CONTRACT DOCUMENTS
FOR

CITY OF FERNDALE, WASHINGTON
Washington Street Improvement Project
Main Street to Vista Drive
City Project Number ST2015-08

Consisting of:

Bid Documents
Contract Forms
Specifications & Conditions
Drawings

Plans Provided for:

City of Ferndale
Kevin Renz, 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

WASHINGTON STREET IMPROVEMENT PROJECT
MAIN STREET TO VISTA DRIVE
FERNDALE, WASHINGTON

TABLE OF CONTENTS

BID PROCEDURES AND CONDITIONS
(This Page Intentionally Left Blank)

INVITATION TO BID
FOR
WASHINGTON STREET IMPROVEMENT PROJECT - # ST2015-08

NOTICE IS HEREBY GIVEN by CITY OF FERNDALE that 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 **March 7, 2018 at 2:00 PM**, and will then and there be opened and publicly read for the **Washington Street Improvement Project.**

PROJECT DESCRIPTION: This contract provides for improvements of approximately 1,800 linear feet of Washington Street, from the intersection of Main Street to Vista Drive, in Ferndale Washington. Work will include clearing, grubbing, grading, roadway excavation, storm sewer drainage improvements, water main installation, sanitary sewer installation, placing gravel base, hot mix asphalt paving, curb and gutters, sidewalks, ADA ramps, and other work, in accordance with the Contract Plans, Special Provisions, the Standard Specifications, including the amendments thereto, and Standard Plans.

Bid Guaranty
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. An electronic version of the project plans and specifications is available for download on the City of Ferndale website at www.cityofferndale.org if you download the bid documents you are required to contact the City to be added to the planholders' list.

Pre-Bid Conference
Bidders, prior to submittal of a bid, may attend a pre-bid conference with the Project Engineer. The meeting will start on **February 28, 2018 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.

Susan Duncan
City Clerk - City of Ferndale
Ferndale Record Journal - Published February 14 and 21, 2018

BID PROPOSAL FORMS

(This Page Intentionally Left Blank)

BID PROPOSAL

FOR

WASHINGTON STREET IMPROVEMENT 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: **"WASHINGTON STREET IMPROVEMENT 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.

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
		Schedule A - Roadway		
1	1 LUMP SUM	MOBILIZATION (1-09.7)	$ per LS	$
2	1 LUMP SUM	SPCC PLAN (1-07)	$ per LS	$
3	2,300 HOUR	FLAGGERS (1-10)	$ per HR	$
4	75 HOUR	OTHER TRAFFIC CONTROL LABOR (1-10)	$ per HR	$
5	1 LUMP SUM	PROJECT TEMPORARY TRAFFIC CONTROL (1-10)	$ per LS	$
6	1 LUMP SUM	CLEARING AND GRUBBING (2-01)	$ per LS	$
7	1 LUMP SUM	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (2-02)	$ per LS	$
8	4,200 LINEAR FOOT-INCH	SAWCUT ACP (2-02)	$ per LF-IN	$
9	1,500 LINEAR FOOT-INCH	SAWCUT PCC (2-02)	$ per LF-IN	$
10	5,600 CUBIC YARD	ROADWAY EXCAVATION INCL. HAUL (2-03)	$ per CY	$
11	30 CUBIC YARD	UNSUITABLE FOUNDATION EXCAVATION INCL. HAUL (2-03)	$ per CY	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
12	50 M GAL.	WATER (2-07)	$ per M GAL.	$
13	10,800 SQUARE YARD	CONSTRUCTION GEOTEXTILE FOR SEPARATION (2-12)	$ per SY	$
14	8,600 TON	GRAVEL BASE (4-02)	$ per TON	$
15	950 TON	CRUSHED SURFACING TOP COURSE (4-04)	$ per TON	$
16	170 SQUARE YARD	PLANING BITUMINOUS PAVEMENT (5-04)	$ per SY	$
17	85 SQUARE YARD	SELF-ADHERING RUBBERIZED ASPHALT MEMBRANE (5-04)	$ per SY	$
18	1,900 TON	HMA CL. 1/2" PG 64-22 (5-04)	$ per TON	$
19	105 TON	COMMERCIAL HMA (5-04)	$ per TON	$
20	0 CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT (5-04)	$ 0 CALC	$ 0
21	0 CALC	COMPACTION PRICE ADJUSTMENT (5-04)	$ 0 CALC	$ 0
22	1 LUMP SUM	ADJUSTMENTS TO FINISHED GRADE (7-05)	$ per LS	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
23	1 LUMP SUM	ESC LEAD (8-01)	$ per LS	$
24	1 LUMP SUM	SWPP PLAN PREPARATION (8-01)	$ per LS	$
25	1 FORCE ACCOUNT	EROSION/WATER POLLUTION CONTROL (8-01)	$ 10,000.00 FA	$ 10,000.00
26	15 EACH	INLET PROTECTION (8-01)	$ per EA	$
27	120 SQUARE YARD	BARK MULCH (8-02)	$ per SY	$
28	1,800 SQUARE YARD	TOPSOIL TYPE A (8-02)	$ per SY	$
29	1,650 SQUARE YARD	SEEDED LAWN INSTALLATION (8-02)	$ per SY	$
30	1 FORCE ACCOUNT	LANDSCAPE RESTORATION (8-02)	$ 20,000.00 FA	$ 20,000.00
31	3,275 LINEAR FOOT	CEMENT CONC. TRAFFIC CURB AND GUTTER (8-04)	$ per LF	$
32	30 LINEAR FOOT	EXTRUDED CURB (8-04)	$ per LF	$
33	625 SQUARE YARD	CEMENT CONC. DRIVEWAY ENTRANCE TYPE 1 (8-06)	$ per SY	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
34	11.4 HUNDRED	RAISED PAVEMENT MARKER TYPE 1 (8-09)	$ per HUN	$
35	2.3 HUNDRED	RAISED PAVEMENT MARKER TYPE 2 (8-09)	$ per HUN	$
36	1,350 SQUARE YARD	CEMENT CONC. SIDEWALK (8-14)	$ per SY	$
37	65 SQUARE YARD	REINFORCED CEMENT CONC. SIDEWALK, 6 IN. THICK (8-14)	$ per SY	$
38	105 LINEAR FOOT	TYPE "A" MONOLITHIC RETAINING WALL (8-14)	$ per LF	$
39	2 EACH	CEMENT CONC. CURB RAMP TYPE PARALLEL A (8-14)	$ per EA	$
40	4 EACH	CEMENT CONC. CURB RAMP TYPE PARALLEL B (8-14)	$ per EA	$
41	60 TON	QUARRY SPALLS (8-15)	$ per TON	$
42	2 EACH	MAILBOX SUPPORT, TYPE 1 (8-18)	$ per EA	$
43	3 EACH	MAILBOX SUPPORT, TYPE 2 (8-18)	$ per EA	$
44	60 LINEAR FOOT	REMOVE AND REPLACE EXISTING FENCE (8-19)	$ per LF	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
45	1 LUMP SUM	PERMANENT SIGNING (8-21)	$ per LS	$
46	7 EACH	PLASTIC TRAFFIC LETTER (8-22)	$ per EA	$
47	3,520 LINEAR FOOT	PAINT LINE (8-22)	$ per LF	$
48	80 LINEAR FOOT	PLASTIC STOP LINE (8-22)	$ per LF	$
49	730 SQUARE FOOT	PLASTIC CROSSWALK LINE (8-22)	$ per SF	$
50	2 EACH	POTHOLE EXISTING UNDERGROUND UTILITY (8-30)	$ per EA	$
51	1 EST	REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES (8-31)	$ 10,000.00 per EST	$ 10,000.00

Total Schedule A $

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
		Schedule B - Storm Drain		
52	1 LUMP SUM	MOBILIZATION (1-09.7)	$ per LS	$
53	500 HOUR	FLAGGERS (1-10)	$ per HR	$
54	40 HOUR	OTHER TRAFFIC CONTROL LABOR (1-10)	$ per HR	$
55	9,600 SQUARE FOOT	SHORING OR EXTRA EXCAVATION CLASS B (2-09)	$ per SF	$
56	2,260 TON	GRAVEL BASE (4-02)	$ per TON	$
57	110 LINEAR FOOT	UNDERDRAIN PIPE 6 IN. DIAM (7-01)	$ per LF	$
58	525 LINEAR FOOT	UNDERDRAIN PIPE 8 IN. DIAM (7-01)	$ per LF	$
59	65 LINEAR FOOT	DUCTILE IRON STORM SEWER PIPE 8 IN. DIAM. (7-04)	$ per LF	$
60	35 LINEAR FOOT	DUCTILE IRON STORM SEWER PIPE 12 IN. DIAM. (7-04)	$ per LF	$
61	145 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 8 IN. DIAM. (7-04)	$ per LF	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
62	1,300 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 12 IN. DIAM. (7-04)	$ per LF	$
63	345 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 18 IN. DIAM. (7-04)	$ per LF	$
64	1,890 LINEAR FOOT	TESTING STORM SEWER PIPE (7-04)	$ per LF	$
65	25 LINEAR FOOT	TRENCH DRAIN (7-05)	$ per LF	$
66	4 EACH	STORM DRAIN CLEANOUT (7-05)	$ per EA	$
67	5 EACH	AREA DRAIN (7-05)	$ per EA	$
68	18 EACH	CATCH BASIN TYPE 1 (7-05)	$ per EA	$
69	1 EACH	CATCH BASIN TYPE 1L (7-05)	$ per EA	$
70	7 EACH	CATCH BASIN TYPE 2, 48 IN. DIAM. (7-05)	$ per EA	$
71	1 EACH	CATCH BASIN TYPE 2, 48 IN. DIAM., STORMFILTER (7-05)	$ per EA	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
72	20 CUBIC YARD	REMOVAL OF UNSUITABLE MATERIAL INCL. HAUL (7-08)	$ per CY	$
73	40 TON	QUARRY SPALLS (8-15)	$ per TON	$
74	20 EACH	POTHOLE EXISTING UNDERGROUND UTILITY (8-30)	$ per EA	$
75	1 EST	REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES (8-31)	$ 5,000.00 EST	$ 5,000.00
		Total Schedule B	$	

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
		Schedule C - Water Main		
76	1 LUMP SUM	MOBILIZATION (1-09.7)	$ per LS	$
77	500 HOUR	FLAGGERS (1-10)	$ per HR	$
78	40 HOUR	OTHER TRAFFIC CONTROL LABOR (1-10)	$ per HR	$
79	40 CUBIC YARD	CONTROLLED DENSITY FILL (2-09)	$ per CY	$
80	2,700 TON	GRAVEL BASE (4-02)	$ per TON	$
81	90 LINEAR FOOT	DUCTILE IRON PIPE FOR WATER MAIN 4 IN. DIAM. (7-09)	$ per LF	$
82	40 LINEAR FOOT	DUCTILE IRON PIPE FOR WATER MAIN 8 IN. DIAM. (7-09)	$ per LF	$
83	2,100 LINEAR FOOT	DUCTILE IRON PIPE FOR WATER MAIN 12 IN. DIAM. (7-09)	$ per LF	$
84	1 EACH	CONNECT TO EXISTING 4 IN. DIAM. WATER MAIN (7-09)	$ per EA	$
85	4 EACH	CONNECT TO EXISTING 8 IN. DIAM. WATER MAIN (7-09)	$ per EA	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
86	2 EACH	CONNECT TO EXISTING 12 IN. DIAM. WATER MAIN (7-09)	$ per EA	$
87	2 EACH	STOVEPIPE WATERMAIN, 4 IN. DIAM. (7-09)	$ per EA	$
88	1 EACH	STOVEPIPE WATERMAIN, 6 IN. DIAM. (7-09)	$ per EA	$
89	2 EACH	STOVEPIPE WATERMAIN, 8 IN. DIAM. (7-09)	$ per EA	$
90	2 EACH	STOVEPIPE WATERMAIN, 12 IN. DIAM. (7-09)	$ per EA	$
91	1 EACH	BLOWOFF ASSEMBLY (7-09)	$ per EA	$
92	16,500 SQUARE FOOT	SHORING OR EXTRA EXCAVATION TRENCH (7-09)	$ per SF	$
93	1 EACH	COMB. AIR RELEASE/AIR VACUUM VALVE ASSEMBLY 2 IN. (7-12)	$ per EA	$
94	1 EACH	GATE VALVE 4 IN. (7-12)	$ per EA	$
95	3 EACH	GATE VALVE 8 IN. (7-12)	$ per EA	$
96	22 EACH	GATE VALVE 12 IN. (7-12)	$ per EA	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
97	4 EACH	HYDRANT ASSEMBLY (7-14)	$ per EA	$
98	1 EACH	2" METER VAULT (7-15)	$ per EA	$
99	1 EACH	4" METER VAULT (7-15)	$ per EA	$
100	13 EACH	SERVICE CONNECTION 3/4 IN. DIAM. (7-15)	$ per EA	$
101	6 EACH	SERVICE CONNECTION 1 IN. DIAM. (7-15)	$ per EA	$
102	18 EACH	PRESSURE REDUCING VALVE 3/4 IN. (7-15)	$ per EA	$
103	1 EACH	PRESSURE REDUCING VALVE 1 IN. (7-15)	$ per EA	$
104	1 EACH	PRESSURE REDUCING VALVE 2 IN. (7-15)	$ per EA	$
105	20 EACH	POTHOLE EXISTING UNDERGROUND UTILITY (8-30)	$ per EA	$
106	1 EST	REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES (8-31)	$ 5,000.00 per EST	$ 5,000.00

Subtotal Schedule C **$** _____

Sales Tax Schedule C (8.7%) **$** _____

Total Schedule C **$** _____

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
		Schedule D - Sanitary Sewer		
107	1 LUMP SUM	MOBILIZATION (1-09.7)	$ per LS	$
108	300 HOUR	FLAGGERS (1-10)	$ per HR	$
109	20 HOUR	OTHER TRAFFIC CONTROL LABOR (1-10)	$ per HR	$
110	13,500 SQUARE FOOT	SHORING OR EXTRA EXCAVATION CLASS B (2-09)	$ per SF	$
111	3,500 TON	GRAVEL BASE (4-02)	$ per TON	$
112	1 EACH	MANHOLE 48 IN. DIAM. TYPE 1 (7-05)	$ per EA	$
113	1 EACH	MANHOLE 60 IN. DIAM. TYPE 1, W/INSIDE DROP (7-05)	$ per EA	$
114	1 EACH	MANHOLE 48 IN. DIAM. TYPE 3 (7-05)	$ per EA	$
115	2 LINEAR FOOT	MANHOLE ADDITIONAL HEIGHT 48 IN. DIAM. TYPE 1 (7-05)	$ per LF	$
116	5 LINEAR FOOT	MANHOLE ADDITIONAL HEIGHT 60 IN. DIAM. TYPE 1 (7-05)	$ per LF	$

( ) SECTION REFERENCE February 13, 2018

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
117	30 CUBIC YARD	REMOVAL OF UNSUITABLE MATERIAL INCL. HAUL (7-08)	$ per CY	$
118	315 LINEAR FOOT	PVC SANITARY SEWER PIPE 6 IN. DIAM. (7-17)	$ per LF	$
119	600 LINEAR FOOT	PVC SANITARY SEWER PIPE 8 IN. DIAM. (7-17)	$ per LF	$
120	170 LINEAR FOOT	PVC SANITARY SEWER PIPE 10 IN. DIAM. (7-17)	$ per LF	$
121	770 LINEAR FOOT	TESTING SEWER PIPE (7-17)	$ per LF	$
122	60 TON	QUARRY SPALLS (8-15)	$ per TON	$
123	20 EACH	POTHOLE EXISTING UNDERGROUND UTILITY (8-30)	$ per EA	$
124	1 EST	REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES (8-31)	$ 5,000.00 EST	$ 5,000.00

Subtotal Schedule D **$** _____

Sales Tax Schedule D (8.7%) **$** _____

Total Schedule D **$** _____

Total Schedules A, B, C, and D (Including Sales Tax) **$** _____

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 _____, 2017, 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, **WASHINGTON STREET IMPROVEMENT 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 _____, 2018.

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.

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

CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (November 7, 2017), the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

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

_____
Bidder's Business Name

_____
Signature of Authorized Official*

_____
Printed Name

_____
Title

_____ _____ _____
Date City State

Check One:
Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

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

_____

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

_____

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

SPECIFICATIONS AND CONDITIONS

(This Page Intentionally Left Blank)

INTRO.AP1

INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2016 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 1, 2016

1-01.3 Definitions

The following new term and definition is inserted after the eighth paragraph:

> **Cold Weather Protection Period** – A period of time 7 days from the day of concrete placement or the duration of the cure period, whichever is longer.

1-02.AP1

Section 1-02, Bid Procedures and Conditions
June 1, 2017

1-02.4(1) General

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

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

1-02.6 Preparation of Proposal

In this section, "Disadvantaged Business Enterprise" is revised to read "Underutilized Disadvantaged Business Enterprise", and "DBE" is revised to read "UDBE".

1-02.9 Delivery of Proposal

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

> The Contracting Agency will not open or consider any Proposal when the Proposal or Bid deposit is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals unless an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received.

The following new paragraph is inserted before the last paragraph:

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

of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.12 Public Opening of Proposals

This section is supplemented with the following new paragraph:

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be opened at the time indicated in the call for Bids the time specified for opening of Proposals will be deemed to be extended to the same time of day on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.13 Irregular Proposals

In this section, "Disadvantaged Business Enterprise" is revised to read "Underutilized Disadvantaged Business Enterprise", and "DBE" is revised to read "UDBE".

1-04.AP1

Section 1-04, Scope of the Work
June 1, 2017

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

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

Whenever reference is made in these Specifications or the Special Provisions to codes, rules, specifications, and standards, the reference shall be construed to mean the code, rule, specification, or standard that is in effect on the Bid advertisement date, unless otherwise stated or as required by law.

1-04.3 Reference Information

This section is supplemented with the following new sentence:

If a document that is provided as reference information contains material also included as a part of the Contract, that portion of the document shall be considered a part of the Contract and not as Reference Information.

1-04.4(2)A General

Item number 4 in the third paragraph is revised to read:

4. Provide substitution for deleted or reduced Condition of Award Work, Apprentice Utilization and Training.

1-06.AP1

Section 1-06, Control of Material
August 7, 2017

This section is supplemented with the following new section and subsections:

1-06.6 Recycled Materials

The Contractor shall make their best effort to utilize recycled materials in the construction of the project; the use of recycled concrete aggregate as specified in Section 1-06.6(1)A is a requirement of the Contract.

The Contractor shall submit a Recycled Material Utilization Plan as a Type 1 Working Drawing within 30 calendar days after the Contract is executed. The plan shall provide the Contractor's anticipated usage of recycled materials for meeting the requirements of these Specifications. The quantity of recycled materials will be provided in tons and as a percentage of the Plan quantity for each material listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material. When a Contract does not include Work that requires the use of a material that is included in the requirements for using materials the Contractor may state in their plan that no recycled materials are proposed for use.

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

1-06.6(1) Recycling of Aggregate and Concrete Materials

1-06.6(1)A General

The minimum quantity of recycled concrete aggregate shall be 25 percent of the total quantity of aggregate that is incorporated into the Contract for those items listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material that allow the use of recycled concrete aggregate. The percentage of recycled material incorporated into the project for meeting the required percentage will be calculated in tons based on the quantity of recycled concrete used on the entire Contract and not as individual items.

If the Contractor's total cost for Work with recycled concrete aggregate is greater than without the Contractor may choose to not use recycled concrete aggregate. If the Recycled Material Utilization Plan does not indicate the minimum usage of recycled concrete aggregate required above, or if completed project quantities do not meet the minimum usage required, the Contractor shall develop the following:

1. A cost estimate for each material listed in Section 9-03.21(1)E that is utilized on the Contract. The cost estimate shall include the following:

    a. The estimated costs for the Work for each material with 25 percent recycled concrete aggregate. The cost estimate shall include for each material a copy of the price quote from the supplier with the lowest total cost for the Work.

    b. The estimated costs for the Work for each material without recycled concrete aggregate.

The Contractor's cost estimates shall be submitted as an attachment to the Recycled Material Utilization Plan, or with the Reporting form.

1-07.AP1

Section 1-07, Legal Relations and Responsibilities to the Public
August 7, 2017

1-07.1 Laws to be Observed

The second paragraph is deleted.

