)

Erosion Hazard Potential

The site is relatively flat and has a low potential for erosion hazards, as defined by the governing municipality on the upper portion of the site. The areas in close proximity to California Creek have an elevated erosion hazard due to the presence of the creek. Site development is anticipated to include a Washington State Department of Ecology Construction Storm Water General Permit to mitigate the erosion potential of soils exposed during construction or site grading activities. In order to meet the criteria established by the Department of Ecology, an erosion control plan consistent with the governing municipal standards and best management practices will be required for this project. The contractor will be responsible for implementing the erosion control plan as established in the plans and specifications approved by the governing municipality for the project.

Site Preparation and Earthwork

The portions of the site to be occupied by the proposed culvert should be prepared by removing any topsoil, deleterious material and significant accumulations of organics from the areas to be developed. Prior to placement of any culvert elements or structural fill, the exposed subgrade

should be observed by a GTS representative. The purpose of this effort is to identify possible loose or soft soil deposits prior to construction of the culvert. Due to the high moisture contents encountered on site GTS does not recommend compaction onsite soils. Loose or otherwise disturbed soils should be overexcavated to firm soil. Overexcavated areas should be backfilled with compacted granular material placed in accordance with subsequent recommendations for structural fill.

Structural Fill and Compaction

Structural fill used to obtain final elevations must be properly placed and compacted. In general, non-organic, predominantly granular soil may be used for structural fill applications provided the material is properly moisture conditioned prior to placement and compaction, and the specified degree of compaction is obtained. Material containing topsoil, wood, trash, organic material, or other debris will not be suitable for reuse as structural fill and should be properly disposed of offsite or placed in nonstructural areas.

Soils containing more than approximately 5 percent fines are considered moisture sensitive, and are very difficult to compact to a firm and unyielding condition when over the optimum moisture content by more than approximately 2 percent. The optimum moisture content is that which allows the greatest dry density to be achieved at a given level of compactive effort.

Reuse of On-Site Soil

Due to elevated silt and organic contents in the near-surface soils and the presence of saturated soils on the site, GTS does not recommend that native soils be re-used as structural fill due to the difficulties associated with moisture conditioning of these soils. We recommend any reuse of the native soils be limited to landscape and other non-structural areas.

Imported Structural Fill

We recommend that imported structural fill consist of clean, well-graded sandy gravel, gravelly sand, or other approved naturally occurring granular material (pit run) with at least 30 percent retained on the No. 4 sieve, or a well-graded crushed rock. Structural fill should contain less than 5 percent fines (that portion passing the U.S. No. 200 sieve) based on the portion passing the U.S. No. 4 sieve due to the wet to saturated subgrade soil conditions.

Due to wet weather or wet site conditions, soil moisture contents could be high enough that it may be very difficult to compact even “clean” imported select granular fill to a firm and unyielding condition. Soils with over-optimum moisture contents should be scarified and dried back to more suitable moisture contents during periods of dry weather or removed and replaced with drier structural fill.

Backfill and Compaction

Structural fill should be placed in horizontal lifts 8 to 10 inches in loose thickness and thoroughly compacted. All structural fill should be compacted to at least 95 percent of the maximum dry density, as determined using test method ASTM D1557. The top of the compacted structural fill should extend outside of the culvert area a minimum distance equal to the thickness of the fill placed beneath the culvert. We recommend that compaction be tested periodically throughout the fill placement process.

Wet Weather Earthwork

It is our experience that fine grained native soils are particularly susceptible to degradation during wet weather. As a result, it may be difficult to control the moisture content of the site soils during the wet season. If construction is accomplished during wet weather, we recommend that structural fill consist of imported, clean, well-graded sand or sand and gravel as described above. If fill is to be placed or earthwork is to be performed in wet weather or under wet conditions, the contractor may reduce soil disturbance by:

- Limiting the size of areas that are stripped of topsoil and left exposed
- Accomplishing earthwork in small sections
- Limiting construction traffic over unprotected soil
- Sloping excavated surfaces to promote runoff
- Limiting the size and type of construction equipment used
- Providing gravel "working mats" over areas of prepared subgrade
- Removing wet surficial soil prior to commencing fill placement each day
- Sealing the exposed ground surface by rolling with a smooth drum compactor or rubber-tired roller at the end of each working day
- Providing up-gradient perimeter ditches or low earthen berms and using temporary sumps to collect runoff and prevent water from ponding and damaging exposed subgrades

Foundation Support

Support for the proposed pre-cast concrete box culvert is not anticipated to require a poured concrete foundation; however, wing walls located at either end of the culvert are expected to include shallow pre-cast foundations, where applicable. We recommend that all culvert and wing wall foundations be founded on a minimum of 2 feet of imported structural fill placed directly over undisturbed, properly prepared, native soil or approved existing fill. We recommend that qualified geotechnical personnel confirm that suitable bearing conditions have been reached prior to placement of both the structural fill and the pre-cast foundation or box culvert elements.

To provide proper support, we recommend that existing topsoil, unsuitable fill, and/or loose upper portions of the native soil be removed from beneath the wing wall areas and below the planned culvert. Within the recommended overexcavations, the limits of the overexcavation should extend laterally beyond the edge of each side of the culvert or wing wall foundation a distance equal to the depth of the structural fill placed beneath.

Wing wall foundations should be founded a minimum of 18 inches below the lowest adjacent final grade for freeze/thaw protection. The wing wall foundations should be sized in accordance with the structural engineer's prescribed design criteria and seismic considerations.

Allowable Bearing Capacity

Assuming the above foundation support criteria are satisfied, wing wall foundations founded directly on a prism of compacted structural fill at least 2 feet thick, placed directly over undisturbed suitable native soils may be proportioned using a net allowable soil bearing pressure of 2,000 pounds per square foot (psf).

The term "net allowable bearing pressure" refers to the pressure that can be imposed on the soil at foundation level resulting from the total of all dead plus live loads, exclusive of the weight of the wing wall foundation or any backfill placed above the wing wall foundation. The net allowable bearing pressure may be increased by one-third for transient wind or seismic loads.

Settlement

Settlement of the culvert structures depends on foundation size and bearing pressure, as well as the strength and compressibility characteristics of the underlying soil. Assuming construction is accomplished as previously recommended and for the maximum allowable soil bearing pressure recommended above, we estimate the total settlement of culvert should be less than about 1 inch and differential settlement between two adjacent load-bearing components supported on competent soil should be less than about one half the total settlement.

As mentioned previously, we recommend that consideration to the net balance of weight between the planned new culvert and structural fill improvements verses the existing culverts and site conditions be evaluated. A significant increase to the net weight of the existing culverts conditions will result in a higher potential for post construction settlements. GeoTest is available to further assist with the design process to help limit the potential for excessive settlements.

Resistance to Lateral Loads

The lateral earth pressures that develop against culvert walls will depend on the method of backfill placement, degree of compaction, slope of backfill, type of backfill material, provisions for drainage, magnitude and location of any adjacent surcharge loads, and the degree to which the wall can yield laterally during or after placement of backfill. If the wall is allowed to rotate or yield so the top of the wall moves an amount equal to or greater than about 0.001 to 0.002 times its height (a yielding wall), the soil pressure exerted will be the active soil pressure. When a wall is restrained against lateral movement or tilting (a nonyielding wall), the soil pressure exerted is the at-rest soil pressure. Wall restraint may develop if a rigid structural network is constructed prior to backfilling or if the wall is inherently stiff.

We recommend that yielding walls under drained conditions be designed for an equivalent fluid density of 40 pounds per cubic ft (pcf) in active soil conditions. Nonyielding walls under drained conditions should be designed for an equivalent fluid density of 60 pcf in at-rest conditions. Under saturated conditions yielding walls should be designed for an equivalent fluid density of 76 pcf in active soil conditions. Nonyieding walls under saturated conditions should be designed for an equivalent fluid density of 85 pcf in at-rest conditions. Design of walls should include appropriate lateral pressures caused by surcharge loads located within a horizontal distance equal to or less than the height of the wall. For uniform surcharge pressures, a uniformly distributed lateral pressure equal to 35 percent and 50 percent of the vertical surcharge pressure should be added to the lateral soil pressures for yielding and nonyielding walls, respectively.

Passive earth pressures developed against the sides of culvert walls, in conjunction with friction developed between the base of the wing wall foundations and the supporting subgrade will resist lateral loads transmitted from the structure to its foundation. For design purposes, the passive resistance of well-compacted fill placed against the sides of foundations may be considered equivalent to a fluid with a density of 170 pounds per cubic feet under drained conditions and 130 pounds per cubic feet under saturated conditions. The recommended value includes a safety factor of about 1.5 and is based on the assumption that the ground surface

adjacent to the structure is level in the direction of movement for a distance equal to or greater than twice the embedment depth. The recommended value also assumes drained conditions that will prevent the buildup of hydrostatic pressure in the compacted fill. Culvert walls should include a drain system constructed in general accordance with the recommendations presented in the attached Culvert Wall Drain Section, Figure 3. In design computations, the upper 12 inches of passive resistance should be neglected if the soil is not covered by floor slabs or pavement. If future plans call for the removal of the soil providing resistance, the passive resistance should not be considered.

An allowable coefficient of base friction of 0.35 may be used between imported granular Structural Fill and the base of the wing wall foundation. If passive and frictional resistance are considered together, one half the recommended passive soil resistance value should be used since larger strains are required to mobilize the passive soil resistance as compared to frictional resistance. A safety factor of about 1.5 is included in the base friction design value. We do not recommend increasing the coefficient of friction to resist seismic or wind loads.

Temporary and Permanent Slopes

Actual construction slope configurations and maintenance of safe working conditions, including temporary excavation stability, should be the responsibility of the contractor, who is able to monitor the construction activities and has direct control over the means and methods of construction. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored during and after excavation for any evidence of instability. If instability is detected, the contractor should flatten the side slopes or install temporary shoring.

Temporary excavations in excess of 4 ft should be shored or sloped in accordance with Safety Standards for Construction Work Part N, WAC 296-155-657.

Temporary unsupported excavations in the near-surface alluvium encountered at the project sites are classified as a Type C soil according to WAC 296-155-657 and may be sloped as steep as 1.5H:1V (Horizontal: Vertical). All soils encountered are classified as Type C soil in the presence of groundwater seepage. Flatter slopes or temporary shoring may be required in areas where groundwater flow is present and unstable conditions develop.

Temporary slopes and excavations should be protected as soon as possible using appropriate methods to prevent erosion from occurring during periods of wet weather.

We recommend that permanent cut or fill slopes be designed for inclinations of 2H:1V or flatter. Permanent cut or fill slopes that are part of detention ponds, retention ponds, infiltration facilities, or other earth structures intended to receive stormwater should be designed for inclinations of 3H:1V or flatter. All permanent cut or fill slopes should be vegetated or otherwise protected to limit the potential for erosion as soon as practical after construction.

Geotechnical Consultation and Construction Monitoring

GeoTest Services recommends that we be involved in the project design review process. The purpose of the review is to verify that the recommendations presented in this report have been properly interpreted and incorporated in the design and specifications.

We recommend that geotechnical construction monitoring services be provided. These services should include observation by GeoTest personnel during structural fill placement, compaction

activities and subgrade preparation operations to confirm that design subgrade conditions are obtained beneath the proposed culvert. We also recommend that periodic field density testing be performed to verify that the appropriate degree of compaction is obtained. The purpose of these services would be to observe compliance with the design concepts, specifications, and recommendations of this report. In the event that subsurface conditions differ from those anticipated before the start of construction, GeoTest Services would be pleased to provide revised recommendations appropriate to the conditions revealed during construction.

GeoTest is also available to provide a full range of materials testing and special inspection during culvert construction as required by the local building department and the International Building Code. These services are supported by our fully accredited materials testing laboratory.

USE OF THIS REPORT

GeoTest Services has prepared this report for the exclusive use of Reichhardt & Ebe Engineering and their design consultants for specific application to the design of the proposed California Creek culvert improvements located on Brown Road east of Malloy Avenue in Ferndale, Washington. Use of this report by others is at the user's sole risk. This report is not applicable to other sites. Our services have been conducted in accordance with generally accepted practices of the geotechnical engineering profession; no other warranty, express or implied, is made as to the professional advice included in this report.

Our site explorations indicate subsurface conditions at the dates and locations indicated. It is not warranted that they are representative of subsurface conditions at other locations and times. The analyses, conclusions, and recommendations contained in this report are based on site conditions to the limited depth of our explorations at the time of our exploration program, a geological reconnaissance of the area, and a review of previously published USGS geological information for the site. If variations in subsurface conditions are encountered during construction that differs from those in this report, we should be allowed to review the recommendations contained in this report and, if necessary, make revisions. If there is a substantial lapse of time between submission of this report and the start of construction, or if conditions change due to construction operations at or adjacent to the project site, we recommend that we review this report to determine the applicability of the conclusions and recommendations contained herein.

The earthwork contractor is responsible to perform all work in conformance with all applicable WISHA/OSHA regulations. GeoTest Services, Inc. should not be assumed to be responsible for job site safety on this project, and this responsibility is specifically disclaimed.

We appreciate the opportunity to provide geotechnical services on this project and look forward to assisting you during the construction phase. If you have any questions regarding the information contained in this report, or if we may be of further service, please contact the undersigned.

Respectfully Submitted,
GeoTest Services, Inc.

3-26-15

Joseph Schmidt, E.I.T.
Engineer in Training

Edwardo Garcia, P.E.
Project Geotechnical Engineer

Attachments:

	Figure 1	Vicinity Map
	Figure 2	Site and Exploration Plan
	Figure 3	Culvert Wall Drain Section
	Figure 4	Soil Classification System and Key
	Figures 5 & 6	Boring Logs
	Figures 7 & 8	Grain Size Test Data
	Figure 9	Atterberg Limits

REFERENCES

Easterbrook, D.J. 1976. *Geologic Map of Western Whatcom County, Washington.* United States Geological Survey. Map I-854-B.

Washington Interactive Geologic Map. Washington State Department of Natural Resources - Online Web Services, 2011.