In the second to last sentence of the third paragraph, "WSDOT" is revised to read "Contracting Agency".

1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax

The last three sentences of the first paragraph are deleted and replaced with the following new sentence:

The Contractor (Prime or Subcontractor) shall include sales or use tax on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project, in the unit bid prices.

1-07.3(1) Forest Fire Prevention

This section is supplemented with the following new subsections:

1-07.3(1)A Fire Prevention Control and Countermeasures Plan

The Contractor shall prepare and implement a project-specific fire prevention, control, and countermeasures plan (FPCC Plan) for the duration of the project. The Contractor shall submit a Type 2 Working Drawing no later than the date of the preconstruction conference.

1-07.3(1)A1 FPCC Plan Implementation Requirements

The Contractor's FPCC Plan shall be fully implemented at all times. The Contractor shall update the FPCC Plan throughout project construction so that the plan reflects actual site conditions and practices. The Contractor shall update the FPCC Plan at least annually and maintain a copy of the updated FPCC Plan that is available for inspection on the project site. Revisions to the FPCC Plan and the Industrial Fire Precaution Level (IFPL) shall be discussed at the weekly project safety meetings.

1-07.3(1)A2 FPCC Plan Element Requirements

The FPCC Plan shall include the following:

1. The names, titles, and contact information for the personnel responsible for implementing and updating the plan.
2. The names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a fire.
3. All potential fire causing activities such as welding, cutting of metal, blasting, fueling operations, etc.
4. The location of fire extinguishers, water, shovels, and other firefighting equipment.
5. The response procedures the Contractor shall follow in the event of a fire.

Most of Washington State is covered under the IFPL system which, by law, is managed by the Department of Natural Resources (DNR). It is the Contractor's responsibility to be familiar with the DNR requirements and to verify whether or not IFPL applies to the specific project.

If the Contractor wishes to continue a work activity that is prohibited under an industrial fire precaution level, the Contractor shall obtain a waiver from the DNR and provide a copy to the Engineer prior to continuation of work on the project.

If the IFPL requirements prohibit the Contractor from performing Work the Contractor may be eligible for an unworkable day in accordance with Section 1-08.5.

The Contractor shall comply with the requirements of these provisions at no additional cost to the Contracting Agency.

1-07.8 High-Visibility Apparel

The last paragraph is revised to read:

High-visibility garments shall be labeled as, and in a condition compliant with the ANSI/ISEA 107 (2004 or later version) and shall be used in accordance with manufacturer recommendations.

1-07.8(1) Traffic Control Personnel

In this section, references to "ANSI/ISEA 107-2004" are revised to read "ANSI/ISEA 107".

1-07.8(2) Non-Traffic Control Personnel

In this section, the reference to "ANSI/ISEA 107-2004" is revised to read "ANSI/ISEA 107".

1-07.9(2) Posting Notices

Items 1 and 2 are revised to read:

1. EEOC - P/E-1 (revised 11/09, supplemented 09/15) – **Equal Employment Opportunity IS THE LAW** published by US Department of Labor. Post for projects with federal-aid funding.

2. FHWA 1022 (revised 05/15) – **NOTICE Federal-Aid Project** published by Federal Highway Administration (FHWA). Post for projects with federal-aid funding.

Items 5, 6 and 7 are revised to read:

5. WHD 1420 (revised 02/13) – **Employee Rights and Responsibilities Under The Family And Medical Leave Act** published by US Department of Labor. Post on all projects.

6. WHD 1462 (revised 01/16) – **Employee Polygraph Protection Act** published by US Department of Labor. Post on all projects.

7. F416-081-909 (revised 09/15) – **Job Safety and Health Law** published by Washington State Department of Labor and Industries. Post on all projects.

Items 9 and 10 are revised to read:

9. F700-074-909 (revised 06/13) – **Your Rights as a Worker in Washington State** by Washington State Department of Labor and Industries (L&I). Post on all projects.

10. EMS 9874 (revised 10/15) – **Unemployment Benefits** published by Washington State Employment Security Department. Post on all projects.

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

The second sentence of the first paragraph is deleted.

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

The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and other materials defined in Chapter 447 of the WSDOT Environmental Manual M 31-11.

Item number four of the fourth paragraph (up until the colon) is revised to read:

4. **Potential Spill Sources** – Describe each of the following for all potentially hazardous materials brought or generated on-site, including but not limited to materials used for equipment operation, refueling, maintenance, or cleaning:

The first sentence of item 7e of the fourth paragraph is revised to read:

BMP methods and locations where they are used to prevent discharges to ground or water during mixing and transfer of hazardous materials and fuel.

The last paragraph is deleted.

1-08.AP1
Section 1-08, Prosecution and Progress
June 1, 2017

1-08.1 Subcontracting

The eighth and ninth paragraphs are revised to read:

On all projects, the Contractor shall certify to the actual amounts paid to all firms that were used as Subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the Contract. This includes all Disadvantaged, Minority, Small, Veteran or Women's Business Enterprise firms. This Certification shall be submitted to the Engineer on a monthly basis each month between Execution of the Contract and Physical Completion of the Contract using the application available at: https://wsdot.diversitycompliance.com. 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 Contractor shall comply with the requirements of RCW 39.04.250, 39.76.011, 39.76.020, and 39.76.040, in particular regarding prompt payment to Subcontractors. Whenever the Contractor withholds payment to a Subcontractor for any reason including disputed amounts, the Contractor shall provide notice within 10 calendar days to the Subcontractor with a copy to the Contracting Agency identifying the reason for the withholding and a clear description of what the Subcontractor must do to have the withholding released. Retainage withheld by the Contractor prior to completion of the Subcontractors work is exempt from reporting as a payment withheld and is not included in the withheld amount. The Contracting Agency's copy of the notice to Subcontractor for deferred payments shall be submitted to the Engineer concurrently with notification to the Subcontractor.

1-08.1(1) Prompt Payment, Subcontract Completion and Return of Retainage Withheld

In item number 5 of the first paragraph, "WSDOT" is revised to read "Contracting Agency".

The last sentence in item number 11 of the first paragraph is revised to read:

The Contractor may also require any documentation from the Subcontractor that is required by the subcontract or by the Contract between the Contractor and Contracting Agency or by law such as affidavits of wages paid, and material acceptance certifications to the extent that they relate to the Subcontractor's Work.

Item number 12 of the first paragraph is revised to read:

12. If the Contractor fails to comply with the requirements of the Specification and the Subcontractor's retainage or retainage bond is wrongfully withheld, the Contractor will be subject to the actions described in No. 7 listed above. The Subcontractor may also seek recovery against

the Contractor under applicable prompt pay statutes in addition to any other remedies provided for by the subcontract or by law.

1-08.5 Time for Completion

In item 2c of the last paragraph, "Quarterly Reports" is revised to read "Monthly Reports".

1-09.AP1

Section 1-09, Measurement and Payment
April 4, 2016

1-09.6 Force Account

The second sentence of item number 4 is revised to read:

A "specialized service" is a work operation that is not typically done by worker classifications as defined by the Washington State Department of Labor and Industries and by the Davis Bacon Act, and therefore bills by invoice for work in road, bridge and municipal construction.

1-10.AP1

Section 1-10, Temporary Traffic Control
January 3, 2017

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 that are not otherwise specified as being furnished by the Contracting Agency.

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

The following new paragraph is inserted after the third paragraph:

The Contractor shall keep lanes, on-ramps, and off-ramps, open to traffic at all times except when Work requires closures. Ramps shall not be closed on consecutive interchanges at the same time, unless approved by the Engineer. Lanes and ramps shall be closed for the minimum time required to complete the Work. When paving hot mix asphalt the Contractor may apply water to the pavement to shorten the time required before reopening to traffic.

1-10.3(2)C Lane Closure Setup/Takedown

The following new paragraph is inserted before the last paragraph:

Channelization devices shall not be moved by traffic control personnel across an open lane of traffic. If an existing setup or staging of traffic control devices require crossing an open lane of traffic, the traffic control devices shall be taken down completely and then set up in the new configuration.

2-02.AP2

Section 2-02, Removal of Structures and Obstructions
August 7, 2017

2-02.3(2)A Bridge Removal

This section's title is revised to read:

Bridge and Structure Removal

2-03.AP2
Section 2-03, Roadway Excavation and Embankment
August 1, 2016

2-03.3(7)C Contractor-Provided Disposal Site
The second paragraph is revised to read:

> The Contractor shall acquire all permits and approvals required for the use of the disposal sites before any waste is hauled off the project. The Contractor shall submit a Type 1 Working Drawing consisting of copies of the permits and approvals for any disposal sites to be used. The cost of any such permits and approvals shall be included in the Bid prices for other Work.

The third paragraph is deleted.

2-06.AP2
Section 2-06, Subgrade Preparation
January 3, 2017

2-06.3(2) Subgrade for Pavement
The second sentence in the first paragraph is revised to read:

> The Contractor shall compact the Subgrade to a depth of 6 inches to 95 percent of maximum density as determined by the compaction control tests for granular materials.

3-04.AP3
Section 3-04, Acceptance of Aggregate
January 3, 2017

3-04.5 Payment
In Table 1, the **Contingent Unit Price Per Ton** value for the item HMA Aggregate is revised to read "$15.00".

4-04.AP4
Section 4-04, Ballast and Crush Surfacing
January 3, 2017

4-04.3(5) Shaping and Compaction
The first sentence is revised to read:

> Immediately following spreading and final shaping, each layer of surfacing shall be compacted to at least 95 percent of maximum density determined by the requirements of Section 2-03.3(14)D before the next succeeding layer of surfacing or pavement is placed.

7-08.AP7

Section 7-08, General Pipe Installation Requirements
January 3, 2017

7-08.3(1)A Trenches

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

> The embankment material shall be compacted to 95 percent of maximum density and the moisture content at the time of compaction shall be between optimum and 3 percentage points below optimum as determined by the Compaction Control Tests specified in Section 2-03.3(14)D.

7-09.AP7

Section 7-09, Water Mains
April 3, 2017

7-09.3(24)D Dry Calcium Hypochlorite

The second paragraph is revised to read:

> Ze The number of grams of 70 percent test calcium hypochlorite required for a 20-foot length of pipe equals $0.238 \times d^2$, in which "d" is the diameter in inches.

8-01.AP8

Section 8-01, Erosion Control and Water Pollution Control
August 1, 2016

8-01.2 Materials

This section is supplemented with the following new paragraph:

> Recycled concrete, in any form, shall not be used for any Work defined in Section 8-01.

8-01.3(7) Stabilized Construction Entrance

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

> Material used for stabilized construction entrance shall be free of extraneous materials that may cause or contribute to track out.

8-01.3(8) Street Cleaning

This section is revised to read:

> Self-propelled street sweepers shall be used to remove and collect sediment and other debris from the Roadway, whenever required by the Engineer. The street sweeper shall effectively collect these materials and prevent them from being washed or blown off the Roadway or into waters of the State. Street sweepers shall not generate fugitive dust and shall be designed and operated in compliance with applicable air quality standards.
>
> Material collected by the street sweeper shall be disposed of in accordance with Section 2-03.3(7)C.
>
> Street washing with water will require the concurrence of the Engineer.

8-09.AP8
Section 8-09, Raised Pavement Markers
January 3, 2017

8-09.5 Payment
In the last paragraph, "flaggers and spotters" is revised to read "flaggers".

8-10.AP8
Section 8-10, Guide Posts
January 4, 2016

8-10.3 Construction Requirements
The last sentence of the second paragraph is deleted.

8-22.AP8
Section 8-22, Pavement Marking
August 7, 2017

8-22.3(6) Removal of Pavement Markings
This section is revised to read:

Pavement markings to be removed shall be obliterated until all blemishes caused by the pavement marking removal conform to the coloration of the adjacent pavement.

Grinding to remove pavement markings in their entirety is allowed in areas designated for applications of either Hot Mix Asphalt (HMA) or Bituminous Surface Treatment (BST). Pavement marking removal shall be performed from April 1st through September 30th and only in those areas that shall be paved within the same time window as the grinding, unless otherwise allowed by the Engineer in writing.

For all cement concrete pavement and areas that will not be overlaid with hot mix asphalt or BST, grinding is allowed to a depth just above the pavement surface and then Water blasting or shot blasting shall be required to remove the remaining pavement markings.

If in the opinion of the Engineer, the pavement is materially damaged by pavement marking removal, such damage shall be repaired by the Contractor in accordance with Section 1-07.13(1). Sand or other material deposited on the pavement as a result of removing lines and markings shall be removed as the Work progresses to avoid hazardous conditions. Accumulation of sand or other material which might interfere with drainage will not be permitted.

8-22.4 Measurement
The first two sentences of the fourth paragraph are revised to read:

The measurement for "Painted Wide Lane Line", "Plastic Wide Lane Line", "Profiled Plastic Wide Lane Line", "Painted Barrier Center Line", "Plastic Barrier Center Line", "Painted Stop Line", "Plastic Stop Line", "Painted Wide Dotted Entry Line", or "Plastic Wide Dotted Entry Line" will be based on the total length of each painted, plastic or profiled plastic line installed. No deduction will be made for the unmarked area when the marking includes a broken line such as, wide broken lane line, drop lane line, wide dotted lane line or wide dotted entry line.

8-22.5 Payment
The following two new Bid items are inserted after the Bid item "Plastic Crosshatch Marking", per linear foot:

"Painted Wide Dotted Entry Line", per linear foot.

"Plastic Wide Dotted Entry Line", per linear foot.

9-01.AP9
Section 9-01, Portland Cement
August 7, 2017

This section's title is revised to read:

Cement

9-01.1 Types of Cement
This section is revised to read:

Cement shall be classified as portland cement, blended hydraulic cement, or rapid hardening hydraulic cement.

9-01.2(2) Vacant
This section, including title, is revised to read:

9-01.2(2) Rapid Hardening Hydraulic Cement
Rapid hardening hydraulic cement shall meet the requirements of ASTM C 1600.

9-01.2(3) Low Alkali Cement
This section is renumbered as follows:

9-01.2(1)A Low Alkali Cement

9-01.2(4) Blended Hydraulic Cement
This section is renumbered as follows:

9-01.2(1)B Blended Hydraulic Cement

In the first paragraph, items number 3 through 5 are revised to read:

3. Type IT(PX)(LY), where (PX) equals the targeted percentage of pozzolan, and (LY) equals the targeted percentage of limestone. The pozzolan (PX) shall be Class F fly ash and shall be a maximum of 35 percent. (LY) shall be a minimum of 5 percent and a maximum of 15 percent. Separate testing of each source of fly ash at each proposed replacement level shall be conducted in accordance with ASTM C1012. Expansion at 180 days shall be 0.10 percent or less.

4. Type IT(SX)(LY), where (SX) equals the targeted percentage of slag cement, and (LY) equals the targeted percentage of limestone. (SX) shall be a maximum of 50 percent. (LY) shall be a minimum of 5 percent and a maximum of 15 percent. Separate testing of each source of slag at each proposed replacement level shall be conducted in accordance with ASTM C1012. Expansion at 180 days shall be 0.10 percent or less.

5. Type IL(X), where (X) equals the targeted percentage of limestone, and shall be a minimum of 5 percent and a maximum of 15 percent. Testing shall be conducted in accordance with ASTM C1012. Expansion at 180 days shall be 0.10 percent or less.

9-01.3 Tests and Acceptance

The second paragraph is revised to read:

Cement producers/suppliers that certify portland cement or blended hydraulic cement shall participate in the Cement Acceptance Program as described in WSDOT Standard Practice QC 1. Rapid hardening hydraulic cement producers/suppliers are not required to participate in WSDOT Standard Practice QC 1.

9-03.AP9

Section 9-03, Aggregates
August 7, 2017

9-03.1(1) General Requirements

In this section, each reference to "Section 9-01.2(3)" is revised to read "Section 9-01.2(1)A".

This first paragraph is supplemented with the following:

Reclaimed aggregate may be used if it complies with the specifications for Portland Cement Concrete. Reclaimed aggregate is aggregate that has been recovered from plastic concrete by washing away the cementitious materials.

9-03.1(2) Fine Aggregate for Portland Cement Concrete

This section is revised to read:

Fine aggregate shall consist of natural sand or manufactured sand, or combinations thereof, accepted by the Engineer, having hard, strong, durable particles free from adherent coating. Fine aggregate shall be washed thoroughly to meet the specifications.

9-03.1(2)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 6 and not exceed the following values:

Material finer than No. 200 Sieve	2.5 percent by weight
Clay lumps and friable particles	3.0 percent by weight
Coal and lignite	0.25 percent by weight
Particles of specific gravity less than 2.00	1.0 percent by weight.

Organic impurities shall be tested in accordance with AASHTO T 21 by the glass color standard procedure and results darker than organic plate no. 3 shall be rejected. A darker color results from AASHTO T 21 may be used provided that when tested for the effect of organic impurities on strength of mortar, the relative strength at 7 days, calculated in accordance with AASHTO T 71, is not less than 95 percent.

9-03.1(4) Coarse Aggregate for Portland Cement Concrete

This section is revised to read:

Coarse aggregate for concrete shall consist of gravel, crushed gravel, crushed stone, or combinations thereof having hard, strong, durable pieces free from adherent coatings. Coarse aggregate shall be washed to meet the specifications.

9-03.1(4)A Deleterious

This section, including title, is revised to read:

9-03.1(4)A Deleterious Substances

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 80 and not exceed the following values:

Material finer than No. 200	1.0[1] percent by weight
Clay lumps and Friable Particles	2.0 percent by weight
Shale	2.0 percent by weight
Wood waste	0.05 percent by weight
Coal and Lignite	0.5 percent by weight
Sum of Clay Lumps, Friable Particles, and Chert (Less Than 2.40 specific gravity SSD)	3.0 percent by weight

[1]If the material finer than the No. 200 sieve is free of clay and shale, this percentage may be increased to 1.5.

9-03.1(4)C Grading

The following new sentence is inserted at the beginning of the last pargraph:

Where coarse aggregate size 467 is used, the aggregate may be furnished in at least two separate sizes.

9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete

This section is revised to read:

As an alternative to using the fine aggregate sieve grading requirements in Section 9-03.1(2)B, and coarse aggregate sieve grading requirements in Section 9-03.1(4)C, a combined aggregate gradation conforming to the requirements of Section 9-03.1(5)A may be used.

9-03.1(5)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregates $\frac{3}{8}$ inch or larger shall not exceed the values specified in Section 9-03.1(4)A and for aggregates smaller than $\frac{3}{8}$ inch they shall not exceed the values specified in Section 9-03.1(2)A.

9-03.1(5)B Grading

The first paragraph is deleted.

9-03.8(2) HMA Test Requirements

In the table in item number 3, the heading “Statistical and Nonstatistical” is revised to read “Statistical”.

9-03.8(7) HMA Tolerances and Adjustments

In the table in item number 1, the column titled “Nonstatistical Evaluation” is deleted.

In the table in item 1, the last column titled “Commercial Evaluation” is revised to read “Visual Evaluation”.

9-03.11(1) Streambed Sediment

The following three new sentences are inserted after the first sentence of the first paragraph:

Alternate gradations may be used if proposed by the Contractor and accepted by the Engineer. The Contractor shall submit a Type 2 Working Drawing consisting of 0.45 power maximum density curve of the proposed gradation. The alternate gradation shall closely follow the maximum density line and have Nominal Aggregate Size of no less than 1½ inches or no greater than 3 inches.

9-03.12(4) Gravel Backfill for Drains

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

As an alternative, AASHTO grading No. 57 may be used in accordance with Section 9-03.1(4)C.

9-03.12(5) Gravel Backfill for Drywells

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

As an alternative, AASHTO grading No. 4 may be used in accordance with Section 9-03.1(4)C.