MAP REFERENCED FROM GOOGLE MAPS, 2015

N

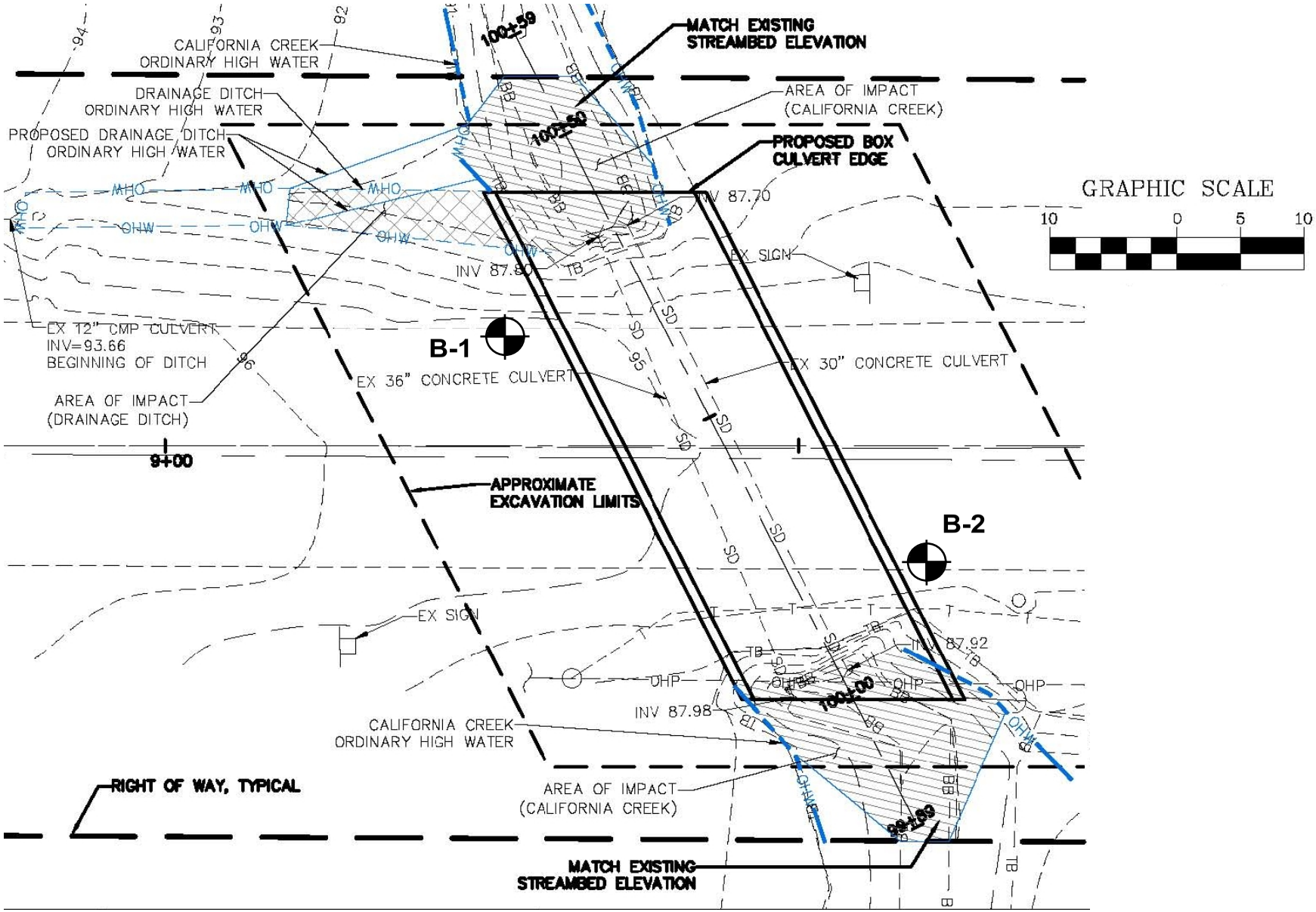
1000 Feet

GEOTEST SERVICES, INC.
741 Marine Drive
Bellingham, WA 98225
phone: (360) 733-7318
fax: (360) 733-7418

Date: 3-11-15	By: JES	Scale: As Shown	Project 15-0061

SITE VICINITY MAP
BROWN ROAD CULVERT
BROWN ROAD EAST OF MALLOY AVENUE
FERNDALE, WASHINGTON

Figure 1



B-# = Approximate Boring Location

Reference Drawing Provided by Rechhardt & Ebe Engineering, Inc

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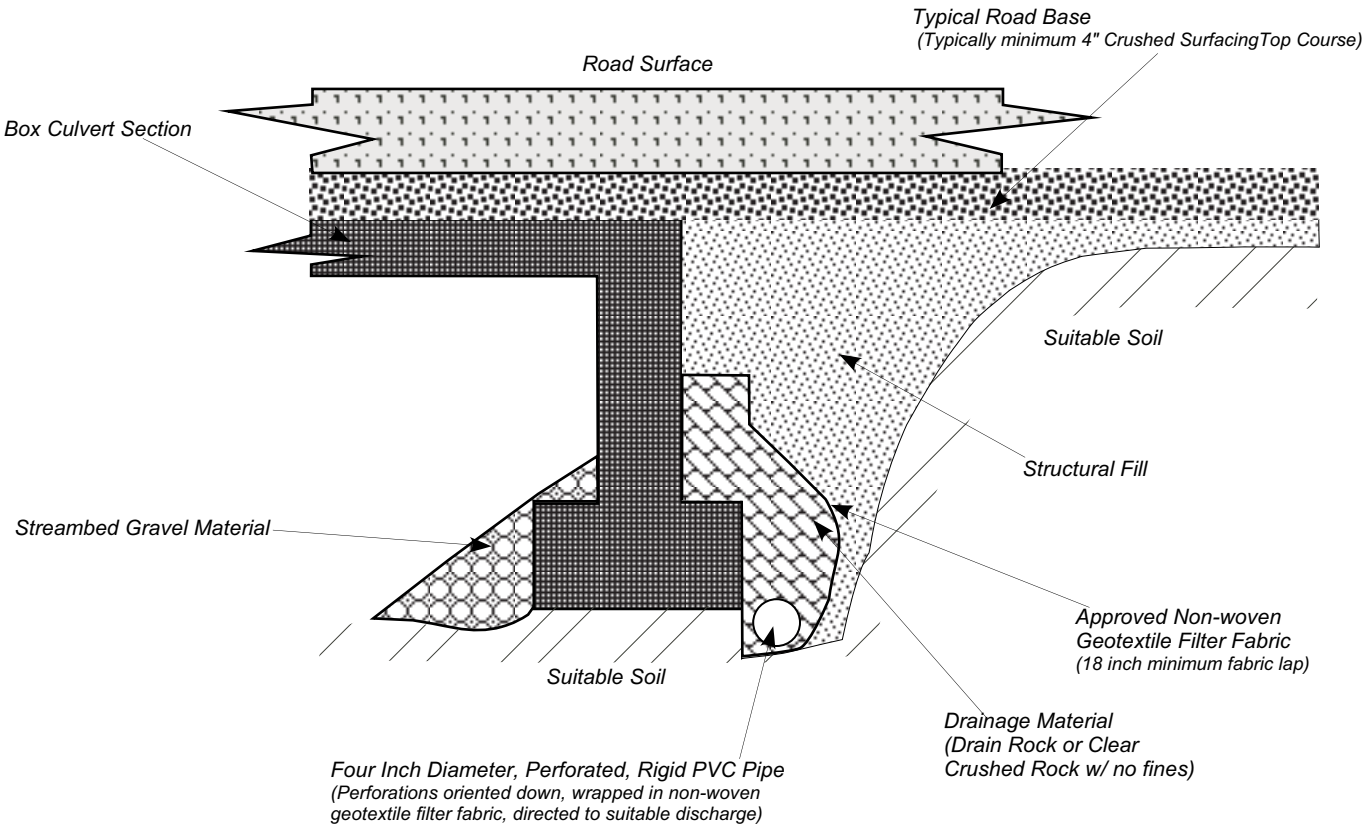
SITE AND EXPLORATION PLAN
Brown Road Culvert
Brown Road East of Malloy Avenue
Ferndale, Washington

Figure **2**

BOX CULVERT BENEATH ROAD SECTION



Notes:
Footings Should be properly buried for frost protection in accordance with International Building Code or local building codes (Typically 18 inches below exterior finished grades)

The footing drain will need to be modified from this typical drawing to fit the dimensions of the planned monolithic footing and slab configuration

GEOTEST SERVICES, INC.
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Date: 3-25-15	By: JES	Scale: None	Project
CULVERT WALL DRAIN SECTION **BROWN ROAD CULVERT** **BROWN ROAD EAST OF MALLOY AVENUE** **FERNDALE, WASHINGTON**			**15-0061** Figure 3

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL	TYPICAL DESCRIPTIONS[1][2]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			MH	Inorganic silt; micaceous or diatomaceous fine sand
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			PT	Peat; humus; swamp soil with high organic content

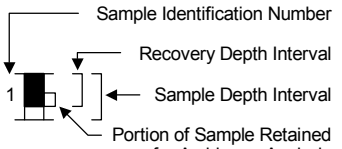
OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

Notes:
1. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, as outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.
2. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent: > 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents: > 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
> 12% and ≤ 30% - "gravelly," "sandy," "silty," etc.
Additional Constituents: > 5% and ≤ 12% - "slightly gravelly," "slightly sandy," "slightly silty," etc.
≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

Drilling and Sampling Key

SAMPLE NUMBER & INTERVAL



SAMPLER TYPE

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Other - See text if applicable

Groundwater

▽ ATD — Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

Field and Lab Test Data

Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
GT	Other Geotechnical Testing
CA	Chemical Analysis

GEOTEST

Brown Rd Culvert
Brown Rd East of Malloy Ave
Ferndale, WA

Soil Classification System and Key

Figure 4

B-1

Drilling Method: Hollow-stem Auger
Ground Elevation (ft): ~95
Drilled By: Boretec 1, Inc

Depth (ft)	Elevation	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Soil Profile	Water Level
0							AC	6" of Asphalt	
		1	b2	4			SW-SM	Loose, brown, damp to moist, very gravelly, slightly silty, SAND (Fill) Upper foot previously compacted to medium dense to dense state for road construction	
5		2	b2				ML	Soft, brown, wet, sandy, SILT with organics (Younger Alluvium)	
		3	b2	2					
		4	b2	3				Grades to very sandy, SILT	▽ ATD
10		5	b2	8	W = 31 GS			Grades to medium stiff/stiff, gray with mottling, saturated, very sandy, SILT with trace gravel Mottled horizon at approximately 11.5' BGS	
							SM	Very loose, brown, saturated, very silty, SAND (Alluvium)	
15		6	b2	17				Medium dense, gray-brown, saturated, very silty, fine SAND (Alluvium)	
20		7	b2	22	W = 21 GS				
25									

Boring Completed 03/09/15
Total Depth of Boring = 21.5 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

GEOTEST

Brown Rd Culvert
Brown Rd East of Malloy Ave
Ferndale, WA

Log of B-1

Figure 5

B-2

Drilling Method: Hollow-stem Auger
Ground Elevation (ft): ~95
Drilled By: Boretec 1, Inc

Depth (ft)	Elevation	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	SOIL PROFILE	GROUNDWATER
0							AC	6" of Asphalt	
							SW-SM	Loose, brown, damp, very gravelly, slightly silty, SAND (Fill) Upper foot previously compacted to medium dense to dense state for road construction	
		1	b2		W = 7 GS				
		2	b2	4			ML	Soft, brown, damp to moist, sandy, SILT (Younger Alluvium)	
5		3	b2	4	W = 29 GS AL			Grades to brown-gray with mottling, moist to wet, slightly sandy to sandy, SILT	▽ ATD
		4	b2	3			SM	Very loose, gray-brown with mottling, wet to saturated, very silty, SAND (Alluvium)	
10		5	b2	24				Grades to medium dense, gray-brown, wet to saturated, very silty, medium to fine, SAND	
15		6	b2	14	W = 28 GS				
20		7	b2	36	W = 26 GS			Grades to dense, brown, saturated, very silty, SAND	
25									

Boring Completed 03/09/15
Total Depth of Boring = 21.5 ft.

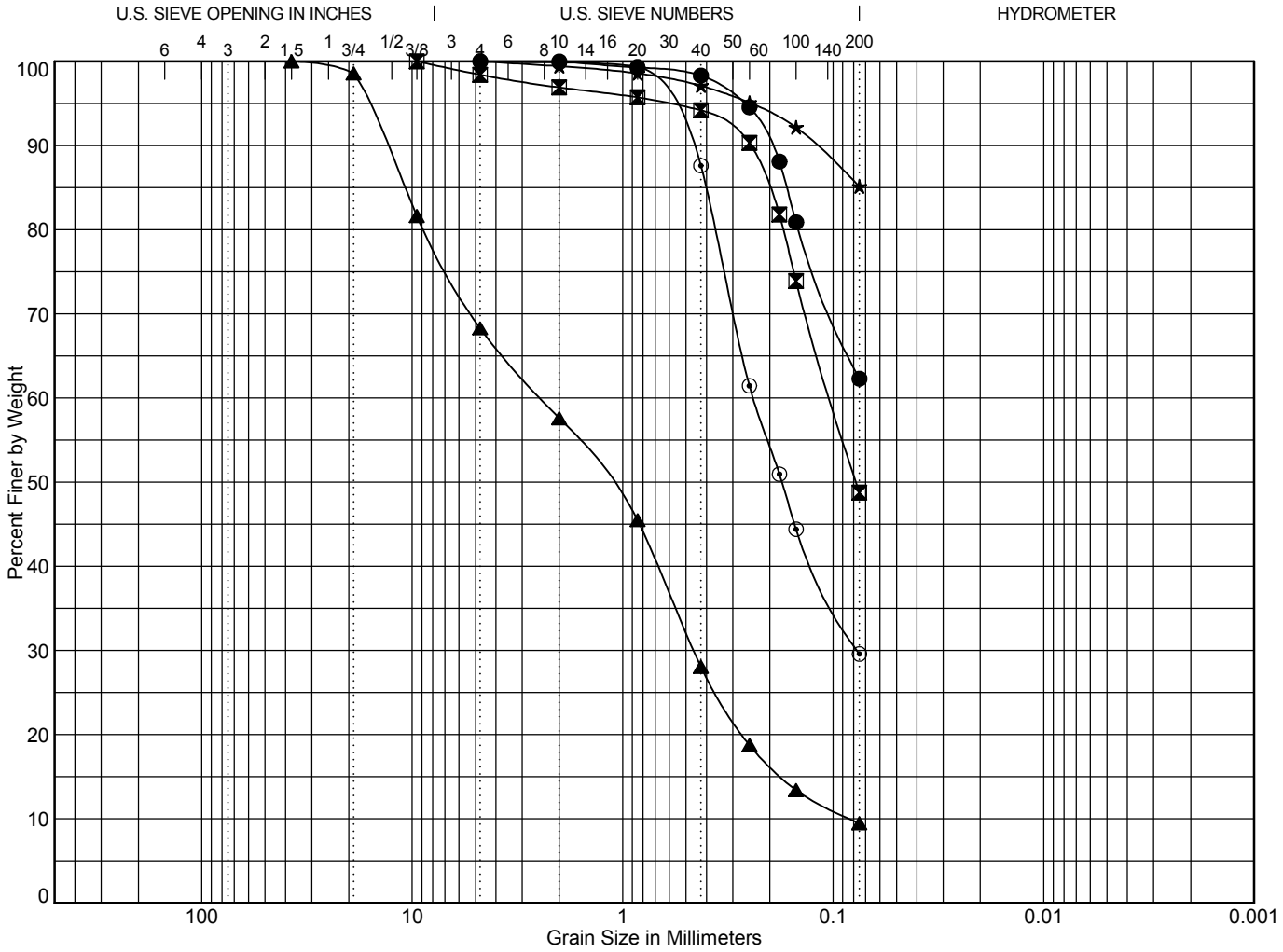
Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