9-03.21(1)B Concrete Rubble

This section, including title, is revised to read:

9-03.21(1)B Recycled Concrete Aggregate

Recycled concrete aggregates are coarse aggregates manufactured from hardened concrete mixtures. Recycled concrete aggregate may be used as coarse aggregate or blended with coarse aggregate for Commercial Concrete. Recycled concrete aggregate shall meet all of the requirements for coarse aggregate contained in Section 9-03.1(4) or 9-03.1(5). In addition to the requirements of Section 9-03.1(4) or 9-03.1(5), recycled concrete shall:

1. Contain an aggregated weight of less than 1 percent of adherent fines, vegetable matter, plastics, plaster, paper, gypsum board, metals, fabrics, wood, tile, glass, asphalt (bituminous) materials, brick, porcelain or other deleterious substance(s) not otherwise noted;

2. Be free of components such as chlorides and reactive materials that are detrimental to the concrete, unless mitigation measures are taken to prevent recurrence in the new concrete;

3. Have an absorption of less than 10 percent when tested in accordance with AASHTO T 85.

4. Be considered mechanically fractured and therefore be considered part of the total fracture calculation as determined by the FOP for AASHTO T 335.

Recycled concrete aggregate shall be in a saturated condition prior to mixing.

Recycled concrete aggregate shall not be placed below the ordinary high water mark of any surface water of the State.

9-03.21(1)D Recycled Steel Furnace Slag

This section title is revised to read:

Steel Slag

9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material

In the Hot Mix Asphalt column, each value of "20" is revised to read "25".

The last column heading "Steel Furnace Slag" is revised to read "Steel Slag".

The following new row is inserted after the second row:

Coarse Aggregate for Commercial Concrete	9-03.1(4)	0	100	0	0

9-04.AP9

Section 9-04, Joint and Crack Sealing Materials
January 3, 2017

This section is supplemented with the following two new subsections:

9-04.11 Butyl Rubber Sealant

Butyl rubber sealant shall conform to ASTM C 990.

9-04.12 External Sealing Band

External sealing band shall by Type III B conforming to ASTM C 877.

9-04.1(2) Premolded Joint Filler for Expansion Joints

This section is supplemented with the following:

As an alternative to the above, a semi-rigid, non-extruding, resilient type, closed-cell polypropylene foam, preformed joint filler with the following physical properties as tested to AASHTO T 42 Standard Test Methods may be used.

Closed-Cell Polypropylene Foam Preformed Joint Filler		
Physical Property	**Requirement**	**Test Method**
Water Absorption	< 1.0%	AASHTO T 42
Compression Recovery	> 80%	AASHTO T 42
Extrusion	< 0.1 in.	AASHTO T 42
Density	> 3.5 lbs./cu.ft.	AASHTO T 42
Water Boil (1 hr.)	No expansion	AASHTO T 42
Hydrochloric Acid Boil (1 hr.)	No disintegration	AASHTO T 42
Heat Resistance °F	392°F± 5°F	ASTM D 5249

9-04.2(1) Hot Poured Joint Sealants

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

9-04.2(1)A Hot Poured Sealant

Hot poured sealant shall be sampled in accordance with ASTM D5167 and tested in accordance with ASTM D5329.

9-04.2(1)A1 Hot Poured Sealant for Cement Concrete Pavement

Hot poured sealant for cement concrete pavement shall meet the requirements of ASTM D6690 Type IV, except for the following:

1. The Cone Penetration at 25°C shall be 130 maximum.
2. The extension for the Bond, non-immersed, shall be 100 percent.

9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement

Hot poured sealant for bituminous pavement shall meet the requirements of ASTM D6690 Type I or Type II.

9-04.2(1)B Sand Slurry for Bituminous Pavement

Sand slurry is mixture consisting of the following components measured by total weight:

1. Twenty percent CSS-1 emulsified asphalt,

2. Two percent portland cement, and

3. Seventy-eight percent fine aggregate meeting the requirements of 9-03.1(2)B Class 2. Fine aggregate may be damp (no free water).

9-04.2(2) Poured Rubber Joint Sealer

The last paragraph is deleted.

9-04.4(1) Rubber Gaskets for Concrete Pipes and Precast Manholes

"AASHTO M 198" is revised to read "ASTM C 990".

9-04.4(3) Gaskets for Aluminum or Steel Culvert or Storm Sewer Pipe

In the last sentence, "AASHTO M 198" is revised to read "ASTM C 990".

9-06.AP9

Section 9-07, Reinforcing Steel
August 1, 2016

9-07.1(1)A Acceptance of Materials

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

Reinforcing steel rebar manufacturers shall comply with the National Transportation Product Evaluation Program (NTPEP) Work Plan for Reinforcing Steel (rebar) Manufacturers.

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

Steel reinforcing bar manufacturers use either English or a Metric size designation while stamping rebar.

9-07.1(2) Bending

The first two sentences of the first paragraph are deleted and replaced with the following two new sentences:

Steel reinforcing bars shall be cut and bent cold to the shapes shown on the Plans. Fabrication tolerances shall be in accordance with ACI 315.

9-14.AP9

Section 9-14, Erosion Control and Roadside Planting
August 7, 2017

9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

The first paragraph is revised to read:

All HECPs shall be made of natural plant fibers unaltered by synthetic materials, and in a dry condition, free of noxious weeds, seeds, chemical printing ink, germination inhibitors, herbicide residue, chlorine bleach, rock, metal, plastic, and other materials detrimental to plant life.

The last sentence of the third paragraph is revised to read the following two sentences:

Under no circumstances will field mixing of additives or components be acceptable, with the exception of seed and water. The product shall be hydrated in accordance with the manufacturer's recommendations.

In Table 1 of the fourth paragraph, the following new row is inserted below the table heading:

These test requirements apply to the fully mixed product, including tackifiers, dyes, or other additives that may be included in the HECP final product in its sprayable form.

The last two paragraphs are revised to read:

If the HECP contains a dye to facilitate placement and inspection of the material, it shall be nontoxic to plants, animals, and aquatic life and shall not stain concrete or painted surfaces.

The HECP shall not be harmful to plants, animals, and aquatic life.

9-14.4(4) Wood Strand Mulch

The last paragraph is revised to read:

The Contractor shall provide a test report performed in accordance with WSDOT T 125 demonstrating compliance to this specification prior to acceptance. This product shall not be harmful to plants, animals, and aquatic life.

9-14.4(7) Tackifier

The first paragraph is supplemented with the following:

Tackifiers shall include a mulch tracer added to visible aid uniform application, and shall not be harmful to plants, animals, or aquatic life.

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

The Contractor shall provide test results documenting the tackifier and mulch tracer meets the requirements for Acute Toxicity, Solvents, and Heavy Metals as required in Table 1 in Section 9-14.4(2).

9-14.4(7)A Organic Tackifier

This section is revised to read:

Organic tackifiers shall be derived from natural plant sources and shall not be harmful to plants, animals, and aquatic life.

9-14.4(7)B Synthetic Tackifier

This section is revised to read:

Synthetic tackifiers shall not be harmful to plants, animals, and aquatic life.

9-14.5(2) Biodegradable Erosion Control Blanket

The first paragraph is revised to read:

Biodegradable erosion control blankets, including netting if present, shall be made of natural plant fibers unaltered by synthetic materials. All blanket material shall effectively perform the intended erosion control function until permanent vegetation has been established, or for a minimum of 6 months, whichever comes first.

9-14.5(4)A Biodegradable Check Dams

This section is revised to read:

Biodegradable check dams shall meet the following requirements:

Wattle	Section 9-14.5(5)
Compost Sock	Section 9-14.5(6)
Coir Log	Section 9-14.5(7)

The Contractor may substitute a different biodegradable check dam as long as it complies with the following and is accepted by the Engineer:

1. Made of natural plant fiber unaltered by synthetic material.

2. Netting if present shall be made of natural plant fibers unaltered by synthetic materials. Materials shall effectively perform the intended erosion control function until permanent vegetation has been established or for a minimum of 6 months, whichever comes first.

3. Straw bales shall not be used as check dams.

9-14.5(5) Wattles

This section is revised to read:

Wattles shall consist of cylinders of plant material such as weed-free straw, coir, wood chips, excelsior, or wood fiber or shavings encased within netting made of natural plant fibers unaltered by synthetic materials. Wattles shall be a minimum of 8 inches in diameter. Netting material shall be clean, evenly woven, and free of encrusted concrete or other contaminating materials such as preservatives. Netting material shall be free from cuts, tears, or weak places and shall effectively perform the intended erosion control function until permanent vegetation has been established or for a minimum of 6 months, whichever comes first.

If wood chip filler is used, it shall meet the material requirements as specified in Section 9-14.4(3). If straw filler is used, it shall meet the material requirements as specified in Section 9-14.4(1). If wood shavings are used, 80 percent of the fibers shall have a minimum length of 6 inches between 0.030 and 0.50 inches wide and between 0.017 and 0.13 inches thick.

Stakes for wattles shall be made of wood from untreated Douglas fir, hemlock, or pine species.

9-14.5(6) Compost Socks

This section is revised to read:

Compost socks shall consist of fabric made of natural plant fibers unaltered by synthetic materials. The compost sock shall be filled with Medium Compost as specified in Section 9-14.4(8). Compost socks shall be at least 8 inches in diameter. The sock shall be clean, evenly woven; free of encrusted

concrete or other contaminating materials; free from cuts, tears, broken or missing yarns; free of thin, open, or weak areas; and free of any type of preservative. Sock fabric shall effectively perform the intended erosion control function until permanent vegetation has been established or for a minimum of 6 months, whichever comes first.

Stakes for compost socks shall be made of wood from untreated Douglas fir, hemlock, or pine species.

9-23.AP9
Section 9-23, Concrete Curing Materials and Admixtures
January 3, 2017

9-23.9 Fly Ash
The first paragraph is revised to read:

Fly ash shall conform to the requirements of AASHTO M295 Class C or F including supplementary optional chemical requirements as set forth in Table 2.

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

The supplementary optional chemical limits in AASHTO M295 Table 2 do not apply to fly ash used in Controlled Density Fill.

9-23.12 Metakaolin
This section, including title, is revised to read:

9-23.12 Natural Pozzolan
Natural Pozzolans shall be either Metakaolin or ground Pumice and shall conform to the requirements of AASHTO M295 Class N, including supplementary optional chemical requirements as set forth in Table 2.

9-28.AP9
Section 9-28, Signing Materials and Fabrication
April 3, 2017

9-28.14(3) Aluminum Structures
This section is revised to read:

Welding of aluminum shall be in accordance with AWS D1.2/D1.2M, latest edition, Structural Welding Code – Aluminum.

Aluminum alloy filler metals utilized on anodized structures shall result in color matching to base metals.

9-30.AP9
Section 9-30, Water Distribution Materials
August 7, 2017

9-30.6(3) Service Pipes
This section is supplemented with the following new subsection:

9-30.6(3)C PEX-a Tubing

PEX-a tubing shall be a minimum of ¾-inch or a maximum 2-inch in diameter and shall be manufactured in accordance with AWWA C904 and ASTM F876. The tubing shall have a minimum materials designation code of 3306 in accordance with ASTM F876, a pressure rating of 200 psi at 73.4 degrees using a design factor of 0.63 as outlined in PPI TR-3, Part F-7, and shall have a minimum SDR of 9. Tubing color shall be blue in accordance with APWA Uniform color standards.

9-30.6(4) Service Fittings

This section is supplemented with the following new paragraph:

Fittings for PEX-a tubing shall meet the requirements of AWWA C904.

SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS

(This Page Intentionally Left Blank)

INTRODUCTION TO THE SPECIAL PROVISIONS

(August 14, 2013 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction,* 2016 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. For example:

(March 8, 2013 APWA GSP)
(April 1, 2013 WSDOT GSP)
(May 1, 2013 R&E GSP)
(NWR February 5, 2013)

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 improvements of approximately 1,800 linear feet of Washington Street, from the intersection of Main Street to Vista Drive, in Ferndale Washington. Work will include clearing, grubbing, grading, roadway excavation, storm sewer drainage improvements, watermain installation, sanitary sewer installation, placing gravel base, hot mix asphalt paving, curb and gutters, sidewalks, ADA ramps, and other work, in accordance with the Contract Plans, Special Provisions, the Standard Specifications, including the amendments thereto, and Standard Plans.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions
(January 4, 2016 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 "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

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

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

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

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

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

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

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

Contract Documents
See definition for "Contract".

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

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

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

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

1-02 BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder
(January 24, 2011 APWA GSP)

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

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

Delete this section and replace it with the following:

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

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

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	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 February 28 , 2018, at 2:00 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.

(February 8, 2018, R&E GSP)
Section 1-02.4(1) is supplemented with the following:

The existing HMA is approximately 6" thick.

1-02.5 Proposal Forms

(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

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

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

1-02.6 Preparation of Proposal

(June 20, 2017 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 fourth paragraph and replace it with the following:

The Bidder shall submit with the Bid a completed Underutilized Disadvantaged Business Enterprise (UDBE) Utilization Certification, when required by the Special Provisions. For each and every UDBE firm listed on the Bidder's completed Underutilized Disadvantaged Business Enterprise Utilization Certification, the Bidder shall submit written confirmation from that UDBE firm that the UDBE is in agreement with the UDBE participation commitment that the Bidder has made in the Bidder's completed Underutilized Disadvantaged Business Enterprise Utilization Certification. WSDOT Form 422-031U (Underutilized Disadvantaged Business

Enterprise Written Confirmation Document) is to be used for this purpose. Bidder must submit good faith effort documentation with the Underutilized Disadvantaged Business Enterprise Utilization Certification only in the event the bidder's efforts to solicit sufficient UDBE participation have been unsuccessful. Directions for delivery of the Underutilized Disadvantaged Business Enterprise Written Confirmation Documents and Underutilized Disadvantaged Business Enterprise Good Faith Effort documentation are included in Sections 1-02.9

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 UDBE 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 UDBE 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
(July 31, 2017 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 UDBE Written Confirmation Document(s) or Good Faith Effort (GFE) Documentation, then to be considered responsive, the Bidder shall submit Written Confirmation Documentation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification, form 272-056U, as required by Section 1-02.6. The UDBE Written Confirmation Document(s) and/or GFE (if any) shall be received either with the Bid Proposal or as a Supplement to the Bid. The document(s) shall be received **no later than 24 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

The Bidder shall submit to the Contracting Agency a signed "Certification of Compliance with Wage Payment Statutes" document where the Bidder under penalty of perjury verifies that the Bidder is in compliance with responsible bidder criteria in RCW 39.04.350 subsection (1) (g), as required per Section 1-02.14. The "Certification of Compliance with Wage Payment Statutes" document shall be received either with the Bid Proposal or **no later than 24 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

If submitted after the Bid Proposal is due, the document(s) must be submitted in a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added. All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (UDBE confirmations, GFE documentation, or Certification of Compliance with Wage Payment Statutes) that is received after the time specified above, or received in a location other than that specified in the Call for Bids.

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

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

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

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

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

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

1-02.13 Irregular Proposals

(June 20, 2017 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The 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 an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
   i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE 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 UDBE 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.

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

a. The Proposal does not include a unit price for every Bid item;

b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;

c. Receipt of Addenda is not acknowledged;

d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or

e. If Proposal form entries are not made in ink.

(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

(July 31, 2017 APWA GSP, Option A)

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

The Bidder shall submit to the Contracting Agency a signed "Certification of Compliance with Wage Payment Statutes", document where the Bidder under penalty of perjury verifies that the Bidder is in compliance with responsible bidder criteria in RCW 39.04.350 subsection (1)(g). A form appropriate for "Certification of Compliance with Wage Payment Statutes" will be provided by the Contracting Agency in the Bid Documents. The form provided in the Bid Documents shall be submitted with the Bid as stated in Section 1-02.9.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination.

If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

1-02.15 Pre Award Information

(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:

9. Evidence of financial resources and experience,
10. 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 5 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
(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

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

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
   a. Is registered with the Washington State Insurance Commissioner, and
   b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,

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

1-03.7 Judicial Review

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Any decision made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 shall control venue and jurisdiction.

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, and
8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.6 Variation in Estimated Quantities

(May 25, 2006 APWA GSP)

Supplement this Section with the following:

The quantities for:

Controlled Density Fill
Unsuitable Foundation Excavation Incl. Haul
Stovepipe Watermain, ___ In. Diam.
Removal of Unsuitable Material Incl. Haul
Quarry Spalls

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.

1-05.15 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.

1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

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

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

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

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to Be Observed

(October 1, 2005 APWA GSP)

Supplement this section with the following:

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

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

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

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

intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1-07.2 State Taxes

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

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

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

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

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

1-07.2(1) State Sales Tax — Rule 171

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

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such

sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

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

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

1-07.2(3) Services

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

1-07.6 Permits and Licenses

(January 2, 2018 WSDOT GSP)

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

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

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
NPDES Construction Stormwater General Permit	Department of Ecology	

Department of Ecology Permits For Construction

(February 1, 2008 R&E GSP)

The Contractor shall transfer the NPDES Construction Stormwater General Permit issued for this project to the Contractor's name. The transfer will be a "Complete Transfer". Prior to the Contractor beginning any work at the site, the Contractor shall provide the Engineer with documents showing that the "Complete Transfer" has been approved.

1-07.15 Temporary Water Pollution Prevention
(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
Jane Major, PSE Municipal Construction Planner
360-715-7221
jane.major@pse.com

Frontier Communications
Barb Robinson
360-757-7624
b.robinson@ftr.com

Comcast Cable
Bill Inama
360-527-8241
william_inama@comcast.com
Thomas Hall
253-439-8955
thomas.hall@cablecomllc.net

Wave
Jeremiah Strand
360-500-9011
jstrand@wavebroadband.com

Cascade Natural Gas
Brandon Haugness
360-788-2362
Brandon.Haugness@cngc.com

City of Ferndale Public Works
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 4, 2016 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.

B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool

coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.

E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

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

H. 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.

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

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

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

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

1-07.18(3) Subcontractors

The Contractor shall cause each Subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors.

The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that

section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

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

1-07.18(4) Verification of Coverage

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

Verification of coverage shall include:

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

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

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

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

1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises,

operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

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

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

Such policy must provide the following minimum limits:

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

1-07.18(5)B Automobile Liability

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

Such policy must provide the following minimum limit:

$1,000,000	Combined single limit each accident

1-07.18(5)C Workers' Compensation

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

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

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

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

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

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

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

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

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

1-07.26 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 and replace it with the following:

1-08.4 Notice to Proceed and Prosecution of Work

(July 23, 2015 APWA GSP)

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

the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

(August 7, 2006)

The Contractor shall begin work no earlier than *****April 17 , 2018 *****.

(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.

Public Open House

The Contractor's Project Manager and the Contractor's Superintendent shall attend one Public Open House Meeting. The meeting will:

- Occur after 5:00 p.m.
- Last approximately 3 hours
- Take place within the City of Ferndale
- Take place prior to beginning any on-site work

All costs involved with the various meetings shall be incidental to the various bid items.

September 15, 2008 R&E GSP)

Order of Work

The Contractor shall close Washington Street and implement the Traffic Control Plans shown in the Contact Documents on April 2, 2018. Cascade Natural Gas (CNG) will relocate and adjust their facilities between April 2, 2018 to April 16, 2018. The Contractor shall provide traffic control to support CNG's relocation and adjustment work. Only CNG's relocation and adjustment work and traffic control will be permitted between April 2, 2018 to April 16, 2018. Contract time shall begin on April 17, 2018, or if CNG completes their work before April 16, 2018, an earlier date agreed upon by the Contractor and the Contracting Agency.

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 **75** working days.

1-08.5 Time for Completion

(September 12, 2016 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

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

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the

contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and 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. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
    d. Final Contract Voucher Certification
    e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
    f. Property owner releases per Section 1-07.24

1-08.9 Liquidated Damages

(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

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

1-09 MEASUREMENT AND PAYMENT

1-09.2 Weighing Equipment

1-09.2(1) General Requirements for Weighing Equipment

(November 7, 2017 R&E GSP)

Section 1-09.2(1) is supplemented with the following:

No handwritten weight tickets will be accepted.

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.

1-09.11(3) Time Limitation and Jurisdiction

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following*:*

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance

(Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

1-09.13(3) Claims $250,000 or Less
(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total $250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

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(1) General

(January 3, 2017 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
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778

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

(December 1, 2016 R&E GSP)

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

The Work Zone Traffic Control Plans (TC-1 – TC-18) 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(1) Measurement

(August 2, 2004 WSDOT GSP)

Section 1-10.4(1) is supplemented with the following:

The bid proposal contains the item "Project Temporary Traffic Control," lump sum and the additional temporary traffic control items listed below. The provisions of Section 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.

"Flaggers"
"Other Traffic Control Labor"

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, storm drain system, 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(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
The approximate thicknesses of the pavement are:

The existing HMA is approximately 6" thick.

Please 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:

Sawcut 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. Saw-cut, if used for the pavement repair, shall not be measured.

Sawcut PCC 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" and "Saw-cut PCC" 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 accesses.

Groundwater may be encountered within the project boundary. Refer to the geotechnical report in the appendix for further information.

The elevations shown on the plans are to finished grade. The Contractor shall excavate to depths sufficient to allow for the appropriate depth of compacted topsoil installation as specified for the project.

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

(March 17, 2010 R&E GSP)

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. A copy of each permit shall be provided to the City prior to utilization of the dumpsite.

2-03.3 (14)E Unsuitable Foundation Excavation

(February 4, 2008 R&E GSP)

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

(February 4, 2008 R&E GSP)

Section 2-03.4 is supplemented with the following

"Roadway Excavation Incl. Haul" will be measured to a maximum depth of 2 feet below the plan roadway excavation lower limit.

"Unsuitable Foundation Excavation Incl. Haul" shall be measured beginning 2 feet below the plan 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 pond or wetland 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, asphalt concrete pavement, and Portland cement 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 and Portland cement concrete pavement will not be measured under this bid item. Pavement removal shall be paid under the bid item "Removal of Structures and Obstructions" in accordance with Section 2-02.

2-03.5 Payment
(March 2, 2010 R&E GSP)
Section 2-03.5 is supplemented with the following:

The unit contract price per cubic yard for "Roadway Excavation Incl. 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.

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(1)E Backfilling

(******)

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

CDF shall be placed at locations shown on the plans.

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.

DIVISION 4
BASES

4-02 GRAVEL BASE

4-02.2 Materials

(February 5, 2008 R&E GSP)
Section 4-02.2 is supplemented with the following:

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 and shall include haul.

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.

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, the second paragraph is revised to read:

"Crushed Surfacing Top Course," shall be measured by the ton and shall include haul.

4-04.5 Payment

(February 5, 2008 R&E GSP)
Section 4-04.5, the second paragraph is revised to read*:*

"Crushed Surfacing Top Course," per ton.

DIVISION 5
SURFACE TREATMENTS AND PAVEMENTS

5-04 Hot Mix Asphalt

(June 19, 2017 APWA GSP)

Delete WSDOT Amended Section 5-04, Hot Mix Asphalt, and replace it with Section 5-04, Hot Mix Asphalt as printed in the Standard Specifications for Road, Bridge and Municipal Construction, 2016 edition.

5-04.1 Description

(January 31, 2011 R&E GSP)

Section 5-04.1 is supplemented with the following:

The HMA Cl. ½" PG 64-22 shall be placed as shown on the Plans. HMA CL ½" PG 64-22 shall be paved in two lifts. Commercial HMA shall be placed and compacted on driveways and parking areas, unless otherwise specified.

5-04.2 Materials

(January 3, 2011)

Section 5-04.2 is supplemented with the following:

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be 4.4 million.

(May 22, 2017 R&E GSP)

Section 5-04.2 is supplemented with the following:

"Self-Adhering Rubberized Asphalt Membrane" shall meet the following:

1. Polypropylene, staple fiber, needle punched nonwoven fabric
2. Coated with rubberized asphalt adhesive on the bottom
3. Top-coated with an asphalt tack coat
4. A release sheet, which is removed just prior to placement, shall cover the adhesive
5. Resistant to ultraviolet degradation
6. Minimum Average Roll Values:

Property	Test Method	Units	Property Requirement
Strip Tensile[1]	ASTM D 882	lb/in	50
Puncture Resistance	ASTM E 154	lb	200
Permeance	ASTM E 96 Method B	Perms	0.05 (max)
Pliability[2]	ASTM D 146	N/A	No cracks in fabric or rubberized asphalt

Note:

1. Using 12 in/min test speed and 1" distance initial distance between grips.
2. Using 180° bend on ¼" mandrel at -25° F.

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) Hot Mix Asphalt Pavers

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 Paved 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(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

(*May 30, 2013 R&E 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(10)B4 Test Results

(*May 30, 2013 R&E GSP)*

Delete this section and replace it with the following;

The results of all acceptance testing performed in the field and the Composite Pay Factor (CPF) of the lot after three sublots have been tested will be provided to the Contractor within 2 working days. The Contractor may request a sublot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results

provided. The sample will be tested for a complete gradation analysis, asphalt binder content, and the results of the retest will be used for the acceptance of the HMA in place of the original sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of $250 per sample.

5-04.3(12) Joints

5-04.3(12)A Transverse Joints

(February 25, 2008 R&E GSP)

Section 5-04.3(12)A1 is supplemented with the following:

All joints of new hot mix asphalt to an existing pavement shall be sealed with an appropriate asphalt joint sealer.

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 HMA 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 7
DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

7-01 DRAINS

7-01.2 Materials

(******)

Section 7-01.2 is supplement with the following:

Underground Drainage Geotextile, Moderate Survivability

7-01.4 Measurement

(January 28, 2011 R&E GSP)

Section 7-01.4 is revised as follows:

The second and third paragraphs of this Section are deleted.

(******)

Section 7-01.4 is supplemented with the following:

Measurement "Underdrain Pipe ___ In. Diam.", as indicated in the bid proposal form, shall be per linear foot. The following items shall be incidental and included in the unit price per linear foot:

1. Dewatering if required.
2. Structure Excavation Class B Including Haul
3. Gravel Backfill for Drains (3/4" Washed Rock)
4. Compaction
5. Installation of underdrain pipe
6. Coupling bands, fittings, and associated gaskets.
7. Underground Drainage Geotextile, Moderate Survivability
8. Cleaning
9. Connection to storm drains, culverts, and structures
10. Other work and materials, not specifically identified as being paid elsewhere
11. Pipe for cleanouts

7-01.5 Payment

(January 28, 2011 R&E GSP)

The second paragraph of Section 7-01.5 is revised to read:

"Underdrain Pipe ___ In. Diam.", per linear foot.

All costs for excavation, backfill, underdrain pipe, fittings, gaskets, gravel backfill for drains, and geotextile fabric required for the installation of drain pipe of the diameter specified shall be considered incidental to the linear foot bid price. Other work and materials not specifically identified as being paid elsewhere will be considered incidental to this bid item.

7-04 STORM SEWERS

7-04.1 Description

(February 5, 2008 R&E GSP)

Section 7-04.1 is supplemented with the following:

Suitable native materials shall be used for trench backfill with approval from or at the direction of the Engineer. Unsuitable native material shall become the property of the contractor for disposal. Excess suitable native material shall be embanked according to the plans and specifications.

7-04.2 Materials

(*February 5, 2008 R&E GSP)*

Section 7-04.2 is supplemented with the following:

"Ductile Iron Storm Sewer Pipe _ In. Diam. 9-05.13"

7-04.3(1) Cleaning and Testing

7-04.3(1)A General

(*February 5, 2008 R&E GSP)*

Section 7-04.3(1)A is supplemented with the following:

Storm Drain Pipe shall be tested visually for alignment with full circle visibility required between drainage structures. Storm drain structures shall be cleaned of sediment and debris prior to final acceptance.

7-04.4 Measurement

(February 5, 2008 R&E GSP)

Section 7-04.4 is supplemented with the following:

Measurement for the various bid items for Storm Sewer pipe as indicated in the bid proposal form, shall be per linear foot. The following items shall be incidental and included in the unit price per linear foot:

1. Dewatering if required.
2. Structure Excavation Class B Including Haul
3. Pipe bedding as shown on the Plans
4. Compaction
5. Installation of storm sewer pipe
6. Coupling bands, fittings, and associated gaskets.
7. Cleaning
8. Connection to existing storm drains, culverts, and structures
9. Other work and materials, not specifically identified as being paid elsewhere
10. Bevel of pipe ends if applicable.

"Ductile Iron Storm Sewer Pipe _ In. Diam." shall be measured by linear feet.

7-04.5 Payment

(February 5, 2008 R&E GSP)

Section 7-04.5 is supplemented with the following:

"Ductile Iron Storm Sewer Pipe ____ In. Diam.," per linear foot.

The unit contract price per linear foot for the various bid items for Storm Sewer pipe as indicated in the bid proposal form, shall be full compensation for all labor, material, tools and equipment required to complete the Bid Items in accordance with Section 1-04.1.

"Testing Storm Sewer Pipe", per linear foot.

The unit Contract price per linear foot for the testing storm sewer pipe shall be full pay for all Work to complete the Testing Storm Sewer Pipe.

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

7-05.1 Description

(******)

Section 7-05.1 is supplemented with the following:

Work in the section also includes the fabrication and installation of StormFilter appurtenances as indicated in the Plans.

Sanitary Sewer Manholes shall conform to the specified Standard Plan and shall be fitted with a booted or approved gasketed connection for sewer pipes. All sanitary sewer manholes shall have locking ring and covers.

This item also includes frames and grates in designated areas. Thru-curb inlet frame and grate shall be used at locations with 6 inch high cement concrete traffic curb and gutter as noted on the Plans. The adjusting of any new storm drain catch basin frame, manhole ring and cover, for the purpose of matching new finish grades shall be incidental to the cost of installation. Existing manholes, inlets, and catch basins within the Project boundary which are nearest to the point of connection into the storm drain system and other manholes, inlets, and catch basins which are impacted by construction activities will be cleaned by the Contractor. This work is incidental to the various bid items in this Section.

All existing sanitary sewer manhole frame and covers that are adjusted to finished grade shall be replaced with locking frame and cover.

This Work also includes the installation of trench drains, area drains and storm drain cleanouts as shown on the plans.

7-05.2 Materials

Section 7-05.3 is supplemented with the following:

*(******

Storm Drain Cleanout

All materials incorporated into the storm drain cleanout shall be as shown on the plans and shall meet the requirements of the various applicable sections of the Specifications.

StormFilter

All materials incorporated into the StormFilter shall be as shown on the plans and shall meet the requirements of the various applicable sections of the Specifications.

Trench Drains

Where shown on the plans the Contractor shall supply and install a surface drainage system complete with locking grates. The trench drain shall be "ACO K100" manufactured by ACO USA, or an approved equal. The trench drain body shall be manufactured from polyester polymer concrete with a minimum properties as follows:

Compressive strength	14,000 psi
Flexural Strength	4,000 psi
Water absorbtion	0.07%
Frost proof	Yes
Salt proof	Yes
Dilute acid and alkali resistant	Yes

The nominal clear opening shall be 4.00" with an overall width of 5.12". Pre-cast units shall be manufactured with either an invert slope of 0.5% or with neutral invert and have a wall thickness of at least 0.50". Each unit will feature a partial radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast in anchoring keys on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface. The galvanized steel edge rail will be integrally cast in by the manufacturer to ensure maximum homogeneity between the polymer concrete body and edge rail. Each edge rail shall be at least 3/32" thick.

Concrete surround shall be class 4000.

Grates shall meet load Class B, and shall be rated for loads up to 28,000 pounds. Grates shall be locking, ADA compliant, bicycle safe, and heel resistant. After removal of grates and locking mechanism there shall be uninterrupted access to the trench to aid maintenance.

Sewer Manhole Covers

"Never-Seez Anti-Seize & Lubricating Compound" shall be applied to all lock down bolts prior to installation. "Never-Seez Anti-Seize & Lubricating Compound" application shall be in accordance with manufacturer's recommendations. This work is incidental to the various bid items.

7-05.3 Construction Requirements

(March 9, 2010 R&E GSP)

Section 7-05.3 is supplemented with the following:

Where called for in the Plans, existing grates shall be removed and catch basins, inlets, and sanitary manholes shall be furnished with locking solid metal covers and frames or locking metal grates and frames as detailed in the Plans and Standard Plans.

Leveling devices used to adjust structures to final grade shall be pre-cast rectangular or circular adjustment sections (risers).

Trench Drain

The trench drain shall be installed in accordance with the manufacturer's installation instructions and recommendations.

Storm Drain Cleanout

Cleanouts shall be provided where shown on the plans. All cleanouts shall be extended to grade as shown on the plans.

Sanitary Sewer Manholes

Where necessary to complete the removal of existing sanitary sewer pipe for the installation of new sanitary sewer manhole, the Contractor shall pump existing sanitary sewer flows around the area of work and/or pump directly into tanker trucks. The required time of pumping shall be sufficient to allow the work to be completed for each manhole.

Pumps used for the temporary diversion of sanitary sewer flows shall be capable of passing solids and other materials typically found in wastewater flows.

The Contractor shall give a minimum of one week notice to the Contracting Agency prior to the planned installation of sanitary sewer manhole. At the time of notice, the Contractor shall provide a Sanitary Sewer Pump Around Plan for review and approval by the Contracting Agency.

The Sanitary Sewer Pump Around Plan shall show method of removing the existing sanitary sewer pipe, proposed materials for the sanitary sewer pipe removal, and the sequence of demolition and removal. The plan shall detail the containment, collection, and disposal of all debris. The Contractor shall not begin removal operations until receiving the Engineer's approval of the Sanitary Sewer Pump Around Plan.

The Contractor may at their option choose to make the connection at night. If night work is elected, the Contractor shall be responsible for all necessary lighting, extra equipment and personnel needed to complete the work. The Contractor shall be responsible for all overtime pay for employees as a result of night work. The Contractor is cautioned that City of Ferndale employees are not on duty for night work. Should City of Ferndale employees be needed to aid in the night work, the Contractor will be billed overtime rates by the Contracting Agency per hour for City employees.

According to available information, the highest expected flow for the sanitary sewer line along **Washington Street is approximately 0.75 cubic feet per second (340 gpm).** Typical flow rates will vary. At each location where pumping is required, at least two pumps shall be supplied, both individually capable of pumping the necessary flows the required distances and against the required elevation head. One shall be designated as the primary pump, and the

second shall be a back-up pump.

Tanker trucks shall empty their loads back into the City of Ferndale's wastewater collection system at a sanitary sewer manhole located on Maple Street, between 2nd and 3rd Avenue.

Should the Contractor elect to pump from an existing sanitary sewer manhole to a sanitary sewer manhole downstream, the elevation differences and distances between the sanitary sewer manholes shall be addressed in the Sanitary Sewer Pump Around Plan. The Contractor shall confirm this distance and elevation difference in the field and size the pumps accordingly.

The Contractor shall designate a person to oversee the pumps during their operation. This person shall be on site at all times while the pump around is occurring and shall continually monitor the pump operation. The individual shall be familiar with the operation of the pumps and shall be capable switching between pumps if necessary, refueling the pumps, etc.

The Contractor shall take all necessary precautions to prevent an uncontrolled spill of untreated wastewater.

Roadway must remain open to the passage of traffic during all pumping operations.

7-05.3(1) Adjusting Manholes and Catch Basins to Grade

(February 5, 2008 R&E GSP)

Section 7-05.3(1), paragraph 1 is revised to read:

Where shown in the Plans or where directed by the Engineer, the existing manholes, catch basins, inlets, water valve boxes, or water meter boxes shall be adjusted to the grade as staked or otherwise designated by the Engineer. Risers and/or Catch Basin sections shall be added or removed as shown in the Plans to achieve finished grade. New metal castings shall be added as shown in the Plans.

7-05.4 Measurement

(******)

Section 7-05.4, the first paragraph is revised to read:

Manholes will be per each, regardless of height.

(July 12, 2010 R&E GSP)

Section 7-05.4 is supplemented with the following:

Measurement for the various inlets, manholes, vaults, StormFilter, area drains, concrete inlets, and catch basins as indicated in the Bid Proposal, shall be per each. The following items shall be incidental and included in the unit price per each:

1. Dewatering if required
2. Structure Excavation Class B Including Haul
3. Gaskets, fittings, inlets, frames and grates or metal castings

4. Bedding
5. Compaction
6. Connection to existing pipes, structures and drain lines
7. Curb modifications required per the Standard Plans
8. Other work and materials not specifically identified as being paid elsewhere
9. StormFilter as shown on the plans
10. Inside drop connection
11. Temporary pumping and transportation of sewer flows, including pumps and trucks.

Measurement for trench drains shall be per linear foot. The following items shall be incidental and included in the unit price per linear foot:

1. Dewatering if required
2. Structure Excavation Class B Including Haul
3. Gaskets, fittings, couplers, caps, and grates
4. Bedding as shown on the Plans
5. Compaction
6. Connection to existing pipes, structures and drain lines
7. Curb modifications required per the Standard Plans
8. Subgrade preparation and concrete surround
9. Installation of the trench drain units
10. Other work and materials not specifically identified as being paid elsewhere

No Specific unit of measurement shall apply for the item "Adjustment to Finished Grade"

Measurement for HMA required for Adjustments to Finished Grades shall be per ton in accordance with Section 5-04.

Storm drain cleanouts will be measured per each

7-05.5 Payment

(April 10, 2008 R&E GSP)

Section 7-05.5 is supplemented with the following:

"Adjustments to Finished Grade", lump sum.

The lump sum price for "Adjustments to Finished Grade" shall be full compensation for all labor, tools, equipment, and materials necessary to adjust existing structures to finished grades within the project limits. Commercial HMA required for Adjustments to Finished Grades shall be considered incidental to this item.

"Storm Drain Cleanout", per each

The unit Contract price per each for cleanouts shall be full pay for furnishing and placing the wye, pipe, pipe bends, pipe plug, castings, collar, labor, tools, equipment, and all other materials necessary to install the cleanouts.

"Trench Drain", per linear foot.

The unit Contract price per linear foot for "Trench Drain" shall be full compensation as specified in the plans and these specifications and shall be for all Work, tools, equipment, and materials necessary to complete the installation.

"Area Drain", per each.
The unit Contract price per each for area drains as specified in the plans and these specifications shall be for all Work, tools, equipment, and materials necessary to complete the installation, including adjustment of inverts to the area drains.

"Manhole 60 In. Diam. Type 1, W/Inside Drop", per each.

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.4 Measurement

(******)
Delete this section and replace it with the following:

Measurement and payment for backfilling with "Gravel Base" shall be as specified in Section 4-02.

There shall be no measurement for plugging pipes. Plugging pipes shall be incidental to the various bid items.

Excavation of the trench shall be incidental to the pipe.

Shoring or extra excavation class B will be measured and paid as specified in Section 2-09.4.

Removal of Unsuitable Material Including Haul will be measured per cubic yard.

7-08.5 Payment

(January 31, 2011 R&E GSP)
The fifth paragraph of this section is revised to read:

Plugging pipes shall be incidental to the various bid items.

(July 12, 2010 R&E GSP)
Section 7-08.5 is supplemented with the following:

"Removal of Unsuitable Material Including Haul", per cubic yard.
The unit contract price per cubic yard for "Removal of Unsuitable Material Including Haul" shall be full pay for all work to remove unsuitable material, haul and disposal of unsuitable material, as specified in Section 7-08.3(1)A.

7-09 WATER MAINS

7-09.1 Description

Section 7-09.1 is supplemented with the following:

Suitable native materials shall be used for trench backfill with approval from or at the direction of the Engineer. Unsuitable native material shall become the property of the contractor for disposal. Excess suitable native material shall be embanked according to the plans and specifications.

All thrust blocks shall be installed per details shown on the plans and inspected by the Engineer prior to backfilling. All bends shall include a thrust block per the details or as indicated on the Plans. Thrust blocks may be substituted with restrained joints at the discretion of the Contractor. The Contractor shall submit detailed sketches and plans of the proposed restrained joints to the Engineer not less than one week prior to the expected construction. The costs for thrust blocks or restrained joints shall be incidental to other items of work. No additional payment shall be made should the Contractor choose to substitute restrained joints for thrust blocks

Also included in the work is the construction of stovepipe watermains at locations directed by the Engineer where the watermain conflicts with unexpected existing utilities, or for other reasons.

7-09.2 Materials

Section 7-09.2 is supplemented with the following:

Ductile Iron Pipe shall be in accordance with Section 9-30.1(1) for Ductile Iron Pipe.

Fittings shall be ductile iron and shall meet the requirements of AWWA C110-71 and AWWA C104-71. Joints shall meet the requirements of C111. Fittings shall be cement mortar lined meeting the requirements of AWWA C104-71.

7-09.3 Construction Requirements

7-09.3(5) Grade and Alignment

Section 7-09.3(5) is supplemented with the following:

Finished grade is the proposed ground elevation unless otherwise staked by the Engineer or Surveyor. Pipes installed, which do not meet minimum cover requirements, shall be replaced at the Contractor's expense. Minimum cover over waterlines shall be 3-feet, except for where specifically noted on the plans.