GEOTEST

Brown Rd Culvert
Brown Rd East of Malloy Ave
Ferndale, WA

Log of B-2

Figure 6



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Point		Depth	Classification	LL	PL	PI	C_c	C_u
●	B-1	7.5	Very sandy (fine), SILT (ML)					
⊠	B-1	15.0	Very silty, fine SAND (SM)					
▲	B-2	1.5	Very gravelly, slightly silty, well-graded SAND (SW-SM)				1.05	29.41
★	B-2	3.0	Sandy, SILT (ML)	32	25	7		
⊙	B-2	10.0	Very silty, medium to fine SAND (SM)					

Point		Depth	D_{100}	D_{60}	D_{50}	D_{30}	D_{10}	%Coarse Gravel	% Fine Gravel	% Coarse Sand	% Medium Sand	% Fine Sand	% Fines
●	B-1	7.5	4.75					0.0	0.0	0.0	1.7	36.0	62.3
⊠	B-1	15.0	9.5	0.102	0.078			0.0	1.6	1.5	2.7	45.4	48.8
▲	B-2	1.5	37.5	2.43	1.17	0.459	0.083	1.4	30.3	10.7	29.6	18.6	9.4
★	B-2	3.0	4.75					0.0	0.0	0.6	2.3	12.0	85.1
⊙	B-2	10.0	4.75	0.239	0.175	0.077		0.0	0.0	0.1	12.3	58.0	29.6

$C_c = D_{30}^2/(D_{60} * D_{10})$
$C_u = D_{60}/D_{10}$

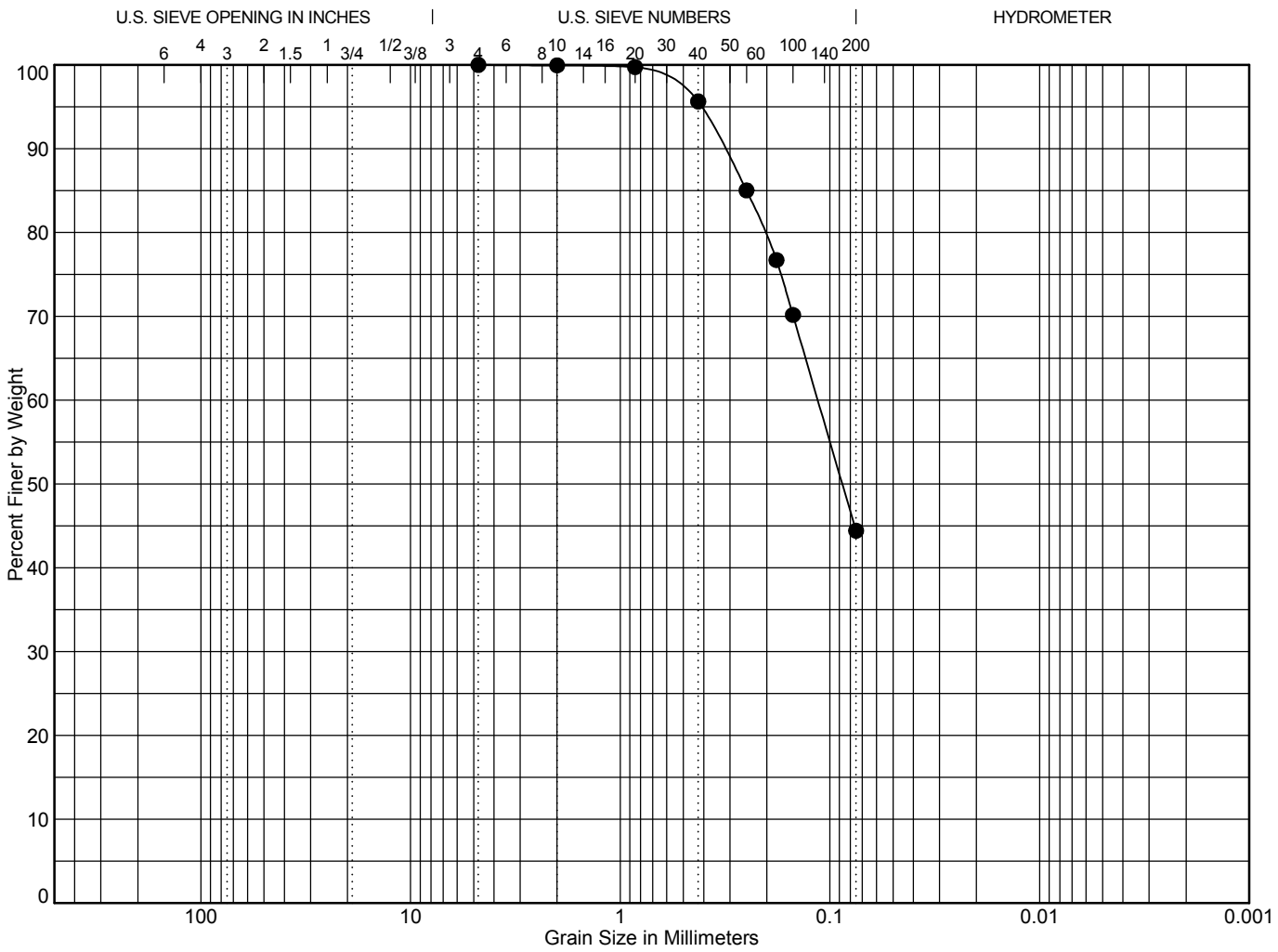
To be well graded: $1 < C_c < 3$ and $C_u > 4$ for GW or $C_u > 6$ for SW

GEOTEST

Brown Rd Culvert
Brown Rd East of Malloy Ave
Ferndale, WA

Grain Size Test Data

Figure 7



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Point	Depth	Classification	LL	PL	PI	C_c	C_u
● B-2	20.0	Very silty, fine SAND (SM)					

Point	Depth	D_{100}	D_{60}	D_{50}	D_{30}	D_{10}	%Coarse Gravel	% Fine Gravel	% Coarse Sand	% Medium Sand	% Fine Sand	% Fines
● B-2	20.0	4.75	0.114	0.087			0.0	0.0	0.1	4.3	51.2	44.4

$C_c = D_{30}^2/(D_{60} * D_{10})$
$C_u = D_{60}/D_{10}$

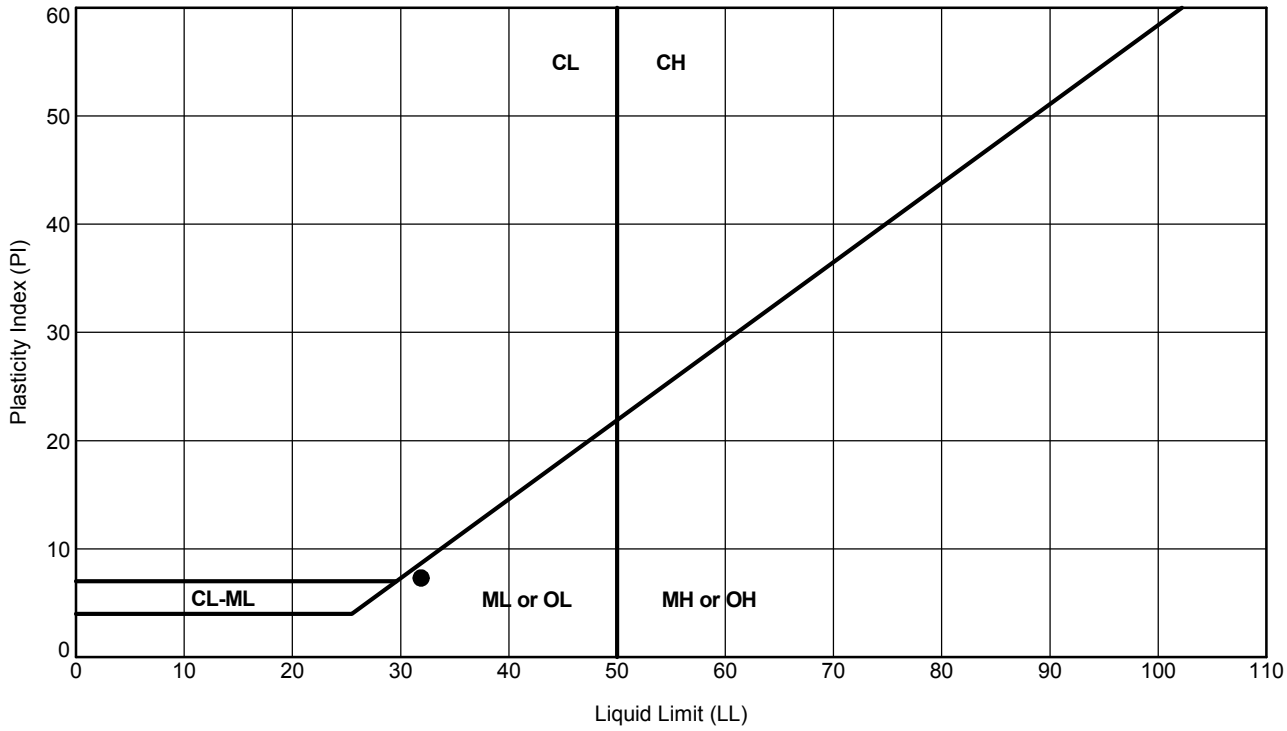
To be well graded: $1 < C_c < 3$ and $C_u > 4$ for GW or $C_u > 6$ for SW

GEOTEST

Brown Rd Culvert
Brown Rd East of Malloy Ave
Ferndale, WA

Grain Size Test Data

Figure 8



ATTERBERG LIMIT TEST RESULTS

Symbol	Exploration Number	Sample Number	Depth (ft)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Natural Moisture (%)	Soil Description	Unified Soil Classification
●	B-2	3	3.0	32	25	7	29	Sandy, SILT	ML

ASTM D 4318 Test Method

GEOTEST

Brown Rd Culvert
Brown Rd East of Malloy Ave
Ferndale, WA

Plasticity Chart

Figure 9

REPORT LIMITATIONS AND GUIDELINES FOR ITS USE[1]

Subsurface issues may cause construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help:

Geotechnical Services are Performed for Specific Purposes, Persons, and Projects

At GeoTest our geotechnical engineers and geologists structure their services to meet specific needs of our clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of an owner, a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. And no one – not even you – should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report is Based on a Unique Set of Project-Specific Factors

GeoTest's geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the clients goals, objectives, and risk management preferences; the general nature of the structure involved its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless GeoTest, who conducted the study specifically states otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed, for example, from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed construction,
- alterations in drainage designs; or
- composition of the design team; the passage of time; man-made alterations and construction whether on or adjacent to the site; or by natural alterations and events, such as floods, earthquakes or groundwater fluctuations; or project ownership.

Always inform GeoTest's geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. Do not rely on the findings and conclusions of this report, whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always contact GeoTest before applying the report to determine if it is still relevant. A minor amount of additional testing or analysis will help determine if the report remains applicable.

Most Geotechnical and Geologic Findings are Professional Opinions

Our site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoTest's engineers and geologists review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in your report. Retaining GeoTest who developed this report to provide construction observation is the most effective method of managing the risks associated with anticipated or unanticipated conditions.

A Report's Recommendations are *Not* Final

Do not over-rely on the construction recommendations included in this report. Those recommendations are not final, because geotechnical engineers or geologists develop them principally from judgment and opinion. GeoTest's geotechnical engineers or geologists can finalize their recommendations only by observing actual subsurface conditions revealed during construction. GeoTest cannot assume responsibility or liability for the report's recommendations if our firm does not perform the construction observation.

A Geotechnical Engineering or Geologic Report may be Subject to Misinterpretation

Misinterpretation of this report by other design team members can result in costly problems. Lower that risk by having GeoTest confer with appropriate members of the design team after submitting the report. Also, we suggest retaining GeoTest to review pertinent elements of the design teams plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having GeoTest participate in pre-bid and preconstruction conferences, and by providing construction observation.

Do not Redraw the Exploration Logs

Our geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors of omissions, the logs included in this report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable; but recognizes that separating logs from the report can elevate risk.

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, consider advising the contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the GeoTest and/or to conduct

additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. In addition, it is recommended that a contingency for unanticipated conditions be included in your project budget and schedule.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering or geology is far less exact than other engineering disciplines. This lack of understanding can create unrealistic expectations that can lead to disappointments, claims, and disputes. To help reduce risk, GeoTest includes an explanatory limitations section in our reports. Read these provisions closely. Ask questions and we encourage our clients or their representative to contact our office if you are unclear as to how these provisions apply to your project.

Environmental Concerns Are Not Covered in this Geotechnical or Geologic Report

The equipment, techniques, and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated containments, etc. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. Do not rely on environmental report prepared for some one else.

Obtain Professional Assistance to Deal with Biological Pollutants

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts biological pollutants from growing on indoor surfaces. Biological pollutants includes but is not limited to molds, fungi, spores, bacteria and viruses. To be effective, all such strategies should be devised for the express purpose of prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional biological pollutant prevention consultant. Because just a small amount of water or moisture can lead to the development of severe biological infestations, a number of prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of this study, the geotechnical engineer or geologist in charge of this project is not a biological pollutant prevention consultant; none of the services preformed in connection with this geotechnical engineering or geological study were designed or conducted for the purpose of preventing biological infestations.