7-09.3(7)A Dewatering of Trench

Section 7-09.3(7)A is supplemented with the following:

If the Contractor fails to adequately dewater the trench and prevent water or other materials

from entering the pipe, the Contractor shall at their expense thoroughly clean the line per section 7-09.3(24)A, prior to disinfecting the main. Dewatering trenches is incidental to the cost of pipe installation.

7-09.3(8) Removal and Replacement of Unsuitable Materials

Section 7-09.3(8) is supplemented with the following:

Unsuitable material consists of excavated silt, clay, and organic material and in-situ materials which provide less than 1500 psf bearing capacity (as determined by a penetrometer test by the Engineer) shall be excavated and replaced with select backfill or ballast at the direction of the Engineer. All unsuitable material shall be removed from the site and hauled to a permitted, Contractor provided disposal site in accordance with Section 2-03.3(7)C.

7-09.3(9) Bedding The Pipe

Section 7-09.3(9) is supplemented with the following:

The contractor shall bed the pipe with Engineer approved native material, or provide imported bedding material meeting the requirements for Gravel Backfill 9-03.12(3). Bedding material or suitable native material used for pipe bedding will be considered incidental to the pipe bid item.

7-09.3(10) Backfilling Trenches

Section 7-09.3(10) is supplemented with the following:

Native backfill containing organics, un-compactable or deleterious materials are considered unsuitable. Driveways must be filled and compacted as required for driveway and pavement repair in accordance with the Plans. Where the Engineer determines that the native material is not suitable for backfill, the Contractor shall provide imported trench backfill material in accordance with Section 9-03.10 as modified. No additional payment shall be made for placement or compaction in the trench. Excess native materials after trench backfill shall be embanked in accordance with the plans and specs. Payment of imported backfill is per ton per Section 4-02. When water mains are installed within the roadway prism, trench backfill shall include the minimum structural section for the roadway. Detectable marking tape shall be installed over the water main.

7-09.3(11) Compaction of Backfill

Section 7-09.3(11) is supplemented with the following:

Trenches which are located outside the roadway may be backfilled with native material upon approval of the Engineer, and compacted to 85% of maximum density as specified in Section 2-03.3(14)D. All other trenches shall be compacted to 95% of the maximum dry density. Compaction of native or imported backfill shall be incidental to other items of work.

7-09.3(19)A Connections to Existing Mains

Section 7-09.3(19)A is supplemented with the following:

Connection to existing mains is the full responsibility of the Contractor. Temporary routing of existing pipelines or services, shoring, temporary thrust blocks, extra fittings required to route the pipe over or under existing or new pipe or other utilities and all other work and materials required for making complete, permanent and workable connections are incidental to other items of work.

The Contractor shall be responsible for determining which residents will be affected by shutoffs, and will notify them 24 hours in advance. 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.

The Contractor shall locate and verify the type of pipe, size, and depth prior to making the connection. Detailed sketches and plans of the connection proposed by the Contractor shall be given to the Engineer not less than one week prior to the expected construction. The City of Ferndale shall be notified not less than two (2) working days prior to connection to existing mains.

7-09.3(24) Disinfection of Water Mains

Section 7-09.3(24) is supplemented with the following:

The liquid chlorine injection method described below or approved alternate method shall be used. Hypochlorite granules (65%) shall be mixed with water and injected into the main to acquire a minimum of 50 mg/l of chlorine in the main. A typical method is as follows: The chlorine solution is mixed in a container (new, clean garbage can) and fed into the new water main using a pressurizing pump. The injection is made at a corporation stop or similar fitting at the fill point of water from the existing City of Ferndale main. Filling and injection rates shall be reviewed by the Engineer prior to disinfection. Chlorine content at the beginning and end of each required 24-hour disinfection period, and prior to bacteriological testing shall be sampled by the Engineer. The cost for the first sequence of sampling and lab testing shall be paid for by the City of Ferndale. Subsequent testing and inspection shall be paid by the Contractor. The Engineer shall be notified 24 hours prior to conducting disinfecting and flushing operations.

7-09.3(24)A Flushing

Section 7-09.3(24)A is supplemented with the following:

Water for flushing mains may be taken from a direct connection to existing mains providing an approved backflow device is utilized. Velocity for testing must equal or exceed 2.5 fps. The connection must be capable of passing at least 400 gallons per minute (gpm) for flushing 8-inch diameter mains.

The Contractor shall be responsible for disposal of treated water flushed from mains and shall

neutralize the waste water before disposal. An adequate amount of reducing agent shall be applied to water being disposed of in order to thoroughly neutralize the chlorine residual remaining in the water per AWWA Standard Section C651.

7-09.3(24)N Final Flushing and Testing

(July 12, 2010 R&E GSP)

Section 7-09.3(24)N is supplemented with the following:

Upon completion of final flushing, the main shall be filled with water and allowed to remain filled for 24 hours. The Engineer shall obtain a sample at the end of this 24-hour period. A satisfactory report shall be received before placing the lines into service.

7-09.3(24)O Repetition of Flushing and Testing

Section 7-09.3(24)O is supplemented with the following:

The City shall furnish water for the initial flushing and testing process. In the event additional water is needed for flushing or testing, the Contractor shall connect a meter and pay the City for actual water used, at the commercial rate. The Contractor will pay for additional bacteriological testing required because of failed samples. The Contractor will be responsible for all cost associated with re-testing, including laboratory fees, and inspection.

7-09.4 Measurement

Section 7-09.4 is supplemented with the following:

Measurement for connect to existing watermain shall be measured per each connection completed.

Measurement for payment of stovepipe watermain shall be measured per each installed.

No measurement shall be made for marking tape. Marking tape shall be considered incidental to the work of constructing the water main.

No measurement shall be made for clearing and grubbing, removal of existing street improvements, removal of the abandoned watermain, removal of existing valve boxes, protection of existing utilities and service, trench excavation and pipe zone backfill, pipe zone bedding, thrust blocks, and compaction of backfill.

7-09.5 Payment

Section 7-09.5 is supplemented with the following:

"Connect to Existing ___ In. Diam. Watermain", per each.

The unit contract price bid per each "Connect to Existing ___ In. Diam. Watermain" shall be full compensation for all work to connect to the existing mains, including but not limited to excavating, removing existing fittings and thrust blocks, backfilling, laying and jointing pipe, pipe and fittings, and cover and cleanup."

"Stovepipe Watermain, ___ In. Diam.", per each

The unit contract price bid per each for "Stovepipe Watermain, ___ In. Diam" shall be full pay for all work to install the stovepipe watermain, including but not limited to excavating, extra trench excavation, backfilling, laying and jointing pipe, tapping the main, corporation stops, pipe and fittings, thrust blocks, and cover and cleanup.

7-12 VALVES FOR WATER MAINS

7-12.1 Description

Section 7-12.1 is supplemented with the following:

All valves shall be thrust blocked per the detail shown on the plans. All valve boxes shall be new and a uniform type.

7-12.2 Materials

Section 7-12.2 is supplemented with the following:

Valves shall meet the requirements of AWWA C509 or C-515 and shall be iron body, bronze-mounted, with resilient seated wedge device and O-ring stuffing box. All valves shall be provided with a valve box conforming to Section 9-30.3(4) and 9-30.3(6) and valves outside of the pavement section shall be encased in concrete and furnished with a concrete valve marker conforming to Section 9-30.3(5).

Valve stem extensions will be required on operating nuts located 4 feet below grade per section 9-30.3(6). Extensions shall be incidental to gate valves.

7-12.3 Construction Requirements

(February 8, 2018 R&E GSP)

Section 7-12.3 is supplemented with the following:

The existing gate valve at Vista Drive shall be salvaged by the Contractor and delivered to the City of Ferndale Maintenance Shop located at 5735 Legoe Ave.

The following new Section is added:

7-12.3(2) Adjustments to Finished Grade

Existing valve boxes, which are to remain, shall be adjusted to finished grade. This work shall be included in the bid item "Adjustments to Finished Grade."

7-14 HYDRANTS

7-14.1 Description

Section 7-14.1 is supplemented with the following:

This work includes the installation of Blue Raised Pavement Markers on the roadway centerline adjacent to all hydrants.

7-14.2 Materials

Section 7-14.2 is supplemented with the following:

The City of Ferndale Standard Fire Hydrants is "M&H model 929". The pumper port shall be oriented to face the main road.

Fire hydrants shall be painted City colors with two coats of Urethane paint, applied per the paint manufacturer's specifications.

A blue reflector, installed 1 foot off the road centerline towards the hydrant shall be included in the bid item “Hydrant Assembly”.

All labor, equipment, and materials necessary to connect fire hydrants shall be incidental to the unit bid prices. Materials include, but are not limited to: gate valves, fittings, spool fittings, restraints, restrained 6” ductile iron pipe, and thrust blocks.

7-14.5 Payment

Section 7-14.5 is supplemented with the following:

The unit contract price per each for "Hydrant Assembly" shall be full compensation for all costs for labor, material, and equipment to install spool fittings, restraints, thrust blocks, auxiliary gate valve, shackles, tie rods, concrete blocks, painting required for the complete installation of the hydrant assembly as specified, lateral tee and 6” ductile iron watermain to hydrant, hydrant, and blue raised pavement marker.

7-15 SERVICE CONNECTIONS

7-15.1 Description

Section 7-15.1 is supplemented with the following:

This work consists of installing new service connections, replacing existing services, and abandoning existing water service connections as shown on the Plans or at the direction of the Engineer.

All work is to be in conformance with City standards for water services.

7-15.2 Materials

Section 7-15.2 is supplemented with the following:

All fittings shall be brass. Saddles shall be as shown on the Plans with I.P. standard tapping. Corporation stops shall be Ford F700, or approved equal with inlet I.P. standard thread and outlet thread compatible with Type K copper connection piping, with no special adapters, minimum 150 psi.

Within the right-of-way, service piping shall be copper tubing and shall conform to the requirements of ASTM B88, Type K annealed. All underground fittings shall be flared within the right-of-way.

7-15.3 Construction Requirements

Section 7-15.3 is supplemented with the following:

General

New type K copper tubing shall be installed between the watermain and the meter setter location. The Contractor shall provide and install a new meter setter, and meter box for all service connections, in accordance with the City of Ferndale Standards. All existing water meters, setters, and boxes shall be salvaged by the Contractor and delivered to the City of Ferndale Maintenance Shop.

Service connections shall include connection to the existing service line on the customer side of the meter. The proposed meter and meter setter shall be installed at the correct elevation below subgrade as shown in the plans. If the proposed meter setter is above or below the existing service line on the customer side of the meter, this work shall include all pipe, fittings, materials, tools, and labor to connect the customers' service line to the new setter.

Existing water services shall be abandoned at the existing water main by closing the corporation stop, disjointing the water service pipe from the corporation stop, and removing the existing water service line a minimum of 2 feet from the watermain.

Various items of work in this contract may require disruption of water service to customers on adjacent properties. The Contractor shall keep the service disruptions to an absolute minimum. When more than one item of work requires disruption of the same utility service to the same customer, the Contractor shall schedule the work so that the customer's service is disrupted only once. The Contractor shall be responsible for determining which residents will be affected by shutoffs, and will notify them a minimum of 24 hours in advance. The Contractor shall locate and verify the type of pipe, size, and depth prior to making the connection. Detailed sketches and plans of the connection proposed by the Contractor shall be given to the Engineer not less than one week prior to the expected construction. The City of Ferndale shall be notified not less than two (2) working days prior to connection to existing mains and existing service line.

Any disrupted services shall be restored before the end of each working day. Overnight disruptions will not be permitted. If, in the opinion of the Engineer, service has not been restored in a satisfactory manner, the Engineer may take whatever action is necessary to restore service. The cost of such action will be deducted from any payments due or coming due the Contractor.

Coordination of Work

The Contractor shall notify the City of Ferndale Public Works Department at 384-4006, 48 hours prior to disconnection of the existing meter. The Contractor shall tag the existing meters to be removed with the corresponding address which is served by that meter and meter reading

at time of removal. Once removed these meters shall be delivered to the City of Ferndale Maintenance Shop located at 5735 Legoe Ave.

The Contractor shall coordinate with the City of Ferndale for the collection of the existing meter. The existing water meter shall not be removed and service shall not be interrupted until the new water meter is on hand. The City will determine if a new meter is required and supply said meter.

Meter and PRV Removal

All meters, PRVs, and meter boxes removed shall be salvaged without damage and delivered to the City of Ferndale shop yard located at 5735 Legoe Avenue. The contractor shall take care to salvage all meters, PRVs, and fittings.

Delivery shall occur during the hours of 7:00 a.m. to 3:30 p.m. Monday thru Friday. Five days written advance notice shall be delivered to the Engineer prior to delivery. Material will not be accepted without the required advance notice.

Equipment damaged during removal or delivery shall be repaired or replaced to the Engineer's satisfaction at no cost to the Contracting Agency.

The Contractor shall be responsible for unloading the equipment where directed by the Engineer at the delivery site.

7-15.3(1) Flushing and Disinfection

Section 7-15.3(1) is supplemented with the following:

Service testing shall be done in conjunction with water main testing. An acceptance inspection will be made by the Engineer upon completion of all project work. During the inspection, every service shall be turned on to its full capacity to check flow and guarantee that each service line has been flushed. In no case shall the acceptance inspection be made until all project work is complete. Damage incurred during other construction work on the project shall be corrected by the Contractor prior to acceptance by the Engineer.

The following new Section is added:

7-15.3(2) Adjustments to Finished Grade

Existing water meter and irrigation boxes, which are to remain shall be adjusted to finished grade. This work shall be included in the bid item "Adjustments to Finished Grade."

7-15.4 Measurement

Section 7-15.4 is supplemented with the following:

Measurement for "Service Connection __ In. Diam." shall be measured per each. The following items shall be incidental and included in the unit price per each:

1. Dewatering if required.

2. Structure Excavation Class B Including Haul.
3. Pipe bedding as shown on the plans.
4. Backfill and Compaction.
5. All couplers, fittings, associated gaskets and appurtenances.
6. Connection to existing service pipe.
7. Connection to the 12" watermain for the two existing 1" services connections at station ~15+42.43, 1.81' LT.
8. Cleaning.
9. Other work and materials, not specifically identified as being paid elsewhere.

Measurement for "___ Meter Vault" shall be measured per each. The following items shall be incidental and included in the unit price per each:

1. Dewatering if required.
2. Structure Excavation Class B Including Haul
3. Pipe bedding as shown on the Plans
4. Backfill and Compaction
5. Installation of 2" and 4" pipe from the 4" valve to the connection to the existing service line
6. 4" gate valve
7. All coupling bands, fittings, associated gaskets, and appurtenances as shown on the plans.
8. Cleaning
9. Connection to existing service pipe.
10. Other work and materials, not specifically identified as being paid elsewhere
11. All other materials shown on the plans, not specifically paid for by other bid items, shall be incidental and included in the unit price per each.

Measurement of pressure reducing valves shall be per each for each type and size actually installed.

7-15.5 Payment

Section 7-15.5 is supplemented with the following:

"___ Meter Vault", per each.

The unit Contract price per each for "___ Meter Vault" shall be full pay for all Work to install the vaults as shown on the plans and shall include but not be limited to, excavation, laying and jointing the pipe and fittings and appurtenances, gate valve on the meter side of the water main, installing the vault, backfilling, testing, flushing, and disinfection of the service connection.

The unit contract price per each for "Service Connection, ___ In. Diam." and shall be full pay for all work to remove and deliver existing meters and PRVs, install the meter boxes, meter setter, gate valve, service connection, including but not limited to, excavating, tapping the main, laying and jointing the pipe and fittings and appurtenances, connecting to existing service line, backfilling, testing, flushing and disinfection of the service connection, and other appurtenances to the location shown on the plans.

"Pressure Reducing Valve ____ In.", per each.

The unit Contract price per each for the valve specified shall be full pay for all Work to furnish and install the valve complete in place on the water service, including trenching, jointing, blocking of valve, disinfecting, hydrostatic testing, and PVC valve box.

7-17 SANITARY SEWERS

7-17.3 Construction Requirements

7-17.3(1) Protection of Existing Sewerage Facilities

(June 10, 2009 R&E GSP)

Section 7-17.3(1) is supplemented with the following:

If the connection to the existing system involves sewer service disruption, the Contractor shall be responsible for notifying the residents and utility owner affected by the shutoff. The Engineer will advise which parties are to be notified.

The Contractor may be required to perform the connection during times other than normal working hours. The types of connections for the sewer main are varied. For the installation of these connections, the surfaced portion of the roadway shall not be penetrated unless the connection point is directly under it.

Maintaining Service

Where existing services are to be transferred from old to new sewer mains, the Contractor shall plan and coordinate its work with that of the Utility so that service will be resumed with the least possible inconvenience to customers.

7-17.4 Measurement

Section 7-17.4 is supplemented with the following:

Measurement for Sanitary Sewer Pipe, as indicated on the Bid Proposal, shall be per linear foot. The following items shall be incidental and included in the unit price per linear foot:

1. Structure Excavation Class B
2. Dewatering if required
3. Detectable marking tape
4. Pipe bedding as shown on the Plans
5. Compaction
6. Installation of sanitary sewer pipe
7. Coupling bands, fittings, and associated gaskets
8. Removing/adding concrete to manhole channels
9. Connection to existing structures
10. Connection to existing side sewers
11. Other work and materials, not specifically identified as being paid elsewhere

7-17.5 Payment

Section 7-17.5 is supplemented with the following:

The unit Contract price per linear foot for sewer pipe of the kind and size specified shall be full pay for connections to existing mains and manholes.

7-18 SIDE SEWERS

7-18.1 Description

(March 15, 2010 R&E GSP)

Section 7-18.1 is supplemented with the following:

Realignment and repair of the existing sanitary sewer services may be necessary to connect to new sanitary sewer main.

7-18.3(1) General

Connections to the existing sewer main shall not be made without first making the necessary scheduling arrangements with the Engineer in advance. Work shall not be started until all the materials, equipment, and labor necessary to properly complete the work are assembled on the site.

Existing side sewers shall be cut by the Contractor, unless otherwise specified in the Special Conditions. The Contractor shall remove the portions of pipe to provide for the installation of the required fittings at the points of connection. Damage caused by the Contractor's operations to existing joints in piping to remain in-service shall be repaired by the Contractor at no additional expense to the Contracting Agency.

Once work is started on a side sewer, it shall proceed continuously without interruption and as rapidly as possible until completed. No shutoff will be permitted overnight, over weekends, or on holidays.

If the connection to the existing side sewer system involves turning off the side sewer, the Contractor shall be responsible for notifying the residents affected by the shutoff. The Engineer will advise which property owners are to be notified.

The Contractor may be required to perform the connection during times other than normal working hours.

The types of connections for the side sewers are varied. For the installation of these side sewers, the surfaced portion of the roadway shall not be penetrated unless the connection point is directly under it.

7-18.5 Payment

Section 7-18.5 is supplemented with the following:

Potholing required to determine the connection point at the right of way shall be paid under the bid item "Pothole Existing Underground Utility."

DIVISION 8
MISCELLANEOUS CONSTRUCTION

8-01 EROSION CONTROL AND WATER POLLUTION CONROL

8-01.3 Construction Requirements

8-01.3(1) General

Section 8-01.3(1) is supplemented with the following:

The Contractor shall prepare a Stormwater Pollution Prevention (SWPP) Plan in compliance with the most current edition of the Department of Ecology's Stormwater Management Manual for Western Washington, Volume II – Construction Stormwater Pollution Prevention and the NPDES Permit. The Contractor's ESC Lead shall coordinate with the Contracting Agency in preparing the SWPP Plan. The SWPP Plan is to remain onsite throughout the duration of construction.

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."

No specific unit of measurement will apply for the lump sum bid item "SWPP Plan Preparation".

8-01.5 Payment

(March 18, 2010 R&E GSP)

Section 8-01.5 is supplemented with the following:

The first item, "ESC Lead", of Section 8-01.5 is revised to read:

"ESC Lead", lump sum.

The item, "Inlet Protection" of Section 8-01.5 is revised to read:

The unit Contract price per each for "Inlet Protection" shall include all costs for removal and disposal of accumulated debris, inlet protection maintenance, and inlet protection removal and disposal.