[1]Information in this document is based upon material developed by ASFE, Professional Firms Practicing in the Geosciences(asfe.org)

APPENDIX C – WSDOT STANDARD PLANS

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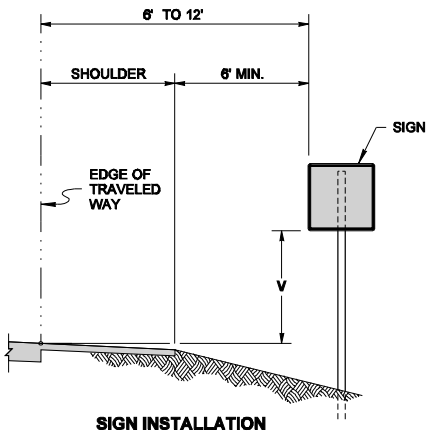
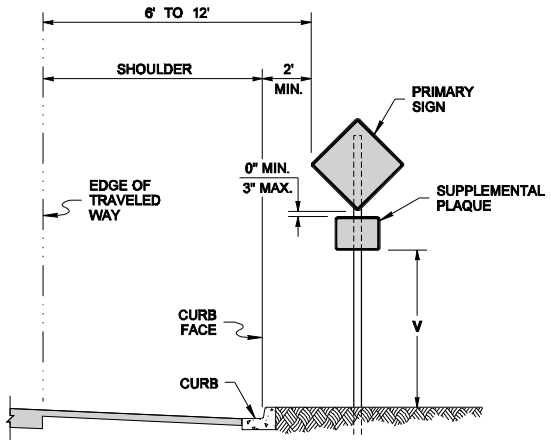
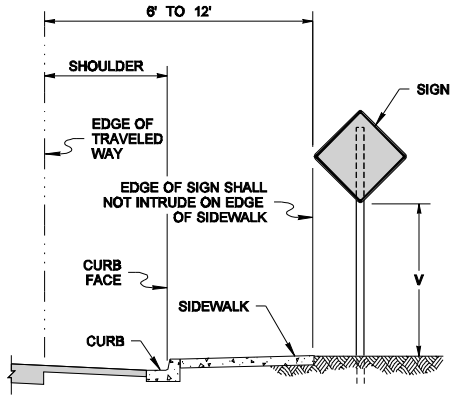
DRAWN BY: FERN LIDDELL



SIGN INSTALLATION (FILL SECTION)



SIGN INSTALLATION (CURB SECTION)

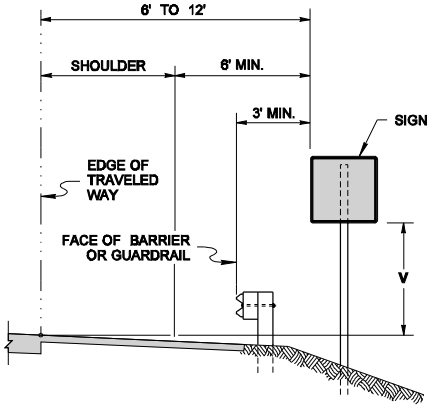


SIGN INSTALLATION (SIDEWALK AND CURB SECTION)

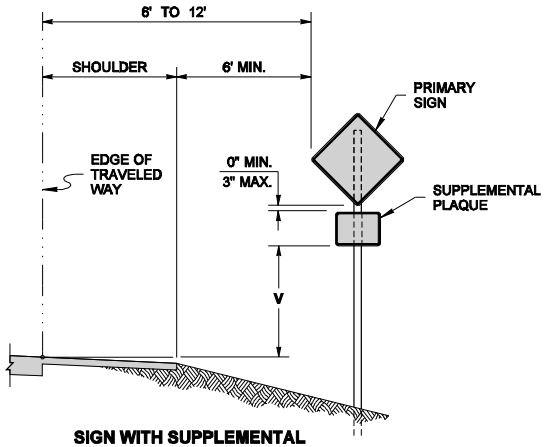
NOTES

1. For sign installation details, see Std. Plan G - series.
2. In rural areas, the "V" Height can be a minimum of 7 feet for primary signs and 6 feet for the supplemental plaques for greater visibility, as directed by the engineer.
3. The "V" height for signs, with an area of more than 50 square feet and two or more sign supports, is 7 feet in both rural and urban areas.

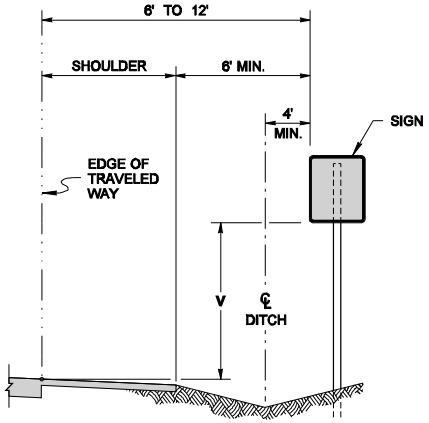
HEIGHT V		
	TO BOTTOM OF SIGN (NO SUPPLEMENTAL PLAQUE)	TO BOTTOM OF SUPPLEMENTAL PLAQUE (WHEN REQUIRED)
RURAL	5' MINIMUM	4' MINIMUM
URBAN	7' MINIMUM	6' MINIMUM



SIGN INSTALLATION (BEHIND TRAFFIC BARRIER)



SIGN WITH SUPPLEMENTAL PLAQUE INSTALLATION (FILL SECTION)



SIGN INSTALLATION (DITCH SECTION)

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CLASS A CONSTRUCTION SIGNING INSTALLATION

STANDARD PLAN K-80.10-00

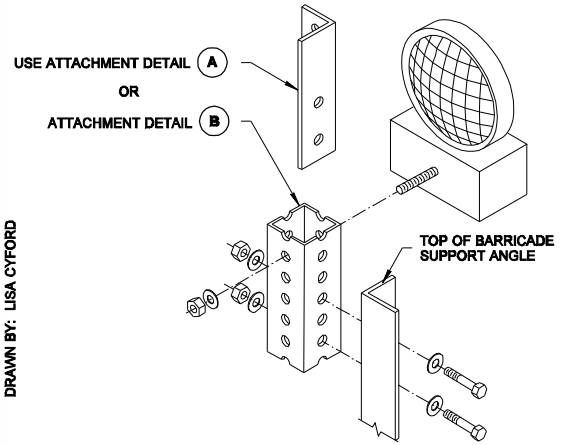
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

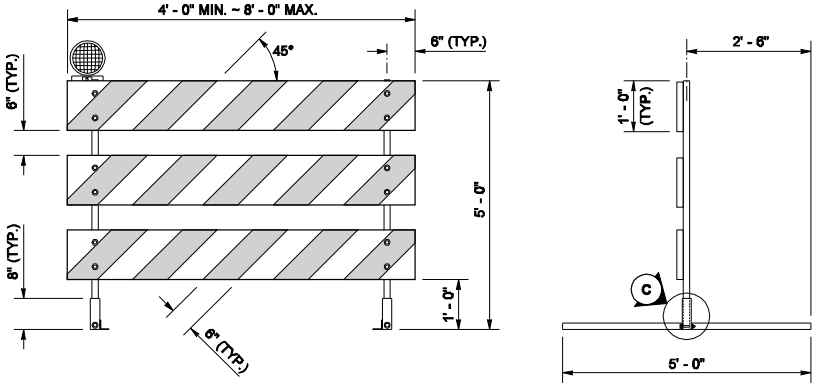
Ken L. Smith — STATE DESIGN ENGINEER — *02-21-07* — DATE

Washington State Department of Transportation

DRAWN BY: LISA CYFORD



WARNING LIGHT ATTACHMENT DETAIL



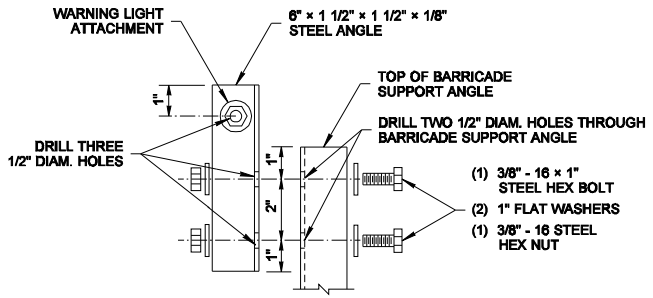
ELEVATION

SIDE

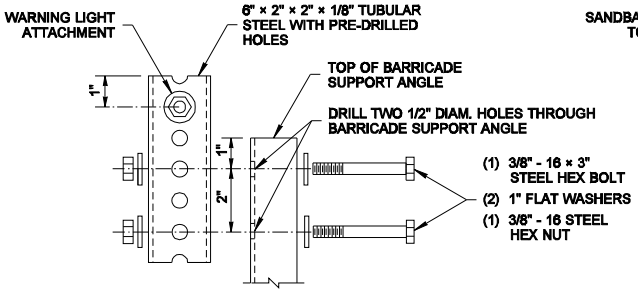
TYPE 3 BARRICADE

NOTES

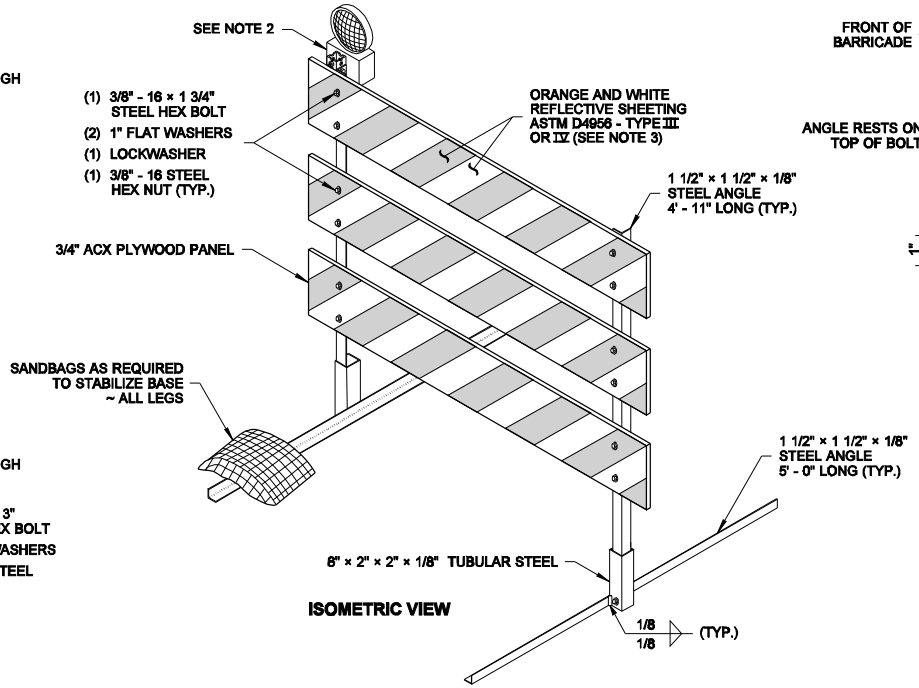
1. All fasteners may be zinc plated, galvanized or stainless steel. All steel angle and tubular steel shall be hot-rolled, high carbon steel, painted or galvanized.
2. Install one lightweight Type A Low-Intensity flashing warning light on the traffic side of the barricade. Install two Type A Low-Intensity flashing warning lights per barricade when the barricades are used to close a roadway. Attach the light to the barricade according to the light manufacturer's recommendations or use the details shown on this plan.
3. Stripes on barricade rails shall be alternating orange and white retroreflective stripes (sloping downward at an angle of 45 degrees in the direction traffic is to pass).
4. The Type 3 barricade design shown on this plan meets the crash test requirements of NCHRP 350. Alternative designs may be approved if they conform to the NCHRP 350 crash test criteria and the MUTCD.
5. When a sign is mounted on the barricade, it shall be securely bolted to at least two plywood panels. The top of the sign shall not be higher than the top panel of the barricade.
6. When sandbags are used in freezing weather, Urea fertilizer shall be mixed with the sand in a quantity to prevent the sand from freezing.



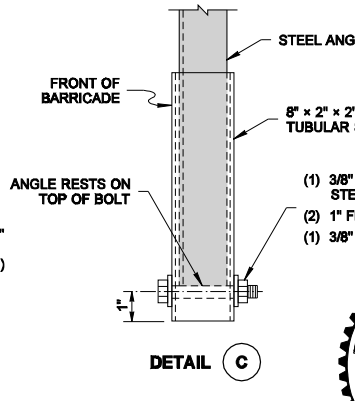
ATTACHMENT DETAIL A



ATTACHMENT DETAIL B



ISOMETRIC VIEW



DETAIL C

THEODORE J. TREPANIER
STATE OF WASHINGTON
25335
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES AUGUST 9, 2007

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TYPE 3 BARRICADE

STANDARD PLAN K-80.20-00

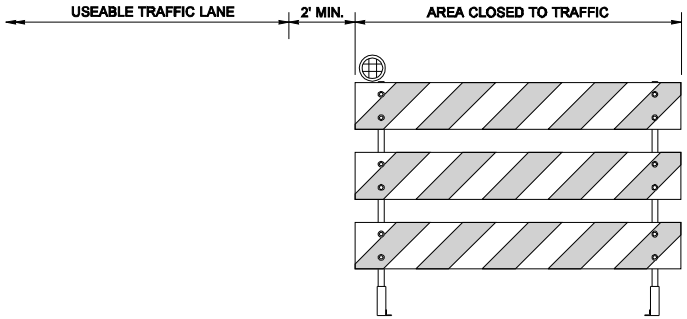
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Kevin J. Dayton — STATE DESIGN ENGINEER — *12-20-06* — DATE