"SWPP Plan Preparation", Lump Sum

The lump sum price for SWPP Plan Preparation shall be full compensation for all labor, materials, tools and equipment to satisfactorily complete the work as necessary and defined in the Standard Specifications, these Special Provisions, and the Plans.

8-02 ROADSIDE RESTORATION

8-02.1 Description

(March 15, 2010 R&E GSP)

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 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(11) Bark or Wood Chip Mulch

(April 22, 2010 R&E GSP)

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

(April 22, 2010 R&E GSP)

Section 8-02.4, is supplemented with the following:

No separate measurement will be made for fertilizer, mulch, soil amendments, binding agents, or water where applied for "Seeded Lawn Installation."

Topsoil Type A will be measured by the square yard along the grade and slope of the area covered immediately after application.

All Work performed under "Landscape Restoration" shall be measured and paid in accordance with Section 1-09.6 Force Account.

"Bark Mulch" shall be measured per square yard along the grade and slope of the area covered immediately after installation.

8-02.5 Payment

(January 31, 2011 R&E GSP)

Section 8-02.5 is supplemented with the following:

"Topsoil Type A", per square yard.

The unit Contract price per square yard for "Topsoil Type A" shall be full payment for all costs for the specified Work.

"Bark Mulch", per square yard.

The unit Contract price per square yard for "Bark Mulch" shall be full payment for all costs for the specified Work.

8-04 CURBS, GUTTERS, AND SPILLWAYS

8-04.2 Materials

(January 31, 2011 R&E GSP)

Section 8-04.2 is supplemented with the following:

All extruded curb shall be Type 6 'Extruded Cement Concrete Curb'.

8-04.3 Construction Requirements

8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways

(February 7, 2008 R&E GSP)

Section 8-04.3(1) is supplemented with the following:

Depressed curb driveways and wheel chair ramp openings shall be provided at such locations as directed by the Engineer or shown on the Plans. All curved sections with a radius less than 500 feet shall be formed in arc sections to match the radii detailed in the Plans. The Contractor shall provide temporary ramps over new concrete curbing at driveway locations.

Concrete placement shall be accomplished with line and grade control such that a 10-foot long straight edge placed on the concrete surface in the gutter or against the face of the curb shows no variance greater than 1/8 inch in grade or 1/4 inch on line, except at a designed angle point. Under no circumstances shall variances be allowed that cause drainage away from the catch basin or other drainage structures.

Curb drains shall be constructed of 2-inch PVC pipe or other material subject to approval of the Engineer, cut to length to pass from the back of curb through the curb to the face of the curb at the gutter line. Spacing will be a maximum of 50 feet, center to center, and/or each side of the driveways and at such locations as designated by the Engineer or as shown on the Plans.

8-04.5 Payment

(February 7, 2008 R&E GSP)

Section 8-04.5 is supplemented with the following:

All costs associated with the supply and installation of curb drains shall be included in the various bid items contained in this section.

8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES

8-06.3 Construction Requirements

(February 8, 2008 R&E GSP)

Section 8-06.3 is supplemented with the following:

Concrete placement shall be accomplished with line and grade control such that a 10-foot long straight edge placed on the concrete surface shows no variance greater than 1/8 inch in grade or 1/4 inch on line, except at a designed angle point.

Where possible the Contractor shall construct the driveway entrance in two or more segments to permit access to an existing driveway.

Driveways shall meet the following minimum requirements.

1. 3/8-inch premolded joint filler shall be placed at 20 foot centers, maximum and shall be matched to curb and gutter joints.
2. 'V' grooves shall be scored ¾-inch deep at five-foot intervals.
3. Driveway sections shall be brush finished longitudinally with a fiber brush.
4. For driveways wider than 20 feet, place ¾-inch deep 'V' groove at the mid-point. For driveways greater than 30 feet wide, place ¾-inch deep 'V' groove at one-third points.
5. All joints shall be cleaned and edged.
6. Driveways shall have a uniform thickness of 6-inches.
7. Six (6) inches of compacted gravel base shall be placed beneath driveways.

8-14 CEMENT CONCRETE SIDEWALKS

8-14.1 Description

(March 16, 2010 R&E GSP)

Section 8-14.1 is supplemented with the following:

This work shall consist of constructing cement concrete sidewalks and sidewalk ramps, in accordance with details shown in the Plans and these Specifications and in conformity to lines and grades shown in the Plans or as established by the Engineer. Replacement or matching to existing driveways shall be completed with a similar material and finish as that which exists or as directed by the Engineer.

8-14.3 Construction Requirements
(February 11, 2008 R&E GSP)
Section 8-14.3 is supplemented with the following:

Concrete placement shall be accomplished with line and grade control such that a 10-foot long straight edge placed on the concrete surface shows no variance greater than 1/8 inch in grade or 1/4 inch on line, except at a designed angle point.

(March 2, 2010 R&E GSP)
Section 8-14.3 is supplemented with the following:

Sidewalks shall meet the following minimum requirements:

1. Sidewalks shall have a uniform thickness of 4-inches.
2. 3/8-inch through joints shall be placed 20 feet center to center and shall be matched to curb and gutter joints.
3. 'V' grooves shall be scored ¾-inch deep at five foot intervals.
4. All joints shall be cleaned and edged.
5. Two inches of washed rock shall be placed beneath sidewalks. Washed rock shall be commercially available 1" to ¾" washed rock. The contractor shall submit preliminary samples to the Engineer for approval prior to use.

8-14.3(4) Curing
(March 16, 2010 R&E GSP)
Section 8-14.3(4) is supplemented with the following:

It shall be the Contractor's responsibility to protect curing concrete until it is set to prevent vandalism. Any repairs needed to correct vandalism during the initial set period, including full replacement of the damaged panel, shall be at the expense of the Contractor and subject to approval of the Engineer.

8-14.4 Measurement
(March 16, 2010 R&E GSP)
Section 8-14.4 is supplemented with the following:

Monolithic Retaining Wall will be measured by the square foot of completed wall in place. The bottom limits for vertical measurement will be the bottom of the wall footing. The top limit for vertical measurement will be the top of the walls as shown on the Plans. The horizontal limits for measurement are from end of the wall to the end of the wall.

8-14.5 Payment
(February 11, 2008 R&E GSP)
Section 8-14.5 is supplemented with the following:

Washed rock shall be included in the unit price for the various bid items in this section.

Payment for "Cement Concrete Sidewalk", shall be at the unit price bid per square yard of cement concrete in place and shall be full compensation for all labor, equipment, and material necessary to construct this item in place, including driveway sections and repair sections, as specified including leveling and grading subgrade. Washed rock, and cement concrete

pedestrian curb, shall be considered incidental to this bid item

"Cement Conc. Curb Ramp Type ___", per each

The unit Contract price per each for "Cement Concrete Curb Ramp Type____", shall be full pay for installing the curb ramp as specified, including the "Detectable Warning Surface" and leveling and grading subgrade. Washed rock, and cement concrete pedestrian curb, shall be considered incidental to this bid item.

Payment for "Reinforced Cement Concrete Sidewalk, 6 In. Thick" shall be at the unit price bid per square yard of cement concrete in place and shall be full compensation for all labor, equipment, and material necessary to construct this item in place, as specified including leveling and grading subgrade. Washed rock shall be considered incidental to this bid item. Reinforcing bar for "Reinforced Cement Concrete Sidewalk, 6 In. Thick", shall be incidental to the bid item.

"Type "A" Monolithic Retaining Wall", per square foot.

All costs in connection with furnishing material for, and constructing, the retaining wall, including reinforcement steel, underdrain pipe, pvc weep hole drains, premolded joint filler, Gravel Backfill for Wall, ¾" washed rock, etc. shall be included in the unit contract price per square foot for "Type "A" Monolithic Retaining Wall".

8-18 MAILBOX SUPPORT

8-18.3 Construction Requirements

Section 8-18.3 is supplemented with the following:

The contractor shall salvage existing mailboxes for use on the new mailbox supports. All relocated mailboxes shall have new mailbox supports, Type 1 or Type 2 in accordance with the Standard Plans unless otherwise noted.

The contractor shall maintain temporary mailboxes and mailbox supports as necessary during construction to ensure that mail delivery is uninterrupted during the duration of the project. Coordination with the United States Postal Service and the property owner or tenant will be the responsibility of the Contractor.

8-18.5 Payment

Section 8-18.5 is supplemented with the following:

All costs for temporary mailboxes, temporary mailbox supports and salvage and relocation of existing mailboxes shall be included in and incidental to the unit bid items for mailbox supports as indicated on the bid proposal form.

Add the following Section:

8-19 WOODEN FENCE

8-19.1 Description

(July 6, 2009 R&E GSP)

This work consists of removing and reinstalling wooden and plastic fencing, including posts, rails and component parts, of the types specified in accordance with the Plans and these Specifications at the locations shown in the Plans and in conformity with the lines as staked.

8-19.2 Materials

(July 6, 2009 R&E GSP)

Clearing of the fence line may be required. Clearing shall consist of the removal and disposal of all trees, brush, logs, upturned stumps, roots of down trees, rubbish, and debris.

Grubbing will not be required except where short and abrupt changes in the ground contour will necessitate removal of stumps in order to properly grade the fence line. All stumps within the clearing limits shall be removed or close cut.

Grading of the fence line sufficient to prevent short and abrupt breaks in the ground contour that will improve the aesthetic appearance of the top of the fencing when installed shall be required.

It is expected that in the performance of this Work, machine operations, and handwork will be required for wooden fencing.

The fence shall be constructed close to and inside the Right of Way line unless otherwise directed by the Engineer or shown in the Plans. Deviations in alignment to miss obstacles will be permitted only when approved by the Engineer and only when such deviation will not be visible to the traveling public or adjacent property owners.

Fencing materials shall match, as closely as possible, the existing fencing material to be removed and replaced. If possible, the Contractor can salvage and re-use the existing fencing materials if the materials are approved as re-usable by the engineer.

Materials shall meet the requirements of the following sections:

Concrete 6-02
Bolts, Washers, Other Hardware 9-06.22
Timber and Lumber 9-09

8-19.3 Construction Requirements

(July 6, 2009 R&E GSP)

All posts, except posts adjacent to the galvanized panel gate, shall be set plumb and to the

required grade and alignment, and shall be backfilled with compacted crushed surfacing top course or other approved material to ensure drainage around post. Fence shall generally follow the contour of the ground. Grading shall be performed where necessary to provide a neat appearance.

Posts adjacent to galvanized gate shall be set in concrete to the dimensions shown in the Plans. All concrete footings shall be crowned so as to shed water.

8-19.3(1) Storing and Handling Materials

(July 6, 2009 R&E GSP)

All lumber shall be stored off ground and protected from moisture with canvas or plastic covers. Ventilation shall be provided.

Handling and care of all treated lumber shall be in accordance with APWA Standard M-4.

8-19.3(2) Workmanship

(July 6, 2009 R&E GSP)

The Contractor shall provide an experienced supervisor and skilled workmen who shall be thoroughly familiar with the type of construction involved and the techniques required for the proper execution of the work. Workmanship on metal parts shall comply with requirements for steel structure.

8-19.3(3) Field Treatment of Cut Surfaces, Bolt Holes, and Contact Surfaces

(July 6, 2009 R&E GSP)

Storage, handling, care, and field treatment of treated timber and lumber shall be in accordance with APWA Standards M4-80.

Treatment shall be applied by an organization regularly involved in the pressurized treatment of wood products. No field treatment will be permitted except for trimmed ends and other required field cuts. Treatments of trimmed ends, field cuts, and holes bored in pressure-treated material shall be thoroughly swabbed with a material equal to the original preservative treatment and in accordance with Section 9-09.3.

8-19.3(4) Field Treatment of Cut Surfaces, Bolt Holes, and Contact Surfaces

(July 6, 2009 R&E GSP)

Bolts and miscellaneous hardware, including nails and spikes, shall be hot-dip galvanized.

Use washers, as specified, under all bolt heads and nuts bearing on wood.

8-19.4 Measurement

(July 6, 2009 R&E GSP)

"Remove and Replace Existing Fence" will be measured by the linear foot of completed fence, along the ground line, exclusive of openings.

8-19.5 Payment
(July 6, 2009 R&E GSP)

"Remove and Replace Existing Fence", per linear foot.
The unit bid price per foot of "Remove and Replace Existing Fence" shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work including excavation, backfilling, and regrading.

8-21 PERMANENT SIGNING

8-21.2.1 Materials
(July 6, 2009 R&E GSP

Section 8-21.2 is supplemented with the following:

Permanent signs shall be mounted on Type ST-2 Sign Supports.

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 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.

The Contractor shall replace all pavement markings as currently delineated throughout the project. It shall be the responsibility of the Contractor to off-set and/or keep track of the existing pavement markings for replacement.

8-22.2 Materials
Section 8-22.2 is supplemented with the following:

The plastic material used to form pavement markings shall be Type A – liquid hot applied thermoplastic.

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.

8-23 TEMPORARY PAVEMENT MARKINGS

8-23.1 Description

Section 8-23.1 is supplemented with the following:

The temporary centerline striping shall be 1-foot of stripe for every 25-feet of roadway. Temporary marking will be incidental to the bid proposal item for HMA in accordance with Section 5-04.

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.

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 4.4 million.

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.

9-03.12(3) Gravel Backfill for Pipe Zone Bedding

(February 11, 2008 R&E GSP)

Add the following section:

9-03.12(3)A Pea Gravel for Pipe Bedding

Pea gravel for pipe bedding shall consist of naturally occurring material. It shall be free from various types of wood waste or other extraneous or objectionable materials. It shall have characteristics of size and shape that it will compact and shall meet the following specifications for grading:

Sieve Size	Percent Passing
1/2"	100
3/8 "	95-100
U.S. No. 8	0-10
U.S. No. 200	0-3

All percentages are by weight.

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.

9-33 CONSTRUCTION GEOSYNTHETIC

The following new section is created:

9-33.2(4) Geotextile Paving Fabric

(*******)

Geotextile Paving Fabric shall be non-woven polypropylene geotextile and shall meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below

Minimum Properties Requireed for Geotextile Paving Fabric

Geotextile Property	ASTM Test Method	Units	Required Values
Tensile Strength (Grab)	ASTM D 4632	lbs	120
Elongation	ASTM D 4632	%	50

Asphalt Retention	ASTM D-6140	gal/yd²	0.24
Melting Point	ASTM D 276	°F	320
UV Resistance %Retained at 500 hours	ASTM D-4355	%	70

All geotextile properties above MARV (i.e., the test results for any sampled roll in a lot shall meet or exceed the values shown in the table).

The test procedures used are essentially in conformance with the most recently approved ASTM geotextile test procedures, except for geotextile sampling and specimen conditioning, which are in accordance with WSDOT T 914, Practice for Sampling of Geotextiles for Testing, and T 915, Practice for Conditioning of Geotextiles for Testing, respectively. Copies of these test methods are available at the State Materials Laboratory, PO Box 47365, Olympia, WA 98504-7365.

(August 7, 2017)
Standard Plans

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 16-048, effective August 7, 2017 is made a part of this contract.

The Standard Plans are revised as follows:

A-30.15
DELETED

A-40.10
Section View, PCCP to HMA Longitudinal Joint, callout, was – "Sawed Groove ~ Width 3/16" (IN) MIN. to 5/16" (IN) MAX. ~ Depth 1" (IN) MIN. ~ see Std. Spec. 5-04.3(12)B" is revised to read; "Sawed Groove ~ Width 3/16" (IN) MIN. to 5/16" (IN) MAX. ~ Depth 1" (IN) MIN. ~ see Std. Spec. Section 5-04.3(12)A2"

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-60.30
Note 4, was – "If the ACP and membrane is to be removed from the bridge deck, see GSP 023106 for deck preparation before placing new membrane." Is revised to read; "If the ACP and membrane is to be removed from the bridge deck, see GSP 6-02.3(10)D.OPT6.GB6 for deck preparation before placing new membrane."

B-10.20
Substitute "step" in lieu of "handhold" on plan

B-25.20
Note 4, was – "Bolt-Down capability is required on all frames, grates and covers, unless specified in the Contract. Provide two holes in the Frame that are vertically aligned with the grate slots. The frame shall accept the 5/8" x 11 NC x 2" allen head cap screw by being tapped, or other approved mechanism. The location of bolt-down holes varies among manufacturers. See BOLT-DOWN DETAIL, **Standard Plan B-30.10.** Is revised to read; "Bolt-Down capability is required on all frames, grates and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) Allen head cap screw by being tapped, or other approved mechanism. The location of bolt-down holes varies by manufacturer."
See BOLT-DOWN DETAIL, **Standard Plan B-30.10.**

Add Note 7. See Standard Specification Section 8-04 for Curb and Gutter requirements

B-30.70

Note 2, was – "Bolt-Down capability is required on all frames, grates and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 5/8" -1 NC x 2" Allen head cap screw by being tapped, or other approved mechanism. Location of bolt down holes varies by manufacturer." Is revised to read; "Bolt-Down capability is required on all frames, grates and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) Allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer."

RING PLAN, callout, was – "DRILL AND TAP 5/8" – 11NC HOLE FOR 1 1/2" X 5/8" STAINLESS STEEL SOCKET HEAD CAP SCREW (TYP.)" is revised to read; "SEE NOTE 2"

B-90.40
Valve Detail - DELETED

C-16b
DELETED

C-22.14
Note 3, formula, was: "Elevation G = (Elevation S – D x (0.1) + 28" is revised to read: "Elevation G = (Elevation S – D x (0.1) + 28/12"

C-22.16
Note 3, formula, was: "Elevation G = (Elevation S – D x (0.1) + 31" is revised to read: "Elevation G = (Elevation S – D x (0.1) + 31/12"

C-22.41
DELETED

C-25.18
DELETED

D-10.10
Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.15
Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.20
Wall Type 3 may be used in all cases. The last sentence of Note 6 on Wall Type 3 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

D-10.25

Wall Type 4 may be used in all cases. The last sentence of Note 6 on Wall Type 4 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

D-10.30
Wall Type 5 may be used in all cases.

D-10.35
Wall Type 6 may be used in all cases.

D-10.40
Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.45
Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design memorandum.

D-15.10
STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.20
STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.30
STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

F-10.12
Section Title, was – "Depressed Curb Section" is revised to read: "Depressed Curb and Gutter Section"

F-10.40
"EXTRUDED CURB AT CUT SLOPE", Section detail - Deleted

F-10.42
DELETE – "Extruded Curb at Cut Slope" View

G-22.10
Sheet 2, Elevation , Three-Post Installation, Dimension, upper right, was – ".035" is revised to read: " 0.35X"

G-24.60
Sheet 1, View A, Dimension @ Bottom of sign, is = 3" is revised to read: 6".

G-60.10
Sheet 3, TYPICAL TRUSS DETAILS, BASE ~ TOP, callout, was – "15/16"(IN) DIAM. HOLES FOR FOUR, 7/8" (IN) DIAM. BOLTS (ASTM A 325)" is revised to read: "15/16"(IN) DIAM. HOLES FOR FOUR, 7/8" (IN) DIAM. BOLTS (ASTM F3125, GRADE A325)"

G-90.10
TOP VIEW, callout, was – "Vertical Brace ~ W4 x 13 steel (TYP.)(See Note 4)" is revised to read; "Vertical Brace ~ W4 x 13 steel (TYP.)(See Note 3)"

G-95.10
Sheet 2, Detail "B", Plan View, callout, was – "5/8" DIAM. ASTM A 325 H.S. BOLT W/HEAVY HEX NUT AND WASHER, GALV. (TYP.) TIGHTEN PER STD. SPEC. 6-03.3(33)" is revised to read: "5/8" DIAM. ASTM F 3125, GRADE A325 H.S. BOLT W/HEAVY HEX NUT AND WASHER, GALV. (TYP.) TIGHTEN PER STD. SPEC. 6-03.3(33)"

H-70.20
Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

I-30.30
8" Diameter Wattle Spacing Table, lower left corner, was –"Slope:1H : 1V, Maximum Spacing:10' – 0"" is revised to read: "Slope:1H : 1V, Maximum Spacing:8' – 0"".

J-3
DELETED

J-3b
DELETED

J-3C
DELETED

J-10.21
Note 18, was – "When service cabinet is installed within right of way fence, see Standard Plan J-10.22 for details." Is revised to read; "When service cabinet is installed within right of way fence, or the meter base is mounted on the exterior of the cabinet, see Standard Plan J-10.22 for details."

J-10.22
Key Note 1, was – "Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305." Is revised to read; "Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305. When the utility requires meter base to be mounted on the side or back of the service cabinet, the meter base enclosure shall be fabricated from type 304 stainless steel."
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)."

Key Note 14, was – "Hinged dead front with ¼ turn fasteners or slide latch." Is revised to read; "Hinged dead front with ¼ turn fasteners or slide latch. ~ Dead front panel bolts shall not extend into the vertical limits of the breaker array(s)."
Key Note 15, was – "Cabinet Main Bonding Jumper. Buss shall be 4 lug tinned copper. See Cabinet Main bonding Jumper detail, Standard Plan J-3b." is revised to read; "Cabinet Main Bonding Jumper Assembly ~ Buss shall be 4 lug tinned copper ~ See Standard Plan J-10.20 for Cabinet Main Bonding Jumper Assembly details."

J-20.10
Add Note 5, "5. One accessible pedestrian signal assembly per pedestrian pushbutton post."

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)"
Add Note 6, "6. One accessible pedestrian signal assembly per pedestrian pushbutton post."

J-20.26
Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."

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

J-21.10
Sheet 1, Elevation View, Round Concrete Foundation Detail, callout – "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"
Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR.. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.
Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.
Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.
Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.
Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 1)"
Detail F, callout, "3/4" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is revised to read; "3/4" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"

J-21.15
Partial View, callout, was – LOCK NIPPLE ~ 1 ½" DIAM., is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-21.16
Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15
Ramp Meter Signal Standard, elevation, dimension 4' - 6" is revised to read; 6'-0"
(2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½" DIAM. is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-26.20
Sheet 1, NOTES, Note 5, was - "Connecting/clamping bolts AASHTO M 164 (ASTM A325)" is revised to read: "Connecting/clamping bolts ASTM F3125 GRADE A325"

Was - "NUTS AASHTO M 291 (ASTM A263) GRADE DH" is revised to read: "NUTS ASTM A563 GRADE DH"

J-28.43
KEY notes, note 1, was – "CLAMPING BOLTS, 7/8" (IN) DIAM. HEX HEAD BOLT AND NUT, TWO PLATE WASHERS, ONE HARDENED ROUND WASHER, 87 FT-LBS TORQUE (THREE CLAMPING BOLT ASSEMBLIES PER SLIP BASE) (PER ASTM A325)" is revised to read: "CLAMPING BOLTS, 7/8" (IN) DIAM. HEX HEAD BOLT AND NUT, TWO PLATE WASHERS, ONE HARDENED ROUND WASHER, 87 FT-LBS TORQUE (THREE CLAMPING BOLT ASSEMBLIES PER SLIP BASE) (PER ASTM F3125 GRADE A325)"

J-40.10
Sheet 2 of 2, Detail F, callout, "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 12" S. S. FLAT WASHER" is revised to read; "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 1/2" (IN) S. S. FLAT WASHER"

J-60.14
All references to J-16b (6x) are revised to read; J-60.11

K-80.30
In the NARROW BASE, END view, the reference to Std. Plan C-8e is revised to Std. Plan K-80.35

M-11.10
Layout, dimension (from stop bar to "X"), was – 23' is revised to read; 24'

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-30.30-01.....6/16/11
A-30.35-00.....10/12/07
A-40.00-00.....8/11/09
A-40.10-03.....12/23/14
A-40.15-00.....8/11/09
A-40.20-04.....1/18/17
A-40.50-02.....12/23/14
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-60.10-03.....12/23/14
A-60.20-03.....12/23/14
A-60.30-00.....11/8/07
A-60.40-00.....8/31/07

B-5.20-02.....1/26/17
B-5.40-02.....1/26/17
B-5.60-02.....1/26/17
B-10.20-01.....2/7/12
B-10.40-01.....1/26/17
B-30.50-02.....1/26/17
B-30.70-03.....4/26/12
B-30.80-00.....6/8/06
B-30.90-02.....1/26/17
B-35.20-00.....6/8/06
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-10.60-00.....6/8/06
B-10.70-00……1/26/17
B-15.20-01.....2/7/12
B-15.40-01.....2/7/12
B-15.60-02.....1/26/17
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-25.60-01.....1/26/17
B-30.10-02.....1/26/17
B-30.20-03.....1/26/17
B-30.30-02.....1/26/17
B-30.40-02.....1/26/17
B-35.40-00.....6/8/06
B-40.20-00.....6/1/06
B-40.40-02.....1/26/17
B-45.20-01.....7/11/17
B-45.40-01.....7/21/17
B-50.20-00.....6/1/06
B-55.20-01.....1/26/17
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-70.60-01.....1/26/17
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-90.40-01.....1/26/17
B-90.50-00.....6/8/06
B-95.20-01.....2/3/09
B-95.40-00.....6/8/06

C-1.....7/12/16
C-1a.....7/14/15
C-1b.....7/14/15
C-1c.....7/12/16
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.....7/12/16
C-2n.....7/12/16
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.....7/15/16
C-4e.....7/15/16
C-4f.....7/2/12
C-6.....7/15/16
C-6a.....10/14/09
C-6c.....7/15/16
C-6d.....7/15/16
C-6f.....7/15/16
C-7.....6/16/11
C-7a.....6/16/11
C-8.....2/10/09
C-8a.....7/25/97
C-8b.....2/29/16
C-8e.....2/21/07
C-8f.....6/30/04
C-10.....7/15/16
C-16a.....7/21/17
C-20.10-04.....7/21/17
C-20.11-00……..7/21/17
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-20.40-06.....7/21/17
C-20.41-01.....7/14/15
C-20.42-05.....7/14/15
C-20.45.01.....7/2/12
C-22.14-04.....7/15/16
C-22.16-06.....7/21/17
C-22.40-06.....7/21/17
C-22.45-03.....7/21/17
C-23.60-04.....7/21/17
C.24.10-01.....6/11/14
C-25.20-06.....7/14/15
C-25.22-05.....7/14/15
C-25.26-03.....7/14/15
C-25.80-04.....7/15/16
C-40.14-02.....7/2/12
C-40.16-02.....7/2/12
C-40.18-03.....7/21/17
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-2.48-00.....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-3.17-02……5/9/16
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-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-2.88-00.....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-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-15.20-03.....5/9/16
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-10.18-01.....7/11/17
F-10.40-03.....6/29/16
F-10.42-00.....1/23/07
F-10.62-02.....4/22/14
F-10.64-03.....4/22/14
F-30.10-03.....6/11/14
F-40.12-03.....6/29/16
F-40.14-03.....6/29/16
F-40.15-03.....6/29/16
F-40.16-03.....6/29/16
F-45.10-02.....7/15/16
F-80.10-04.....7/15/16

G-10.10-00.....9/20/07
G-20.10-02.....6/23/15
G-22.10-03.....7/10/15
G-24.10-00.....11/8/07
G-24.20-01.....2/7/12
G-24.30-01.....2/7/12
G-24.40-06.....2/29/16
G-24.50-04.....7/11/17
G-24.60-04.....6/23/15
G-25.10-04.....6/10/13
G-30.10-04.....6/23/15
G-50.10-02.....6/23/15
G-60.10-03.....6/18/15
G-60.20-02.....6/18/15
G-60.30-02.....6/18/15
G-70.10-03.....6/18/15
G-70.20-04.....7/21/17
G-70.30-04.....7/21/17
G-90.10-03……7/11/17
G-90.11-00……4/28/16
G-90.20-05……7/11/17
G-90.30-04……7/11/17
G-90.40-02……4/28/16
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-80.10-02.....7/15/16

J-10.....7/18/97
J-10.10-03……6/3/15
J-10.15-01.....6/11/14
J-10.16-00……6/3/15
J-10.17-00……6/3/15
J-10.18-00……6/3/15
J-10.20-01……6/1/16
J-10.21-00……6/3/15
J-10.22-00.....5/29/13
J-10.25-00……7/11/17
J-15.10-01.....6/11/14
J-15.15-02……7/10/15
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-26.20-00…..6/11/14
J-27.10-01…..7/21/16
J-27.15-00…..3/15/12
J-28.10-01.....5/11/11
J-28.22-00.....8/07/07
J-28.24-01.....6/3/15
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-28.45-03.....7/21/16
J-28.50-03.....7/21/16
J-28.60-02.....7/21/16
J-28.70-03.....7/21/17
J-29.10-01.....7/21/16
J-29.15-01.....7/21/16
J-40.38-01.....5/20/13
J-40.39-00……5/20/13
J-40.40-01……4/28/16
J-45.36-00……7/21/17
J-50.05-00……7/21/17
J-50.10-00…….6/3/11
J-50.11-01…….7/21/17
J-50.12-01…….7/21/17
J-50.15-01…….7/21/17
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-60.05-01…….7/21/16
J-60.11-00……..5/20/13
J-60.12-00……..5/20/13
J-60.13-00……..6/16/10

J-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-22.15-02.....7/10/15
J-22.16-03.....7/10/15
J-26.10-03…..7/21/16
J-26.15-01…..5/17/12
J-29.16-02.....7/21/16
J-30.10-00…...6/18/15
J-40.05-00……7/21/16
J-40.10-04…...4/28/16
J-40.20-03…...4/28/16
J-40.30-04……4/28/16
J-40.35-01……5/29/13
J-40.36-02……7/21/17
J-40.37-02……7/21/17
J-60.14-00……6/16/10
J-75.10-02……7/10/15
J-75.20-01……7/10/15
J-75.30-02…….7/10/15
J-75.40-02……6/1/16
J-75.41-01……6/29/16
J-75.45-02……6/1/16
J-90.10-02…….4/28/16
J-90.20-02…….4/28/16
J-90.21-01……4/28/16

K-70.20-01.....6/1/16
K-80.10-01.....6/1/16
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-20.10-03.....7/14/15
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-2.20-03.....7/10/15
M-2.21-00……7/10/15
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-11.10-02.....7/11/17
M-12.10-00……7/11/17
M-15.10-01.....2/6/07
M-17.10-02.....7/3/08
M-20.10-02.....6/3/11
M-20.20-02.....4/20/15
M-20.30-04.....2/29/16
M-20.40-03.....6/24/14
M-20.50-02.....6/3/11
M-24.20-02.....4/20/15
M-24.40-02.....4/20/15
M-24.50-00.....6/16/11
M-24.60-04.....6/24/14
M-24.65-00……7/11/17
M-24.66-00……7/11/17
M-40.10-03.....6/24/14
M-40.20-00...10/12/07
M-40.30-01.....7/11/17
M-40.40-00.....9/20/07
M-40.50-00.....9/20/07
M-40.60-00.....9/20/07
M-60.10-01.....6/3/11
M-60.20-02.....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
(This Page Intentionally Left Blank)

CONTRACT
FOR:
WASHINGTON STREET IMPROVEMENT PROJECT
FERNDALE, WASHINGTON

This Contract, made and entered into this ____ day of _____, 2017 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 “WASHINGTON STREET IMPROVEMENT 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 _____, 2017.

CITY OF FERNDALE:

By: _____
City Administrator / Mayor

STATE OF WASHINGTON)
) ss.
COUNTY OF WHATCOM)

On this _____ day of _____, 2017, 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 _____, 2017, 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 WASHINGTON STREET IMPROVEMENT 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 _____, 2017, 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 _____, 2017, 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
(This Page Intentionally Left Blank)

APPENDIX A – STATE PREVAILING WAGE RATES

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: 2/13/2018

County	Trade	Job Classification	Wage	Holiday	Overtime	Note
Whatcom	Asbestos Abatement Workers	Journey Level	$46.57	5D	1H	
Whatcom	Boilermakers	Journey Level	$44.35		1	
Whatcom	Brick Mason	Journey Level	$55.82	5A	1M	
Whatcom	Brick Mason	Pointer-Caulker-Cleaner	$55.82	5A	1M	
Whatcom	Building Service Employees	Janitor	$11.50		1	
Whatcom	Building Service Employees	Shampooer	$11.50		1	
Whatcom	Building Service Employees	Waxer	$11.50		1	
Whatcom	Building Service Employees	Window Cleaner	$11.50		1	
Whatcom	Cabinet Makers (In Shop)	Journey Level	$24.89		1	
Whatcom	Carpenters	Acoustical Worker	$57.18	5D	4C	
Whatcom	Carpenters	Bridge, Dock And Wharf Carpenters	$57.18	5D	4C	
Whatcom	Carpenters	Carpenter	$57.18	5D	4C	
Whatcom	Carpenters	Carpenters on Stationary Tools	$57.31	5D	4C	
Whatcom	Carpenters	Creosoted Material	$57.28	5D	4C	
Whatcom	Carpenters	Floor Finisher	$57.18	5D	4C	
Whatcom	Carpenters	Floor Layer	$57.18	5D	4C	
Whatcom	Carpenters	Scaffold Erector	$57.18	5D	4C	
Whatcom	Cement Masons	Journey Level	$57.21	7A	1M	
Whatcom	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	$110.54	5D	4C	
Whatcom	Divers & Tenders	Dive Supervisor/Master	$72.97	5D	4C	
Whatcom	Divers & Tenders	Diver	$110.54	5D	4C	8V
Whatcom	Divers & Tenders	Diver On Standby	$67.97	5D	4C	
Whatcom	Divers & Tenders	Diver Tender	$61.65	5D	4C	
Whatcom	Divers & Tenders	Manifold Operator	$61.65	5D	4C	
Whatcom	Divers & Tenders	Manifold Operator Mixed Gas	$66.65	5D	4C	
Whatcom	Divers & Tenders	Remote Operated Vehicle Operator/Technician	$61.65	5D	4C	
Whatcom	Divers & Tenders	Remote Operated Vehicle Tender	$57.43	5A	4C	
Whatcom	Dredge Workers	Assistant Engineer	$56.44	5D	3F	
Whatcom	Dredge Workers	Assistant Mate (Deckhand)	$56.00	5D	3F	

Whatcom	Dredge Workers	Boatmen	$56.44	5D	3F	
Whatcom	Dredge Workers	Engineer Welder	$57.51	5D	3F	
Whatcom	Dredge Workers	Leverman, Hydraulic	$58.67	5D	3F	
Whatcom	Dredge Workers	Mates	$56.44	5D	3F	
Whatcom	Dredge Workers	Oiler	$56.00	5D	3F	
Whatcom	Drywall Applicator	Journey Level	$56.78	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	$68.09	7H	1E	
Whatcom	Electricians - Inside	Construction Stock Person	$33.86	7H	1D	
Whatcom	Electricians - Inside	Journey Level	$63.61	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	$73.93	5A	4D	
Whatcom	Electricians - Powerline Construction	Certified Line Welder	$67.60	5A	4D	
Whatcom	Electricians - Powerline Construction	Groundperson	$45.49	5A	4D	
Whatcom	Electricians - Powerline Construction	Heavy Line Equipment Operator	$67.60	5A	4D	
Whatcom	Electricians - Powerline Construction	Journey Level Lineperson	$67.60	5A	4D	
Whatcom	Electricians - Powerline Construction	Line Equipment Operator	$57.02	5A	4D	
Whatcom	Electricians - Powerline Construction	Pole Sprayer	$67.60	5A	4D	
Whatcom	Electricians - Powerline Construction	Powderperson	$50.76	5A	4D	
Whatcom	Electronic Technicians	Journey Level	$25.09		1	
Whatcom	Elevator Constructors	Mechanic	$88.36	7D	4A	
Whatcom	Elevator Constructors	Mechanic In Charge	$95.41	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	$39.48	7A	3I	
Whatcom	Glaziers	Journey Level	$60.56	7L	1Y	
Whatcom	Heat & Frost Insulators And Asbestos Workers	Journeyman	$67.93	5J	4H	
Whatcom	Heating Equipment Mechanics	Journey Level	$19.85		1	
Whatcom	Hod Carriers & Mason Tenders	Journey Level	$48.02	7A	3I	
Whatcom	Industrial Power Vacuum Cleaner	Journey Level	$11.50		1	
Whatcom	Inland Boatmen	Boat Operator	$59.86	5B	1K	
Whatcom	Inland Boatmen	Cook	$56.18	5B	1K	
Whatcom	Inland Boatmen	Deckhand	$56.18	5B	1K	
Whatcom	Inland Boatmen	Deckhand Engineer	$57.26	5B	1K	
Whatcom	Inland Boatmen	Launch Operator	$58.59	5B	1K	
Whatcom	Inland Boatmen	Mate	$58.59	5B	1K	

Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$11.50		1	
Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$11.50		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	$11.50		1	
Whatcom	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$11.50		1	
Whatcom	Insulation Applicators	Journey Level	$57.18	5D	4C	
Whatcom	Ironworkers	Journeyman	$66.68	7N	1O	
Whatcom	Laborers	Air, Gas Or Electric Vibrating Screed	$46.57	7A	3I	
Whatcom	Laborers	Airtrac Drill Operator	$48.02	7A	3I	
Whatcom	Laborers	Ballast Regular Machine	$46.57	7A	3I	
Whatcom	Laborers	Batch Weighman	$39.48	7A	3I	
Whatcom	Laborers	Brick Pavers	$46.57	7A	3I	
Whatcom	Laborers	Brush Cutter	$46.57	7A	3I	
Whatcom	Laborers	Brush Hog Feeder	$46.57	7A	3I	
Whatcom	Laborers	Burner	$46.57	7A	3I	
Whatcom	Laborers	Caisson Worker	$48.02	7A	3I	
Whatcom	Laborers	Carpenter Tender	$46.57	7A	3I	
Whatcom	Laborers	Caulker	$46.57	7A	3I	
Whatcom	Laborers	Cement Dumper-paving	$47.44	7A	3I	
Whatcom	Laborers	Cement Finisher Tender	$46.57	7A	3I	
Whatcom	Laborers	Change House Or Dry Shack	$46.57	7A	3I	
Whatcom	Laborers	Chipping Gun (under 30 Lbs.)	$46.57	7A	3I	
Whatcom	Laborers	Chipping Gun(30 Lbs. And Over)	$47.44	7A	3I	
Whatcom	Laborers	Choker Setter	$46.57	7A	3I	
Whatcom	Laborers	Chuck Tender	$46.57	7A	3I	
Whatcom	Laborers	Clary Power Spreader	$47.44	7A	3I	
Whatcom	Laborers	Clean-up Laborer	$46.57	7A	3I	
Whatcom	Laborers	Concrete Dumper/chute Operator	$47.44	7A	3I	
Whatcom	Laborers	Concrete Form Stripper	$46.57	7A	3I	
Whatcom	Laborers	Concrete Placement Crew	$47.44	7A	3I	
Whatcom	Laborers	Concrete Saw Operator/core Driller	$47.44	7A	3I	
Whatcom	Laborers	Crusher Feeder	$39.48	7A	3I	
Whatcom	Laborers	Curing Laborer	$46.57	7A	3I	
Whatcom	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	$46.57	7A	3I	
Whatcom	Laborers	Ditch Digger	$46.57	7A	3I	
Whatcom	Laborers	Diver	$48.02	7A	3I	