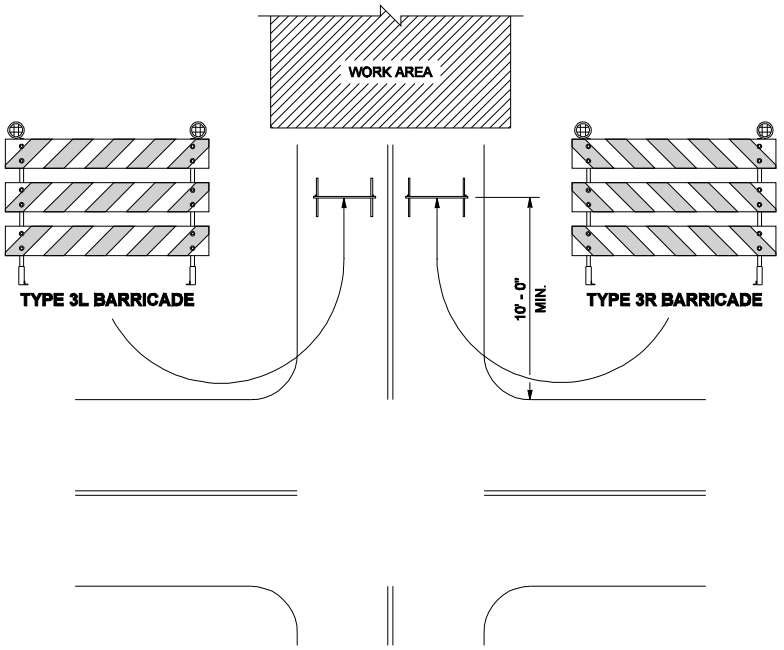
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

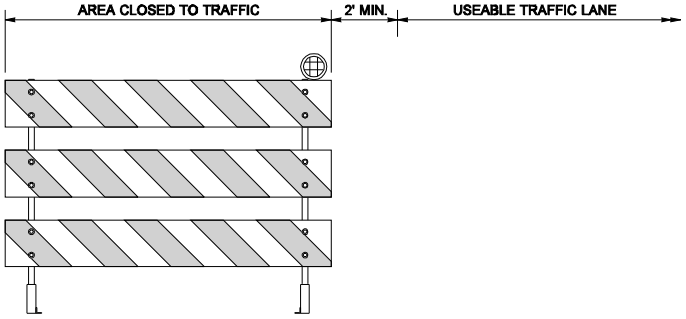


TYPE 3L BARRICADE

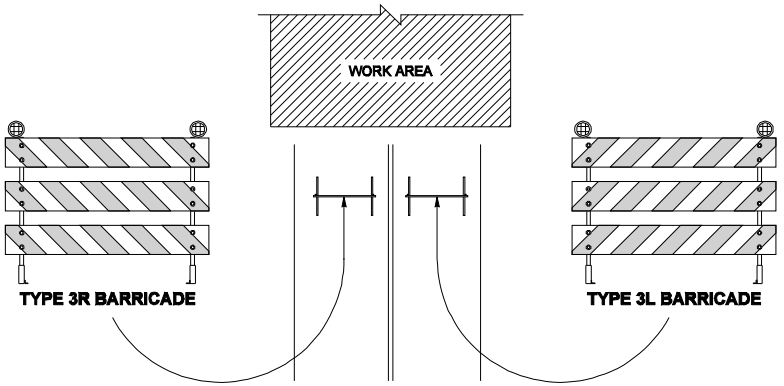
STRIPES ON THE BARRICADES SHALL SLOPE
DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS



ROAD CLOSURE AT INTERSECTION



TYPE 3R BARRICADE



ROAD CLOSURE AT OTHER LOCATIONS

BARRICADE PLACEMENT

THEODORE J. TREPANIER
STATE OF WASHINGTON
25335
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES AUGUST 9, 2007

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

TYPE 3 BARRICADE

STANDARD PLAN K-80.20-00

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Kevin J. Dayton — STATE DESIGN ENGINEER — *12-20-06* — DATE

Washington State Department of Transportation

APPENDIX D
AGC AGREEMENT
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AGC – WSDOT
EQUIPMENT RENTAL AGREEMENT

Effective Date: May 1, 2007 Until Further Notice

It is mutually agreed by the parties to this agreement that rental rates to be paid Contractors for equipment used on force account will be established in accordance with Section 1-09.6 of the Standard Specifications and this agreement. The following rules have been agreed to:

1. **General**

The Rental Rate Blue Book published by Primedia Information, Inc., as clarified or modified by this agreement, will be used to establish rental rates for equipment approved for use on force account work. Rate modifications, indicated on Regional Adjustment Maps in the Blue Book and as applied automatically by the Blue Book CD (Washington State Version), shall be used for all equipment covered under this agreement. Updates to the Rental Rate Book, in compact disk format, are published on a schedule determined by Primedia Information, Inc. Each update will become applicable to force accounts fourteen days after the date on which Primedia Information, Inc. declares the update to be effective. Equipment used under the terms of this agreement will be at the rates in effect for each section of the Blue Book at the time of use except that calculations made prior to the applicable date, using the previous rates, will not be changed.

2. **Rental Rate**

The hourly rental rate for equipment utilized on force account shall be a combination of the following items:

a. The Blue Book monthly rate multiplied by the Rate Adjustment factors for age and geographic location divided by 176.

b. Attachments will be included in the rental rate when the Engineer deems them necessary to accomplish the force account work. An approved attachment that is continuously attached and used intermittently during the work will be paid for the same duration as the host equipment. When multiple attachments are approved for use, and the attachments are being used interchangeably on the force account operation, only the one attachment having the higher rate will be paid.

c. The hourly operating cost for each hour that the equipment is in use. "In use" shall mean that the presence of the equipment is necessary for the operation and that the equipment is present and is not being used for other activities while the force account work is underway. Under the circumstances, the equipment shall be paid at its hourly rate plus the hourly operating cost.

3. **Standby Time**

Standby time shall be defined as the time during which equipment is idled and cannot be assigned to other work on the project. Only that equipment which has been utilized for work on the force account and is expected to be utilized again on the same force account will be eligible for standby compensation. The Contractor is expected to utilize idled equipment on other work if reasonably possible. Standby time will only be paid if the Engineer has had an opportunity to evaluate the cost of standby versus the cost of mobilizing and demobilizing and has ordered standby.

When ordered by the Engineer, standby time shall be paid at one-half of the rate established in accordance with this agreement. The operating cost shall not be included in the calculation for establishing the standby rate. Standby time will not be compensated beyond that amount which will bring the resulting total of operated time and standby time to 8 hours in any one day or 40 hours in any one week.

4. **Rental Equipment**

If Contactor-owned equipment is not reasonably available, the Engineer may approve the use of operated or non-operated rental equipment. Operated equipment shall be considered a "service" and shall be compensated according to section 4 of the force account specification. Non-operated equipment shall be compensated according to the provisions for rented equipment in section 3 of the force account specifications. If the invoice costs of non-operated equipment do not specifically say the fuel is included, the Rental Rate Blue Book Hourly Operating Cost shall be added for each hour the equipment operates.

When invoiced equipment is used on both force account and non-force account work, payment for the equipment will be a prorated share of the invoice cost. The time period covered by the invoice shall reflect the normal practice of the renting agency, except that the time period shall not exceed one month. When calculating the prorated share, the amounts of standby time for both types of work will be considered according to the formula:

$$\text{Share of Invoice to be charged to Force Account} = \frac{\mathbf{FC}}{\mathbf{FC + NFC}}$$

Where:

FC = $ Force account including standby time.
NFC = $ Non-force account including standby time.

5. **Mobilization**

Force account mobilization of equipment is defined as the preparatory work performed by the Contractor including procurement, loading and transportation of equipment that is intended for use in a force account. A pro-rata adjustment will be made when the equipment is eventually used for regular contract work in addition to the force account work. Mobilization also included the costs incurred during demobilization. The costs will be included in the appropriate sections (Labor, Equipment, Services, etc) depending on the nature of the cost. If the equipment being mobilized is hauled, payment will cover the hauling vehicle (operated cost). In the event that equipment is transferred under its own power, the payment will cover the operated cost of the equipment plus operator costs. Move-out, or demobilization costs will provide for the return of the equipment to the location from which it was obtained. In the event that the move-out is to a different location, payment will not exceed the amount of the move-in.

If approved by the Engineer, payment will be allowed for moving equipment from work site to work site within the project after the equipment is on the job.

Charges for mechanic's time utilized in servicing equipment to ready it for use prior to moving to the project and similar charges will not be allowed.

6. **Blue Book Omissions**

In the event a rate has not been established for a particular piece of equipment in the Rental Rate Blue Book, a rate will be established, utilizing one or more of the following methods:

a. Use a rate for the most similar model found in the applicable Blue Book. Such characteristics as manufacturer, capacity, horsepower, and fuel type will be used as the basis for selecting a similar model.

b. Contact Primedia Information, Inc, (through the WSDOT OSC Construction Office) for the rate not included in the Book.

c. Utilize a rate agreed upon by the parties.

d. For equipment that is older than 20 years the oldest adjustment rate available in the book shall be used.

7. **Breakdown**

The Contractor shall provide reasonable maintenance efforts for equipment utilized in force account. When a breakdown occurs for any piece of equipment being used on force account work, the Contractor shall divert idled equipment. Payment shall cease for the equipment that is broken down. Payment shall also cease for any other equipment that is idled as a result of the breakdown (there will be no standby payment.) Payment for any labor that is idled as a result of the breakdown will be made in accordance with provisions of section 1 of the force account specifications, particularly as related to contractual obligations and normal practices of the Contractor.

8. **Shutdown**

If the Engineer orders a shutdown of any or all of the force account, the equipment idled as a result of the shutdown shall be diverted to other work. When diversion of equipment is not practical, standby time may be paid during non-operating hours as provided in Item 3 of this agreement.

The Engineer reserves the right to cease standby payment for equipment that is idled as a result of a shutdown when the shutdown is anticipated to be for an extended period of time. No further payment shall be allowed after the date the Engineer makes this determination except as provided in Item 5 of this agreement, "Mobilization."

Standby time shall not be paid when shutdown is the result of the fault or negligence of the Contractor.

9. **Small Tools**

Any contractor-owned equipment listed in the Blue Book with a monthly rate of less than $100 and any other equipment with a purchase price of less than $500 shall be considered Small Tools and shall be paid by negotiation rather than using an hourly rate (except for rentals.) Any such small tool that is rented shall be paid according to the rental provisions in the Equipment section of this agreement. All other Small Tools shall be paid by agreement of the parties. After the force account work has been completed, (or more often, by agreement of the parties,) the Contractor shall promptly supply a list of small tools and equipment that have been utilized in the work. The list shall be supported by invoices or, in the event the item came from stock, by a Contractor affidavit of purchase cost. The negotiation of the Small Tools payment may include discussions of shared use with other work and of residual value, if appropriate. Once agreed upon, the small tools amount will be added to the payment amount in the Equipment section (Section 3 of the force account specification.)

10. **Aeration Equipment**

The rental rate for plows and discs shall be as listed below:

Plows and discs meeting the requirements of Section 2-03.3(15) of the Standard Specifications shall be paid at the rate of $9.60 per hour.

Add $0.70 per hour per foot of width for additional width of disc more than 10 ft.

Motive power for discs and plows shall be capable of pulling discs and plows at the speeds specified in Section 2-03.3(15) of the Standard Specifications. Payment for motive power shall be 100 percent of the rates in this agreement except that equipment having motive power in excess of 340 horsepower shall be paid at 100 percent of the highest equipment rate for a comparable unit of the same manufacturer having less than 340 horsepower.

Payment for all other equipment approved for Aeration shall be at the rates established in accordance with this agreement when used for aeration work.

10. **Concurrence, Review Time**

This agreement is issued after conference among representatives of the Associated General Contractors of Washington and the Washington State Department of Transportation and has the approval of both. Either party may request a review after a one-year period.

Associated General Contractors of Washington	**Washington State Department of Transportation**
Van Collins Southern District Manager	Linea Laird State Construction Engineer

APPENDIX E – PERMITS

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DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

March 10, 2015

Regulatory Branch

Mrs. Wendy LaRocque
PO Box 936
Ferndale, Washington 98248

Reference: NWS-2014-1153
Ferndale, City of

Dear Wendy LaRocque:

We have reviewed your application to excavate and backfill to replace existing culverts with a box culvert in California Creek at Ferndale, Whatcom County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 14, *Linear Transportation Projects* (Federal Register February 21, 2012, Vol. 77, No. 34), authorizes your proposal as depicted on the enclosed drawings dated January 27, 2015. In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 14, Terms and Conditions* and the following special condition:

a. No residue from construction activity shall be allowed to remain in waters of the U. S. The permittee must install and maintain debris collection measures until all project operations are complete.

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

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

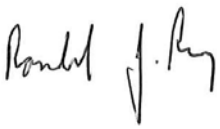
In the project area, we have determined that California Creek is a water of the United States. We have completed an approved jurisdictional determination for your project area dated March 10, 2015, which can be found on our website at: www.nws.usace.army.mil select "Regulatory Branch, Permit Information", then "Jurisdictional Determinations". If you object to this determination, you may request an administrative appeal under our regulations (33 Code of Federal Regulations, Part 331) as described in the enclosed *Appeal Process Fact Sheet* and the *Notification of Administrative Appeal Options and Process and Request for Appeal* form (*Appeal Form for Approved Jurisdictional Determinations*).

You are cautioned that any change in project location or plans will require that you submit a copy of the revised plans to this office and obtain our approval before you begin work. Deviating from the approved plans could result in the assessment of criminal or civil penalties.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit* form. Thank you for your cooperation during the permitting process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey form. This form and information about our program is available on our website at www.nws.usace.army.mil select "Regulatory Branch, Permit Information" and then "Contact Us."

A copy of this letter with enclosures will be furnished to Mr. Ross Widener of Widener and Associates at 10108 32nd Avenue West, Suite D, Everett, Washington, 98204. If you have any questions, please contact me at Randel.j.perry@usace.army.mil or at (360) 734-3156.

Sincerely,



Randel Perry, Project Manager
Regulatory Branch

Enclosures

NTS

VICINITY MAP

PROJECT LOCATED IN SECTION 8, TOWNSHIP 39N RANGE 2E, W.M.

LUIS PONCE
STATE OF WASHINGTON
38378
REGISTERED
PROFESSIONAL ENGINEER

PERMIT SET

DESIGNED BY ARS DRAWN BY ARS CHECKED BY LP	**R&E Reichhardt & Ebe ENGINEERING INC** P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713	**CITY OF FERNDALE** **BROWN ROAD CULVERT REPLACEMENT PROJECT** **VICINITY MAP**	DWG 14035 Jarpa JOB# 14035 SCALE H: N/A V: N/A	DATE 1/27/15 SHEET 1 of 4

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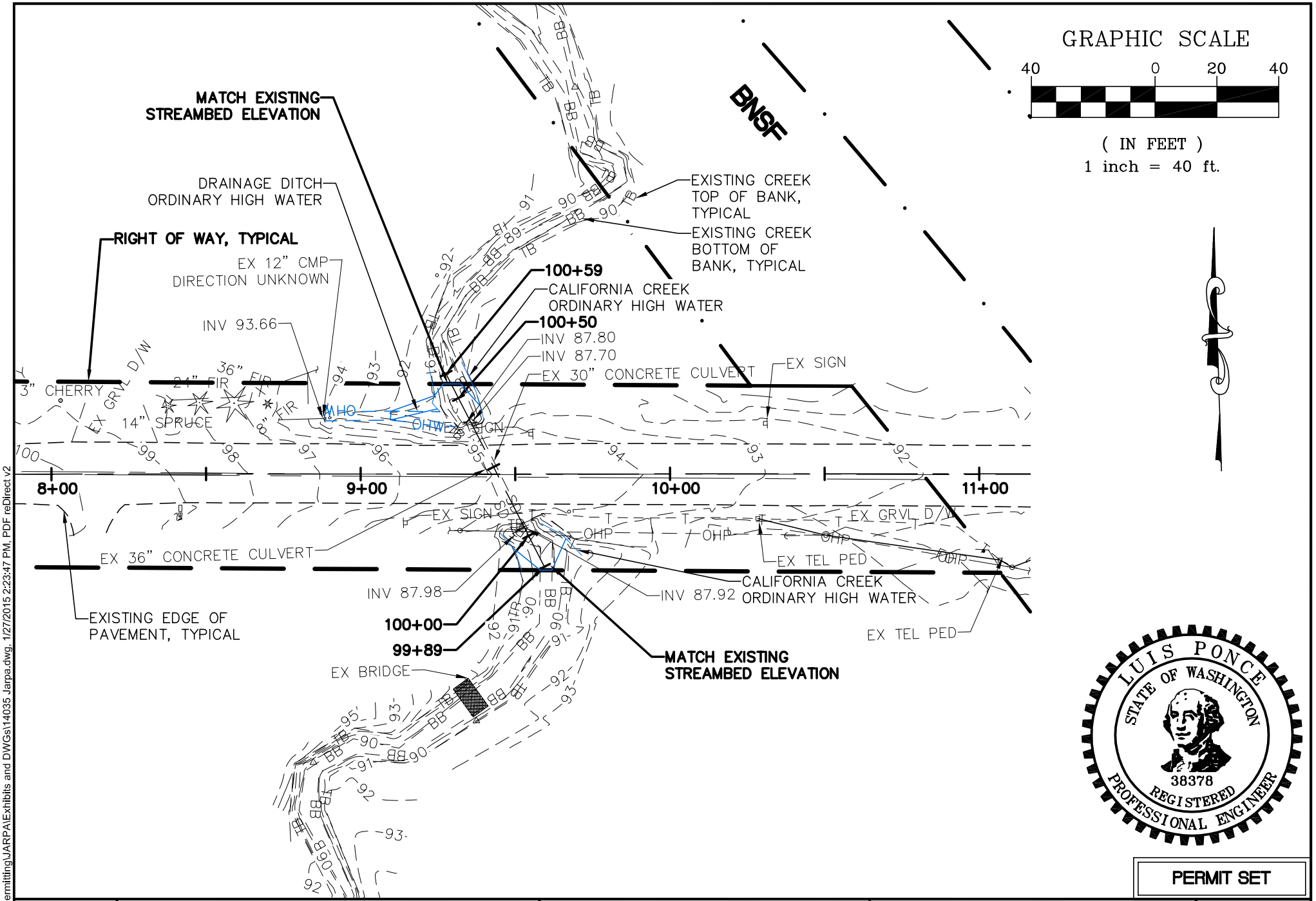

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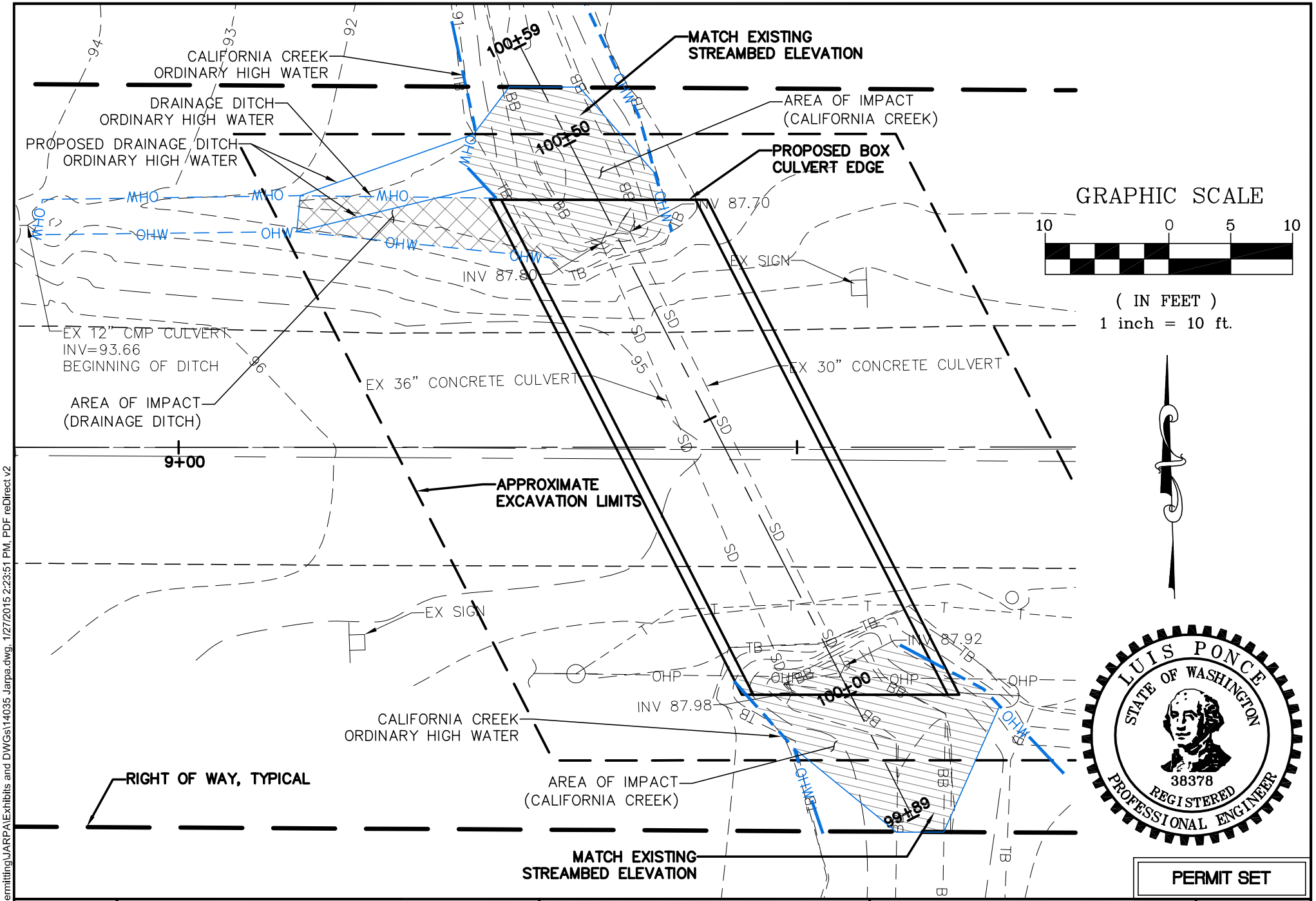
DESIGNED BY ARS DRAWN BY ARS CHECKED BY LP	**R&E Reichhardt & Ebe ENGINEERING INC** P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713	**CITY OF FERNDALE** **BROWN ROAD CULVERT REPLACEMENT PROJECT** **EXISTING CONDITIONS**	DWG 14035 Jarpa JOB# 14035 SCALE H: 1"=40' V: N/A	DATE 1/27/15 SHEET 2 of 4



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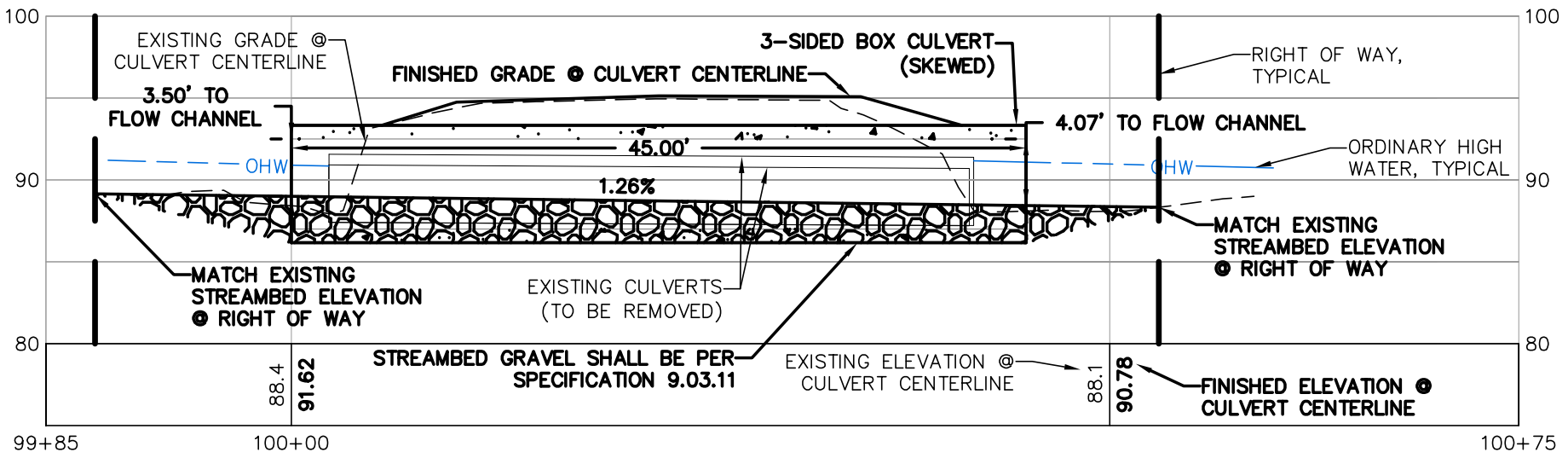
DESIGNED BY ARS DRAWN BY ARS CHECKED BY LP	**R&E Reichhardt & Ebe ENGINEERING INC** P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713	**CITY OF FERNDALE** **BROWN ROAD** **CULVERT REPLACEMENT PROJECT** **PLAN VIEW**	DWG 14035 Jarpa JOB# 14035 SCALE H: 1"=10' V: N/A	DATE 1/27/15 SHEET 3 of 4



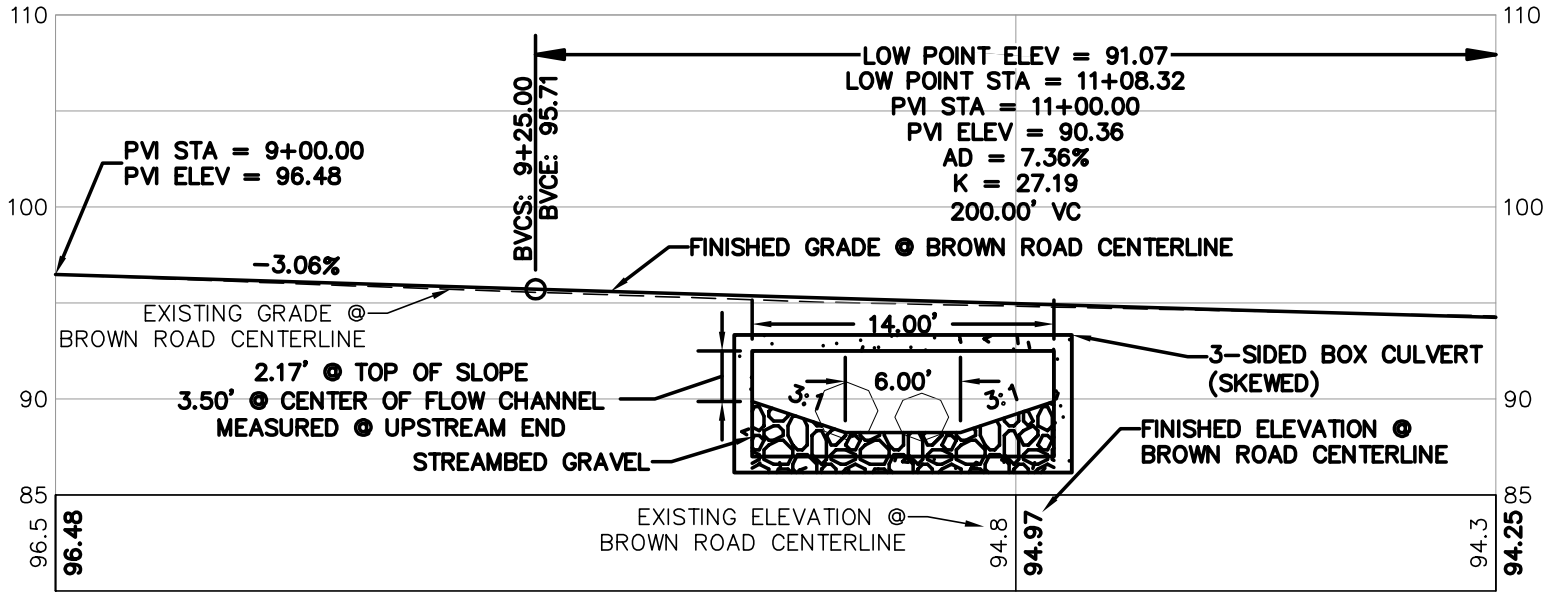
GRAPHIC SCALE

10 0 5 10

(IN FEET)

1 inch = 10 ft. H

1 inch = 10 ft. V



PERMIT SET

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DESIGNED BY ARS DRAWN BY ARS CHECKED BY LP	R&E Reichhardt & Ebe ENGINEERING INC P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713	CITY OF FERNDALE BROWN ROAD CULVERT REPLACEMENT PROJECT PROFILE VIEW	DWG 14035 Jarpa JOB# 14035 SCALE H: 1"=10' V: 1"=10'	DATE 1/27/15 SHEET 4 of 4

US Army Corps of Engineers ®
Seattle District

NATIONWIDE PERMIT 14
Terms and Conditions

Effective Date: June 15, 2012

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 authorization to be valid in Washington State.

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL NWPs

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 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.

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 and storm water management activities, 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.

13. Removal of Temporary Fills. 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. No 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. 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).

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 the critical habitat of such species. No activity is

authorized under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, 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 designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. 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. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation 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 with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a 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 U.S. 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) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, 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. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The

district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may 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 may be affected by the proposed work 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 resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, 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, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and 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 or that consultation under Section 106 of the NHPA has been completed.

(d) 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. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work 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 (16 U.S.C. 470h-2(k)) 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. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you 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, and 52 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, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined 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 adverse effects on the aquatic environment are 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 adverse effects to the aquatic environment are 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 effects of the proposed activity are minimal, and provides a project-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 minimal adverse effects on the aquatic environment. 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 minimal adverse effects on the aquatic environment. (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (3) 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) – (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)). (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (5) 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.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) 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 project 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 a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. 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 establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing 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 compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory 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.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of 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 effects of the project to the 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 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. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe 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)). 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 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 prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not 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.

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 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 work 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 work and mitigation.

31. 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 in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may 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 (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. 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 project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; 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. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project 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); (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral 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 waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands 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 effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(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 project's adverse environmental effects to a minimal level. (2) For 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, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, 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 (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), 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 telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse 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 the net adverse environmental effects to the aquatic environment of the proposed activity are 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. (3) 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. (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource

functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences 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. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

C. CORPS SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS

1. Aquatic Resources Requiring Special Protection. Activities resulting in a loss of waters of the United States in a mature forested wetland, bog, bog-like wetland, aspen-dominated wetland, alkali wetland, wetlands in a dunal system along the Washington coast, vernal pools, camas prairie wetlands, estuarine wetlands, and wetlands in coastal lagoons cannot be authorized by a NWP, except by the following NWPs:

NWP 3 – Maintenance
NWP 20 – Oil Spill Cleanup
NWP 32 – Completed Enforcement Actions
NWP 38 – Cleanup of Hazardous and Toxic Waste

In order to use one of the above-referenced NWPs in any of the aquatic resources requiring special protection, you must submit a pre-construction notification to the District Engineer in accordance with Nationwide Permit General Condition 31 (Pre-Construction Notification) and obtain written approval before commencing work.

2. Commencement Bay. The following NWPs may not be used to authorize activities located in the Commencement Bay Study Area (see Figure 1 at www.nws.usace.army.mil, select Regulatory Permits then Permit Guidebook, then Nationwide Permits) requiring Department of the Army authorization:

NWP 12 – Utility Line Activities (substations)
NWP 13 – Bank Stabilization
NWP 14 – Linear Transportation Projects
NWP 23 – Approved Categorical Exclusions
NWP 29 – Residential Developments
NWP 39 – Commercial and Institutional Developments
NWP 40 – Agricultural Activities
NWP 41 – Reshaping Existing Drainage Ditches
NWP 42 – Recreational Facilities
NWP 43 – Stormwater Management Facilities

3. New Bank Stabilization Prohibition Areas 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 specific area identified on Figure 2 at www.nws.usace.army.mil, select Regulatory Permits then Permit Guidebook, then Nationwide Permits) cannot be authorized by a NWP.

4. Bank Stabilization. Any project including new or maintenance bank stabilization activities requires pre-construction notification to the District Engineer in accordance with Nationwide Permit General Condition 31 for Pre-Construction Notification. This requirement does not apply to maintenance work exempt by 33 CFR 323.4 (a)(2). Each notification must also include the following information:

a. Need for the work, including the cause of the erosion and the threat posed to structures, infrastructure, and/or public safety. The notification must also include a justification for the need to place fill or structures waterward of the line of the Corps' jurisdiction (typically, the ordinary high water mark or mean higher high water mark).

b. Current and expected post-project sediment movement and deposition patterns in and near the project area. In tidal waters, describe the location and size of the nearest bluff sediment sources (feeder bluffs) to the project area and current and expected post-project nearshore drift patterns in the project area.

c. Current and expected post-project habitat conditions, including the presence of fish, wildlife and plant species, submerged aquatic vegetation, spawning habitat, and special aquatic sites (e.g., vegetated shallows, riffle and pool complexes, or mudflats) in the project area.

d. In rivers and streams, an assessment of the likely impact of the proposed work on upstream, downstream and cross-stream properties (at a minimum the area assessed should extend from the nearest upstream bend to the nearest downstream bend of the watercourse). Discuss the methodology used for determining effects. The Corps reserves the right to request an increase in the reach assessment area to fully address the relevant ecological reach and associated habitat.

e. For new bank stabilization activities in rivers and streams, describe the type and length of existing bank stabilization within 300 feet up and downstream of the project area. In tidal areas, describe the type and length of existing bank stabilization within 300 feet along the shoreline on both sides of the project area.

f. Demonstrate the proposed project incorporates the least environmentally damaging practicable bank protection methods. These methods include, but are not limited to, the use of bioengineering, biotechnical design, root wads, large woody material, native plantings, and beach nourishment in certain circumstances. If rock must be used due to site erosion conditions, explain how the bank stabilization structure incorporates elements beneficial to fish. If the Corps determines you have not incorporated the least environmentally damaging practicable bank protection methods and/or have not fully compensated for impacts to aquatic resources, you must submit a compensatory mitigation plan to compensate for impacts to aquatic resources.

g. A planting plan using native riparian plant species unless the applicant demonstrates a planting plan is not appropriate or not practicable.

5. Crossings of Waters of the United States. Any project including installing, replacing, or modifying crossings of waters of the United States, such as culverts, requires pre-construction notification to the District Engineer in accordance with Nationwide Permit General Condition 31 for Pre-Construction Notification. This requirement does not apply to maintenance work exempt by 33 CFR 323.4 (a)(2). Each notification must also include the following information:

a. Need for the crossing.

b. Crossing design criteria and design methodology.

c. Rationale behind using the specific design method for the crossing.

6. Cultural Resources and Human Burials. Permittees must immediately stop work and notify the District Engineer within 24 hours if, during the course of conducting authorized work, human burials, cultural resources, or historic properties, as identified by the National Historic Preservation Act, are discovered. Failure to stop work in the area of discovery until the Corps can comply with the provisions of 33 CFR 325 Appendix C, the National Historic Preservation Act, and other pertinent laws and

regulations could result in a violation of state and federal laws. Violators are subject to civil and criminal penalties.

7. Essential Fish Habitat. An activity which may adversely affect essential fish habitat, as identified under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), may not be authorized by NWP until essential fish habitat requirements have been met by the applicant and the Corps. Non-federal permittees shall notify the District Engineer if essential fish habitat may be affected by, or is in the vicinity of, a proposed activity and shall not begin work until notified by the District Engineer that the requirements of the essential fish habitat provisions of the MSA have been satisfied and the activity is authorized. The notification must identify the type(s) of essential fish habitat (e.g., Pacific salmon, groundfish, and/or coastal-pelagic species) managed by a Fishery Management Plan that may be affected. Information about essential fish habitat is available at www.nwr.noaa.gov/.

8. Vegetation Protection and Restoration. Permittees must clearly mark all construction area boundaries before beginning work. The removal of native vegetation in riparian areas and wetlands, and the removal of submerged aquatic vegetation in estuarine and tidal areas must be avoided and minimized to the maximum extent practicable. Areas subject to temporary vegetation removal shall be replanted with appropriate native species by the end of the first planting season following the disturbance except as waived by the District Engineer. If an aquaculture area is permitted to impact submerged aquatic vegetation under NWP 48, the aquaculture area does not need to be replanted with submerged aquatic vegetation.

9. Access. You must allow representatives of this office to inspect the authorized activity at any time deemed necessary to ensure the work is being, or has been, accomplished in accordance with the terms and conditions of your permit.

10. Contractor Notification of Permit Requirements. The permittee must provide a copy of the nationwide permit verification letter, conditions, and permit drawings to all contractors involved with the authorized work, prior to the commencement of any work in waters of the U.S.

D. CORPS REGIONAL SPECIFIC CONDITIONS FOR THIS NWP

1. Private linear transportation crossings placed in waters of the U.S. with footprints wider than 22 feet or longer than 200 feet are not authorized by this NWP. For the width requirement, “footprint” refers to the footprint of the width of the roadway fill prism.

2. The permittee must submit a pre-construction notification to the District Engineer in accordance with Nationwide Permit General Condition 31 (Pre-Construction Notification) for linear transportation crossing activities in tidal waters.

E. STATE 401 CERTIFICATION GENERAL CONDITIONS:

1. **For in-water construction activities**. Individual 401 review is required for projects or activities authorized under NWPs that will cause, or be likely to cause or contribute to an exceedence of a State water quality standard (WAC 173-201A) or sediment management standard (WAC 173-204).

   ***Note**: State water quality standards are posted on Ecology’s website: http://www.ecy.wa.gov/programs/wq/swqs/. Click “Surface Water Criteria” for freshwater and marine water standards. Sediment management standards are posted on Ecology’s website: http://www.ecy.wa.gov/biblio/wac173204.html. Information is also available by contacting Ecology’s Federal Permit staff.*

2. **Projects or Activities Discharging to Impaired Waters**. Individual 401 review is required for projects or activities authorized under NWPs if the project or activity will occur in a 303(d) listed segment of a waterbody or upstream of a listed segment and may result in further exceedences of the specific listed parameter.

   ***Note**: To determine if your project or activity is in a 303(d) listed segment of a waterbody, visit Ecology's Water Quality Assessment webpage for maps and search tools, http://www.ecy.wa.gov/programs/wq/303d/2008/. Information is also available by contacting Ecology's Federal Permit staff.*

3. **Notification**. For projects or activities that will require Individual 401 review, applicants must provide Ecology with the same documentation provided to the Corps (as described in Corps Nationwide Permit General Condition 31, Pre-Construction Notification), including, when applicable:

   (a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, and any other Department of the Army permits used or intended to be used to authorize any part of the proposed project or any related activity.

   (b) Delineation of special aquatic sites and other waters of the United States. Wetland delineations must be prepared in accordance with the current 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.

   ***Note**: Wetland rating forms are available on Ecology's Wetlands website: http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems or by contacting Ecology's Federal Permit staff.*

   (c) A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted.

   Mitigation plans submitted for Ecology review and approval shall be based on the guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (Ecology Publications #06-06-011a and #06-06-011b).

   (d) Coastal Zone Management Program "Certification of Consistency" Form if the project is located within a coastal county (Clallam, Grays Harbor, Island, Jefferson, King, Kitsap, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Thurston, Wahkiakum, and Whatcom counties).

   ***Note**: CZM Certification of Consistency forms are available on Ecology's Federal Permit website: http://www.ecy.wa.gov/programs/sea/fed-permit/index.html or by contacting Ecology's Federal Permit staff.*

   (e) Other applicable requirements of Corps Nationwide Permit General Condition 31, Corps Regional Conditions, or notification conditions of the applicable NWP.

   ***Note**: Ecology has 180 days from receipt of applicable documents noted above **and** a copy of the final authorization letter from the Corps providing coverage for a proposed project or activity under the NWP Program to issue a WQC and CZM consistency determination response. If more than 180 days pass after Ecology's receipt of these documents, your requirement to obtain an individual WQC and CZM consistency determination response becomes waived.*

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

   Individual 401 review is required for activities in or affecting the following aquatic resources (and not prohibited by Regional Condition 1):

   (a) Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publications #04-06-025 and #04-06-015):
   - Estuarine wetlands
   - Natural Heritage wetlands
   - Bogs
   - Old-growth and mature forested wetlands
   - Wetlands in coastal lagoons
   - Interdunal wetlands
   - Vernal pools
   - Alkali wetlands

   (b) Fens, aspen-dominated wetlands, camas prairie wetlands, and marine water with eelgrass (*Zostera marina*) beds (except for NWP 48).

   (c) Category 1 wetlands

   (d) Category II wetlands with a habitat score $\geq$ 29 points. This State General Condition does not apply to the following Nationwide Permits:

   NWP 20 – Response Operations for Oil and Hazardous Substances
   NWP 32 – Completed Enforcement Actions

5. Mitigation. For projects requiring Individual 401 review, adequate compensatory mitigation must be provided for wetland and other water quality-related impacts of projects or activities authorized under the NWP Program.

   (a) Mitigation plans submitted for Ecology review and approval shall be based on the guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (Ecology Publications #06-06-011a and #06-06-011b) and shall, at a minimum, 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 towards 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) for guidance on developing mitigation plans.

Ecology encourages the use of alternative mitigation approaches, including advance mitigation and other programmatic approaches such as mitigation banks and programmatic mitigation areas at the local level. If you are interested in proposing use of an alternative mitigation approach, consult with the appropriate Ecology regional staff person. (see http://www.ecy.wa.gov/programs/sea/wetlands/contacts.htm)

Information on the state wetland mitigation banking program is available on Ecology's website: http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/index.html

6. **Temporary Fills.** Individual 401 review is required for any project or activity with temporary fill in wetlands or other waters of the State for more than 90 days, unless the applicant has received written approval from Ecology.

   ***Note**: This State General Condition does not apply to projects or activities authorized under NWP 33, Temporary Construction, Access, and Dewatering*

7. **Stormwater discharge pollution prevention**: All projects that involve land disturbance or impervious surfaces must implement prevention or control measures to avoid discharge of pollutants in stormwater runoff to waters of the state. For land disturbances during construction, the permittee must obtain and implement permits where required and follow Ecology's current stormwater manual.

   ***Note**: Stormwater permit information is available at Ecology's Water Quality website: http://www.ecy.wa.gov/programs/wq/stormwater/index.html. Ecology's Stormwater Management and Design Manuals are available at: http://www.ecy.wa.gov/programs/wq/stormwater/municipal/StrmwtrMan.html. Information is also available by contacting Ecology's Federal Permit staff.*

8. **State Certification for PCNs not receiving 45-day response.** In the event the U.S. Army Corps of Engineers does not respond to a complete pre-construction notification within 45 days, the applicant must contact Ecology for Individual 401 review.

F. STATE 401 CERTIFICATION SPECIFIC CONDITIONS FOR THIS NWP: Certified subject to conditions. Permittee must meet State 401 General Conditions. Individual 401 review is required for projects or activities authorized under this NWP if:

1. The entire linear transportation project or activity impacts more than ½ acre of wetlands or more than 1/3 acre of tidal waters.

2. The project includes fill related to a residential and/or commercial development.

G. EPA 401 CERTIFICATION GENERAL CONDITIONS:

A. Any activities in the following types of wetlands and waters of the United States will need to apply for an individual 401 certification: Mature forested wetlands, bogs, bog-like wetlands, wetlands in dunal systems along the Washington coast, coastal lagoons, vernal pools, aspen-dominated wetlands, alkali wetlands, camas prairie wetlands, estuarine wetlands, including salt marshes, and marine waters with eelgrass or kelp beds.

B. A 401 certification determination is based on the project or activity meeting established turbidity levels. The EPA will be using as guidance the state of Washington's water quality standards [WAC 173-201a] and sediment quality standards [WAC 173-204]. Projects or activities that are expected to exceed these levels or that do exceed these levels will require an individual 401 certification.

The water quality standards allow for short-term turbidity exceedances after all necessary Best Management Practices have been implemented (e.g., properly placed and maintained filter fences, hay bales and/or other erosion control devices, adequate detention of runoff to prevent turbid water from flowing off-site, providing a vegetated buffer between the activity and open water, etc.), and only up to the following limits:

Wetted Stream Width at Discharge Point	Approximate Downstream Point for Determining 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 dimension

C. 401 certification of projects and activities under NWPs will use Washington State Department of Ecology's most recent stormwater manual or an EPA approved equivalent manual as guidance in meeting water quality standards.

D. For projects and activities requiring coverage under an NPDES permit, certification is based on compliance with the requirements of that permit. Projects and activities not in compliance with NPDES requirements will require individual 401certification.

E. Individual 401certification is required for projects or activities authorized under NWPs if the project will discharge to a waterbody on the list of impaired waterbodies (the 303(d) List) and the discharge may result in further exceedance of a specific parameter the waterbody is listed for. The EPA shall make this determination on a case-by-case basis.

For projects or activities that will discharge to a 303(d)-listed waterbody that does not have an approved Total Maximum Daily Load (TMDL) or an approved water quality management plan, the applicant must provide documentation for EPA approval showing that the discharge will not result in further exceedance of the listed contaminant or impairment.

For projects or activities that will discharge to a 303(d)-listed waterbody that does not have an approved TMDL, the applicant must provide documentation for EPA approval showing that the discharge is within the limits established in the TMDL. The current list of 303(d)-listed waterbodies in Washington

State will be consulted in making this determination and is available on Ecology's web site at: www.ecy.wa.gov/programs/wq/303d/2012/index.html

The EPA may issue 401 certification for projects or activities that would result in further exceedance or impairment if mitigation is provided that would result in a net decrease in listed contaminants or less impairment in the waterbody. This determination would be made during individual 401 certification review.

F. For projects requiring individual 401 certification, applicants must provide the EPA with the same documentation provided to the Corps, (as described in Corps' National General Condition 31, Pre-Construction Notification), including, when applicable:

(a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, any other U.S. Department of the Army permits used or intended to use to authorize any part of the proposed project or any related activity.

(b) Delineation of special aquatic sites and other waters of the United States. Wetland delineations must be prepared in accordance with the current method required by the Corps.

(c) A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted.

(d) Other applicable requirements of Corps National General Condition 31, Corps Regional Conditions, or notification conditions of the applicable NWP.

A request for individual 401 certification- review is not complete until the EPA receives the applicable documents noted above and the EPA has received a copy of the final authorization letter from the Corps providing coverage for a proposed project or activity under the NWP Program.

G. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

H. An individual 401 certification is based on adequate compensatory mitigation being provided for aquatic resource and other water quality-related impacts of projects or activities authorized under the NWP Program.

A 401 certification is contingent upon written approval from the EPA of the compensatory mitigation plan for projects and activities resulting in any of the following:

- impacts to any aquatic resources requiring special protection (as defined in EPA General Condition A or Corps General Regional Condition 1)
- any impacts to tidal waters or non-tidal waters adjacent to tidal waters (applies to NWP 14)
- Or, any impacts to aquatic resources greater than ¼ acre.

Compensatory mitigation plans submitted to the EPA shall be based on the Joint Agency guidance provided in *Wetland Mitigation in Washington State, Parts 1 and 2* (Ecology Publication #06-06-011a and #06-06-011b) and shall, at a minimum, include the following:

(1) A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.
(2) The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded)
(3) The rationale for the mitigation site that was selected
(4) The goals and objectives of the compensatory mitigation project
(5) How the mitigation project will be accomplished, including proposed performance standards for measuring success (including meeting planting success standard of 80 percent survival after five years), evidence for hydrology at the mitigation site, and the proposed buffer widths;
(6) How it will be maintained and monitored to assess progress towards goals and objectives.
(7) Completion and submittal of an "as-built conditions report" upon completion of grading, planting and hydrology establishment at the mitigation site;
(8) Completion and submittal of monitoring reports at years 3 and 5 showing the results of monitoring for hydrology, vegetation types, and aerial cover of vegetation.
(9) For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.
(10) Documentation of legal site protection mechanism (covenant or deed restriction) to show how the compensatory mitigation site will be legally protected for the long-term.

I. An individual 401 certification is required for any activity where temporary fill will remain in wetlands or other waterbodies for more than 90 days. The 90 day period begins when filling activity starts in the wetland or other waterbody.

J. An individual 401 is required for any proposed project or activity in waterbodies on the most current list of the following Designated Critical Resource Waters (per Corps General Condition 22).

K. An individual 401 certification is required for any proposed project that would increase permanent, above-grade fill within the 100-year floodplain (including the floodway and the flood fringe).

[***Note:*** The 100-year floodplain is defined as those areas identified as Zones A, A1-30, AE, AH, AO, A99, V, V1-30, and VE on the most current Federal Emergency Management Agency Flood Rate Insurance Maps, or areas identified as within the 100-year floodplain on applicable local Flood Management Program maps. The 100-year flood is also known as the flood with a 100-year recurrence interval, or as the flood with an exceedance probability of 0.01.]

H. EPA 401 CERTIFICATION SPECIFIC CONDITIONS FOR THIS NWP: Denied. Individual 401 certification is required.

I. COASTAL ZONE MANAGEMENT CONSISTENCY RESPONSE FOR THIS NWP: Concur, subject to the following condition: When individual 401 review is triggered, a CZM Certificate of Consistency form must be submitted for project located within the 15 coastal counties (See State General 401 Condition 3 (Notification)).

HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: January 16, 2015
Project End Date: October 15, 2015

Permit Number: 2015-4-33+01
FPA/Public Notice Number: N/A
Application ID: 2285

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
City of Ferndale	Widener & Associates
ATTENTION: Wendy LaRocque	ATTENTION: Ross Widener
PO Box 936	10108 32nd Ave W, Ste D
Ferndale, WA 98248	Everett, WA 98204-1302

Project Name: Brown Road Culvert Replacement

Project Description: The proposed project will replace the two existing concrete culverts under Brown Road with one three sided box culvert. Approximately 100 linear feet of roadway will be restored at the culvert crossing.

PROVISIONS

TIMING LIMITATIONS:

1. The project may begin June 1, 2015 and shall be completed by October 15, 2015.

NOTIFICATION REQUIREMENTS:

2. The Area Habitat Biologist (AHB) listed below shall receive written notification (FAX or mail) from the person to whom this Hydraulic Project Approval (HPA) is issued (permittee) or the agent/contractor no less than three working days prior to the start of construction activities. The notification shall include the permittee's name, project location, starting date for work, and the control number for this HPA.

3. Work shall be accomplished per plans and specifications approved by the Washington Department of Fish and Wildlife entitled APPS Application 2285 and submited on December 4, 2014, except as modified by this Hydraulic Project Approval. A copy of these plans shall be available on site during construction.

4. If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), immediate notification shall be made to the Washington Military Department's Emergency Management Division at 1-800-258-5990, and to the Area Habitat Biologist listed below.

POST CONSTRUCTION NOTIFICATION REQUIREMENTS:

5. The permittee, agent or contractor shall contact the Washington Department of Fish and Wildlife by e-mail to HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98501-1091; or fax to (360) 902-2946 within seven days of completion of the work. The notification shall include the permittee’s name, project location, completion date for the work, and the Hydraulic Project Approval control number. The department may conduct a compliance inspection; however, the department will notify the permittee or agent prior to the inspection.

EQUIPMENT RELATED:

6. Equipment used for this project may operate below the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) shall not enter or operate below the ordinary high water line.

7. Equipment used for this project shall be free of external petroleum-based products while working around the stream. Equipment shall be checked daily for leaks and any necessary repairs shall be completed prior to commencing work activities along the stream.

8. Fueling activities shall be commenced a minimum of 100 feet from the wetted perimeter of any stream or be placed

within a secondary containment unit (pumps) to prevent spillage of petro-chemicals. A petroleum spill kit shall be present on site for the duration of project.

BY-PASS:

9. If the stream is flowing, a temporary bypass to divert flow around the work area shall be in place prior to initiation of other work in the wetted perimeter. If the stream is not flowing, bypass materials shall be present on-site and ready to be deployed in the event the channel becomes re-watered.

10. A sandbag revetment or similar device shall be installed at the bypass inlet to divert the entire flow through the bypass.

11. A sandbag revetment or similar device shall be installed at the downstream end of the bypass to prevent backwater from entering the work area.

12. The bypass shall be of sufficient size to pass all flows and debris for the duration of the project.

13. Upon completion of the project, all material used in the temporary bypass shall be removed from the site and the site returned to preproject or improved conditions.

14. The permittee shall capture and safely move food fish, game fish, and other fish life from the job site. The permittee shall have fish capture and transportation equipment ready and on the job site. Captured fish shall be immediately and safely transferred to free-flowing water downstream of the project site.

15. Any device used for diverting water from a fish-bearing stream shall be equipped with a fish guard to prevent passage of fish into the diversion device pursuant to RCW 77.57.010 and 77.57.070. The pump intake shall be screened by one of the following:
a. Perforated plate: 0.094 inch (maximum opening diameter).
b. Profile bar: 0.069 inch (maximum width opening).
c. Woven wire: 0.087 inch (maximum opening in the narrow direction).
The minimum open area for all types of fish guards is 27%. The screened intake shall consist of a facility with enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. Screen maintenance shall be adequate to prevent injury or entrapment of juvenile fish and the screen shall remain in place whenever water is withdrawn from the stream through the pump intake.

CULVERT INSTALLATION:

16. The culvert shall be installed in the dry or in isolation from the stream flow by the installation of a bypass flume or culvert, or by pumping the stream flow around the work area.

17. The width between the culvert footings for a bottomless culvert shall be equal to or greater than the average width of the streambed (12 feet wide, measured by Joel Ingram on 10/03/2014)

18. Footings of the bottomless culvert shall be buried sufficiently deep so they will not become exposed by scour within the culvert.

19. The culvert shall be placed on a flat gradient with the bottom of the culvert placed below the level of the streambed a minimum of 20 percent of the culvert's verticle rise. The 20 percent placement below the streambed shall be measured at the culvert outlet. Bedload material shall be clean, rounded, well graded and sized appropritately for the stream.

20. The culvert shall be installed to maintain structural integrity to the 100-year peak flow with consideration of the debris likely to be encountered.

21. Fill associated with the culvert installation shall be protected from erosion to the 100-year peak flow.

22. The culvert shall be installed and maintained to avoid inlet scouring and to prevent erosion of stream banks downstream of the project.

23. The culvert facility shall be maintained by the owner(s) per RCW 77.57.030 to ensure continued, unimpeded fish passage. If the structure becomes a hindrance to fish passage, the owner(s) shall be responsible for obtaining an

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Hydraulic Project Approval and providing prompt repair. Financial responsibility for maintenance and repairs shall be that of the owner(s).

RE-VEGETATION:

24. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to construct the project. Within seven calendar days of project completion, all disturbed areas shall be protected from erosion using vegetation or other means. Within one year of project completion, the banks, including riprap areas, shall be revegetated with native or other approved woody species. Vegetative cuttings shall be planted at a maximum interval of three feet (on center) and maintained as necessary for three years to ensure 80 percent survival.

WATER QUALITY:

25. Every effort shall be taken during all phases of this project to ensure that sediment-laden water is not allowed to enter the stream.

26. Erosion control methods shall be used to prevent silt-laden water from entering the stream. These may include, but are not limited to, straw bales, filter fabric, temporary sediment ponds, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas.

27. Wastewater from project activities and water removed from within the work area shall be routed to an area landward of the ordinary high water line to allow removal of fine sediment and other contaminants prior to being discharged to the stream.

28. All waste material such as construction debris, silt, excess dirt or overburden resulting from this project shall be deposited above the limits of flood water in an approved upland disposal site.

29. If high flow conditions that may cause siltation are encountered during this project, work shall stop until the flow subsides.

30. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.

LOCATION #1:	Site Name: Brown Road Culver Existing right-of-way near 2069 Brown Road, Ferndale, WA					
WORK START:	June 1, 2015			WORK END:	October 15, 2015	
WRIA		Waterbody:			Tributary to:	
01 - Nooksack		California Creek			Drayton Harbor	
1/4 SEC:	Section:	Township:	Range:	Latitude:	Longitude:	County:
SW 1/4	08	39 N	02 E	48.884674	-122.592891	Whatcom
Location #1 Driving Directions						
From I-5, take exit 263 for Portal Way. Turn Right to follow Portal Way North to Brown Road. Turn left onto Brown Road. See attached vicinity map.						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

HYDRAULIC PROJECT APPROVAL

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This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person (s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person (s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. Minor modifications do not require you to pay additional application fees or be issued a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you do not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the control number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. Do not include payment with your request. You should allow up to 45 days for the department to process your request.

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MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you paid an application fee for your original HPA you must pay an additional $150 for the major modification. If you did not pay an application fee for the original HPA, no fee is required for a change to it. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you do not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the control number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, payment of the application the original application was subject to an application fee, and the requestor's signature. Send your written request and payment, if applicable, 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), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-110-340 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 Washington Department of Fish and Wildlife HPA Appeals Coordinator,600 Capitol Way North, Olympia, Washington 98501-1091; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee will conduct an informal hearing and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-110-350 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.

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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 Washington Department of Fish and Wildlife HPA Appeals Coordinator,600 Capitol Way North, Olympia, Washington 98501-1091; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist	Joel.Ingram@dfw.wa.gov		for Director
Joel Ingram	360-466-4345, Ext:271		WDFW