Whatcom	Laborers	Drill Operator (hydraulic,diamond)	$47.44	7A	3I	
Whatcom	Laborers	Dry Stack Walls	$46.57	7A	3I	
Whatcom	Laborers	Dump Person	$46.57	7A	3I	
Whatcom	Laborers	Epoxy Technician	$46.57	7A	3I	
Whatcom	Laborers	Erosion Control Worker	$46.57	7A	3I	
Whatcom	Laborers	Faller & Bucker Chain Saw	$47.44	7A	3I	
Whatcom	Laborers	Fine Graders	$46.57	7A	3I	
Whatcom	Laborers	Firewatch	$39.48	7A	3I	
Whatcom	Laborers	Form Setter	$46.57	7A	3I	
Whatcom	Laborers	Gabian Basket Builders	$46.57	7A	3I	
Whatcom	Laborers	General Laborer	$46.57	7A	3I	
Whatcom	Laborers	Grade Checker & Transit Person	$48.02	7A	3I	
Whatcom	Laborers	Grinders	$46.57	7A	3I	
Whatcom	Laborers	Grout Machine Tender	$46.57	7A	3I	
Whatcom	Laborers	Groutmen (pressure)including Post Tension Beams	$47.44	7A	3I	
Whatcom	Laborers	Guardrail Erector	$46.57	7A	3I	
Whatcom	Laborers	Hazardous Waste Worker (level A)	$48.02	7A	3I	
Whatcom	Laborers	Hazardous Waste Worker (level B)	$47.44	7A	3I	
Whatcom	Laborers	Hazardous Waste Worker (level C)	$46.57	7A	3I	
Whatcom	Laborers	High Scaler	$48.02	7A	3I	
Whatcom	Laborers	Jackhammer	$47.44	7A	3I	
Whatcom	Laborers	Laserbeam Operator	$47.44	7A	3I	
Whatcom	Laborers	Maintenance Person	$46.57	7A	3I	
Whatcom	Laborers	Manhole Builder-mudman	$47.44	7A	3I	
Whatcom	Laborers	Material Yard Person	$46.57	7A	3I	
Whatcom	Laborers	Motorman-dinky Locomotive	$47.44	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	$47.44	7A	3I	
Whatcom	Laborers	Pavement Breaker	$47.44	7A	3I	
Whatcom	Laborers	Pilot Car	$39.48	7A	3I	
Whatcom	Laborers	Pipe Layer Lead	$48.02	7A	3I	
Whatcom	Laborers	Pipe Layer/tailor	$47.44	7A	3I	
Whatcom	Laborers	Pipe Pot Tender	$47.44	7A	3I	
Whatcom	Laborers	Pipe Reliner	$47.44	7A	3I	
Whatcom	Laborers	Pipe Wrapper	$47.44	7A	3I	
Whatcom	Laborers	Pot Tender	$46.57	7A	3I	
Whatcom	Laborers	Powderman	$48.02	7A	3I	
Whatcom	Laborers	Powderman's Helper	$46.57	7A	3I	
Whatcom	Laborers	Power Jacks	$47.44	7A	3I	
Whatcom	Laborers	Railroad Spike Puller - Power	$47.44	7A	3I	

Whatcom	Laborers	Raker - Asphalt	$48.02	7A	3I	
Whatcom	Laborers	Re-timberman	$48.02	7A	3I	
Whatcom	Laborers	Remote Equipment Operator	$47.44	7A	3I	
Whatcom	Laborers	Rigger/signal Person	$47.44	7A	3I	
Whatcom	Laborers	Rip Rap Person	$46.57	7A	3I	
Whatcom	Laborers	Rivet Buster	$47.44	7A	3I	
Whatcom	Laborers	Rodder	$47.44	7A	3I	
Whatcom	Laborers	Scaffold Erector	$46.57	7A	3I	
Whatcom	Laborers	Scale Person	$46.57	7A	3I	
Whatcom	Laborers	Sloper (over 20")	$47.44	7A	3I	
Whatcom	Laborers	Sloper Sprayer	$46.57	7A	3I	
Whatcom	Laborers	Spreader (concrete)	$47.44	7A	3I	
Whatcom	Laborers	Stake Hopper	$46.57	7A	3I	
Whatcom	Laborers	Stock Piler	$46.57	7A	3I	
Whatcom	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$47.44	7A	3I	
Whatcom	Laborers	Tamper (multiple & Self-propelled)	$47.44	7A	3I	
Whatcom	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	$47.44	7A	3I	
Whatcom	Laborers	Toolroom Person (at Jobsite)	$46.57	7A	3I	
Whatcom	Laborers	Topper	$46.57	7A	3I	
Whatcom	Laborers	Track Laborer	$46.57	7A	3I	
Whatcom	Laborers	Track Liner (power)	$47.44	7A	3I	
Whatcom	Laborers	Traffic Control Laborer	$42.22	7A	3I	8R
Whatcom	Laborers	Traffic Control Supervisor	$42.22	7A	3I	8R
Whatcom	Laborers	Truck Spotter	$46.57	7A	3I	
Whatcom	Laborers	Tugger Operator	$47.44	7A	3I	
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$92.60	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$97.63	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$101.31	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$107.01	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$109.13	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$114.23	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$116.13	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$118.13	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$120.13	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Guage and Lock Tender	$48.12	7A	3I	8Q
Whatcom	Laborers	Tunnel Work-Miner	$48.12	7A	3I	8Q
Whatcom	Laborers	Vibrator	$47.44	7A	3I	

Whatcom	Laborers	Vinyl Seamer	$46.57	7A	3I	
Whatcom	Laborers	Watchman	$35.88	7A	3I	
Whatcom	Laborers	Welder	$47.44	7A	3I	
Whatcom	Laborers	Well Point Laborer	$47.44	7A	3I	
Whatcom	Laborers	Window Washer/cleaner	$35.88	7A	3I	
Whatcom	Laborers - Underground Sewer & Water	General Laborer & Topman	$46.57	7A	3I	
Whatcom	Laborers - Underground Sewer & Water	Pipe Layer	$47.44	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	$56.78	5D	1H	
Whatcom	Marble Setters	Journey Level	$55.82	5A	1M	
Whatcom	Metal Fabrication (In Shop)	Fitter	$13.81		1	
Whatcom	Metal Fabrication (In Shop)	Laborer	$11.50		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	$11.50		1	
Whatcom	Painters	Journey Level	$41.60	6Z	2B	
Whatcom	Pile Driver	Crew Tender	$52.37	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$71.35	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	$76.35	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$80.35	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$85.35	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$87.85	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$92.85	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	$94.85	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$96.85	5D	4C	
Whatcom	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$98.85	5D	4C	
Whatcom	Pile Driver	Journey Level	$57.43	5D	4C	
Whatcom	Plasterers	Journey Level	$54.89	7Q	1R	
Whatcom	Playground & Park Equipment Installers	Journey Level	$11.50		1	
Whatcom	Plumbers & Pipefitters	Journey Level	$67.47	5A	1G	
Whatcom	Power Equipment Operators	Asphalt Plant Operators	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Assistant Engineer	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Barrier Machine (zipper)	$59.96	7A	3C	8P

Whatcom	Power Equipment Operators	Batch Plant Operator, Concrete	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Bobcat	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Brokk - Remote Demolition Equipment	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Brooms	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Bump Cutter	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Cableways	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Chipper	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Compressor	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Finish Machine -laser Screed	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Conveyors	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes Friction: 200 tons and over	$62.33	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250’ of boom including jib with attachments	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 300 tons and over or 300’ of boom including jib with attachments	$62.33	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: Friction cranes through 199 tons	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Crusher	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Deck Engineer/deck Winches (power)	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Derricks, On Building Work	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Dozers D-9 & Under	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Drilling Machine	$61.10	7A	3C	8P

Whatcom	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Gradechecker/stakeman	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Guardrail Punch	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Horizontal/directional Drill Locator	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Horizontal/directional Drill Operator	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Hydralifts/boom Trucks Over 10 Tons	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Loaders, Overhead Under 6 Yards	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Loaders, Plant Feed	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Loaders: Elevating Type Belt	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Locomotives, All	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Material Transfer Device	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Mechanics, All (leadmen - $0.50 Per Hour Over Mechanic)	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators	Motor Patrol Graders	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	$60.49	7A	3C	8P

Whatcom	Power Equipment Operators	Pavement Breaker	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Pile Driver (other Than Crane Mount)	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Posthole Digger, Mechanical	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Power Plant	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Pumps - Water	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Rigger And Bellman	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Rollagon	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Roller, Other Than Plant Mix	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Roto-mill, Roto-grinder	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Saws - Concrete	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Scrapers - Concrete & Carry All	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Service Engineers - Equipment	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Shotcrete/gunite Equipment	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators	Slipform Pavers	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Spreader, Topsider & Screedman	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Subgrader Trimmer	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Bucket Elevators	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Crane: over 175’ through 250’ in height, base to boom	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators	Tower Cranes: over 250’ in height from base to boom	$62.33	7A	3C	8P

Whatcom	Power Equipment Operators	Transporters, All Track Or Truck Type	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Trenching Machines	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators	Truck Mount Portable Conveyor	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators	Welder	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators	Wheel Tractors, Farmall Type	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators	Yo Yo Pay Dozer	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Bobcat	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Brooms	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cableways	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Chipper	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Compressor	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Conveyors	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	$62.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	$61.10	7A	3C	8P

Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	$62.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Crusher	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Guardrail Punch	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-	Hydralifts/boom Trucks Over 10	$59.49	7A	3C	8P

	Underground Sewer & Water	Tons				
Whatcom	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Mechanics, All (leadmen - $0.50 Per Hour Over Mechanic)	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Power Plant	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving	$60.49	7A	3C	8P

		Equipment				
Whatcom	Power Equipment Operators-Underground Sewer & Water	Rigger And Bellman	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Rollagon	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	$61.10	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175’ through 250’ in height, base to boom	$61.72	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250’ in height from base to boom	$62.33	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-	Trenching Machines	$59.49	7A	3C	8P

	Underground Sewer & Water					
Whatcom	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	$59.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$59.96	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Welder	$60.49	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$56.90	7A	3C	8P
Whatcom	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$59.96	7A	3C	8P
Whatcom	Power Line Clearance Tree Trimmers	Journey Level In Charge	$48.54	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Spray Person	$46.03	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$48.54	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Tree Trimmer	$43.32	5A	4A	
Whatcom	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$32.68	5A	4A	
Whatcom	Refrigeration & Air Conditioning Mechanics	Journey Level	$23.95		1	
Whatcom	Residential Brick Mason	Journey Level	$55.82	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	$55.82	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	$39.88	5A	1G	
Whatcom	Residential Sheet Metal Workers	Journey Level (Field or Shop)	$37.16	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	$55.82	5A	1M	
Whatcom	Residential Terrazzo Workers	Journey Level	$11.50		1	
Whatcom	Residential Terrazzo/Tile Finishers	Journey Level	$14.00		1	
Whatcom	Residential Tile Setters	Journey Level	$11.50		1	
Whatcom	Roofers	Journey Level	$25.27		1	

Whatcom	Sheet Metal Workers	Journey Level (Field or Shop)	$62.96	7F	1E	
Whatcom	Shipbuilding & Ship Repair	Boilermaker	$43.31	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	$67.93	5J	4H	
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	$47.61	5A	3D	
Whatcom	Solar Controls For Windows	Journey Level	$11.50		1	
Whatcom	Sprinkler Fitters (Fire Protection)	Journey Level	$56.81	7J	1R	
Whatcom	Stage Rigging Mechanics (Non Structural)	Journey Level	$13.23		1	
Whatcom	Stone Masons	Journey Level	$55.82	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	$45.07	7E	1E	
Whatcom	Telephone Line Construction - Outside	Cable Splicer	$38.84	5A	2B	
Whatcom	Telephone Line Construction - Outside	Hole Digger/Ground Person	$21.45	5A	2B	
Whatcom	Telephone Line Construction - Outside	Installer (Repairer)	$37.21	5A	2B	
Whatcom	Telephone Line Construction - Outside	Special Aparatus Installer I	$38.84	5A	2B	
Whatcom	Telephone Line Construction - Outside	Special Apparatus Installer II	$38.03	5A	2B	
Whatcom	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	$38.84	5A	2B	
Whatcom	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$36.09	5A	2B	
Whatcom	Telephone Line Construction - Outside	Telephone Lineperson	$36.09	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television Groundperson	$20.33	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television Lineperson/Installer	$27.21	5A	2B	
Whatcom	Telephone Line Construction - Outside	Television System Technician	$32.55	5A	2B	
Whatcom	Telephone Line Construction -	Television Technician	$29.18	5A	2B	

	Outside					
Whatcom	Telephone Line Construction - Outside	Tree Trimmer	$36.09	5A	2B	
Whatcom	Terrazzo Workers	Journey Level	$51.36	5A	1M	
Whatcom	Tile Setters	Journey Level	$51.36	5A	1M	
Whatcom	Tile, Marble & Terrazzo Finishers	Finisher	$42.19	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	$11.50		1	
Whatcom	Well Drillers & Irrigation Pump Installers	Well Driller	$18.02		1	

****

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.

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.

Overtime Codes Continued

1. 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.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   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.

   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.

Overtime Codes Continued

3. 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.

Overtime Codes Continued

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.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

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).

Holiday Codes Continued

5. 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).

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).

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, the Friday 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).

Holiday Codes Continued

6. 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).

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.

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.

Holiday Codes Continued

7. 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.

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.

Holiday Codes Continued

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. 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.

Note Codes Continued

8. U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

APPENDIX B – GEOTECHNICAL DATA REPORT

associated earth sciences incorporated

February 2, 2018
Project No. 160465E001

Reichhardt & Ebe Engineering
423 Front Street, P.O. Box 978
Lynden, Washington 98264

Attention: Mr. Luis Ponce

Subject: Subsurface Exploration and Stormwater Infiltration Feasibility
Washington Street, Main Street to Vista Drive
Ferndale, Washington

Dear Mr. Ponce:

This report summarizes our subsurface explorations and stormwater infiltration feasibility for the Washington Street improvement project. The site location is shown on the "Vicinity Map," Figure 1. Existing site features and the approximate locations of the subsurface explorations referenced in this study are presented on the "Site and Exploration Plan," Figure 2. Logs of the exploration borings are also attached in the Appendix. The purpose of our work was to provide subsurface soil and shallow groundwater data to be utilized in the preliminary design of the improvements to Washington Street and to determine the feasibility of the infiltration of stormwater into the shallow subsurface soils. Our services for this project have been completed in accordance with local standards of practice in the field of geotechnical engineering at the time they were completed. No other warranty, express or implied, is made. We were provided with an aerial image showing potential infiltration locations to explore along Washington Street and Main Street, provided by the client and dated December 14, 2016, for preparation of our report.

SITE AND PROJECT DESCRIPTION

We understand that the project will widen and improve Washington Street from Main Street to Vista Drive to include new 5-foot-wide sidewalks, landscaping strip, curbs, gutters, shoulders for

bicycle use, improved bus pullouts, and 11-foot-wide travel lanes for vehicles. The subject alignment has a total length of approximately 1,800 feet. As part of the project, the street lighting will be upgraded to include new LED fixtures, and the City of Ferndale's existing and aging utilities, including water, sewer, and stormwater will be replaced or improved. We understand that the project is considering roadside infiltration facilities to treat and manage stormwater runoff.

SUBSURFACE EXPLORATION

Subsurface conditions at the site were observed during completion of eight shallow vactor-truck-assisted hand-auger borings completed on March 7, 2017. The borings were completed by an experienced engineer from our firm, and interpretive logs of the subsurface conditions encountered at each exploration location are included in the Appendix. Descriptions contained in the exploration logs are based on visual classification of the soils encountered, difficulty of excavation, and previous experience with similar soils. Representative samples of the materials encountered in the hand-auger borings were collected, placed in sealed plastic bags, and returned to our office for further visual evaluation. The approximate hand-auger boring locations are shown relative to existing site features on the "Site and Exploration Plan," Figure 2, attached with this report.

The conclusions and recommendations presented in this report are based on the explorations completed for this study. The number, locations, and depths of our explorations were completed within site and budget constraints, and as directed by the Civil Engineer. The locations of each exploration correlated to an area of proposed infiltration. Because of the nature of exploratory work below ground, extrapolation of subsurface conditions between field explorations is necessary. It should be noted that differing subsurface conditions may sometimes be present due to the random nature of deposition and the alteration of topography by past grading and/or filling. The nature and extent of any variations between the field explorations may not become fully evident until construction. If variations are observed at that time, it may be necessary to re-evaluate specific recommendations in this report and make appropriate changes.

SUBSURFACE CONDITIONS

Stratigraphy

Grass and Topsoil

Explorations completed in unpaved areas encountered approximately 6 inches of topsoil and grass. Excavated topsoil is not suitable for structural support or use as an infiltration receptor.

Existing Fill

Existing fill was encountered in explorations VB-3, VB-5, VB-7, and VB-8 completed for this study. The fill was encountered underlying the grass and topsoil and ranged in thickness from 3 to 4 feet. In VB-3 and VB-8, the fill generally consisted of silty fine to coarse sand with some gravel and was underlain by the Sumas Stade outwash sand or Bellingham Drift. In VB-5, the fill consisted of soft to medium stiff, fine sandy silt with trace gravel. In VB-8, the fill consisted of loose, organic rich topsoil. Existing fill is not suitable for use as an infiltration receptor due to its high variability and high fine-grained content.

Sumas Stade Outwash

Underlying the topsoil in VB-1, VB-2, and VB-4, and underlying fill in VB-3 and VB-5, our explorations encountered sediments generally consisting of medium dense sandy gravel, fine to medium sand with varying silt content and trace gravel, and silty fine sand. These sediments were interpreted as Sumas Stade recessional outwash. The recessional outwash sediments were deposited by meltwater streams flowing from the receding glacier and therefore have not been glacially consolidated. Where permeable and unsaturated, Sumas outwash is generally suitable for stormwater infiltration.

Bellingham Drift

Underlying the topsoil in VB-6, and underlying fill in VB-4, VB-7, and VB-8, our explorations generally encountered soft to stiff, fine sandy silt with trace gravel. We interpreted these sediments as Bellingham drift. These sediments were melted out of floating ice during the Everson Interstade and deposited on the sea floor. These sediments are not suitable as an infiltration receptor due to their high fine-grained content.

Published Geologic Map

We reviewed a published geologic map of the project, *Geologic Map of Western Whatcom County, Washington: U.S. Geological Survey, 7.5' Quadrangle, Skagit County, Washington,* by D.J. Easterbrook (1976), Scale 1:62,500. The referenced map indicates that the site vicinity is characterized by Sumas Stade outwash sand and gravel. Our on-site explorations encountered both Bellingham drift and Sumas outwash. We recommend that project planning follows the recommendations provided in this report and not on the referenced published map.

Hydrology

Groundwater seepage was encountered in exploration VB-1, VB-3, VB-4, VB-5, and VB-8 and ranged in depth from 1.5 feet to 5 feet below the existing surface. The shallow, unconfined groundwater encountered in explorations VB-1, VB-3, VB-4, and VB-5 is part of a likely thin,

shallow water table contained within the Sumas Stade outwash deposits, perched on underlying Bellingham drift. In VB-8, the groundwater seepage is likely a localized perched groundwater table. Perched groundwater occurs when rain or surface water infiltrates through upper, looser, and more permeable soils, such as the existing fill soils, and becomes trapped on top of or in the upper portions of the less-permeable soils, such as the Bellingham drift sediments. Groundwater conditions should be expected to vary seasonally and in response to changes in precipitation, on- and off-site land usage, and other factors.

Laboratory Testing

As a part of our investigation, we completed three laboratory grain-size analyses. Copies of the laboratory analyses reports are included in the Appendix.

CONCLUSIONS AND RECOMMENDATIONS

As directed, we assessed the feasibility of shallow infiltration based on the requirements of the Department of Ecology (Ecology) 2014 *Stormwater Management Manual for Western Washington* (SWMMWW), which has been adopted by the City of Ferndale. Specifically, we followed the Site Suitability Criteria (SSC) presented in Section 3.3.7 of the SWMMWW to assess the potential infiltration locations, as determined by the project Civil Engineer; and the data collected from our subsurface explorations. Key factors affecting infiltration feasibility and long-term performance provided in SSC-5 include a minimum vertical separation from groundwater or an impermeable layer of 3 feet. For the proposed infiltration locations provided on the referenced figure, our explorations generally encountered Sumas outwash consisting of very silty sands or sandy gravel, existing fill, or Bellingham Drift silts. Of these sediments, the fill and Bellingham drift are not suitable for infiltration due to the variability of the fill and the high fine-grained content of the drift sediments. The Sumas outwash is a potential suitable receptor for infiltrated stormwater where it was encountered as sandy gravel and unsaturated for a reasonable thickness (VB-1 and VB-2). However, it was later determined by the project Civil Engineer that the locations where the Sumas outwash was encountered as suitable for infiltration were not desirable for stormwater design. Where the Sumas outwash was encountered within the more desired infiltration locations, our explorations encountered groundwater within the upper 1 foot of the outwash sediments.

Therefore, infiltration of stormwater into native sediments at the desired infiltration locations (VB-3 through VB-8) is considered not feasible because the minimum vertical setback requirement of 3 feet to groundwater or an impermeable layer (Bellingham Drift Silts) provided in SSC-5, cannot be met. It is possible that the separation requirements provided in SSC-5 may be met in the locations of VB-1 and VB-2, and infiltration into the Sumas outwash at these may be feasible; however, it is our understanding that these locations are not desirable for infiltration facilities.

CLOSURE

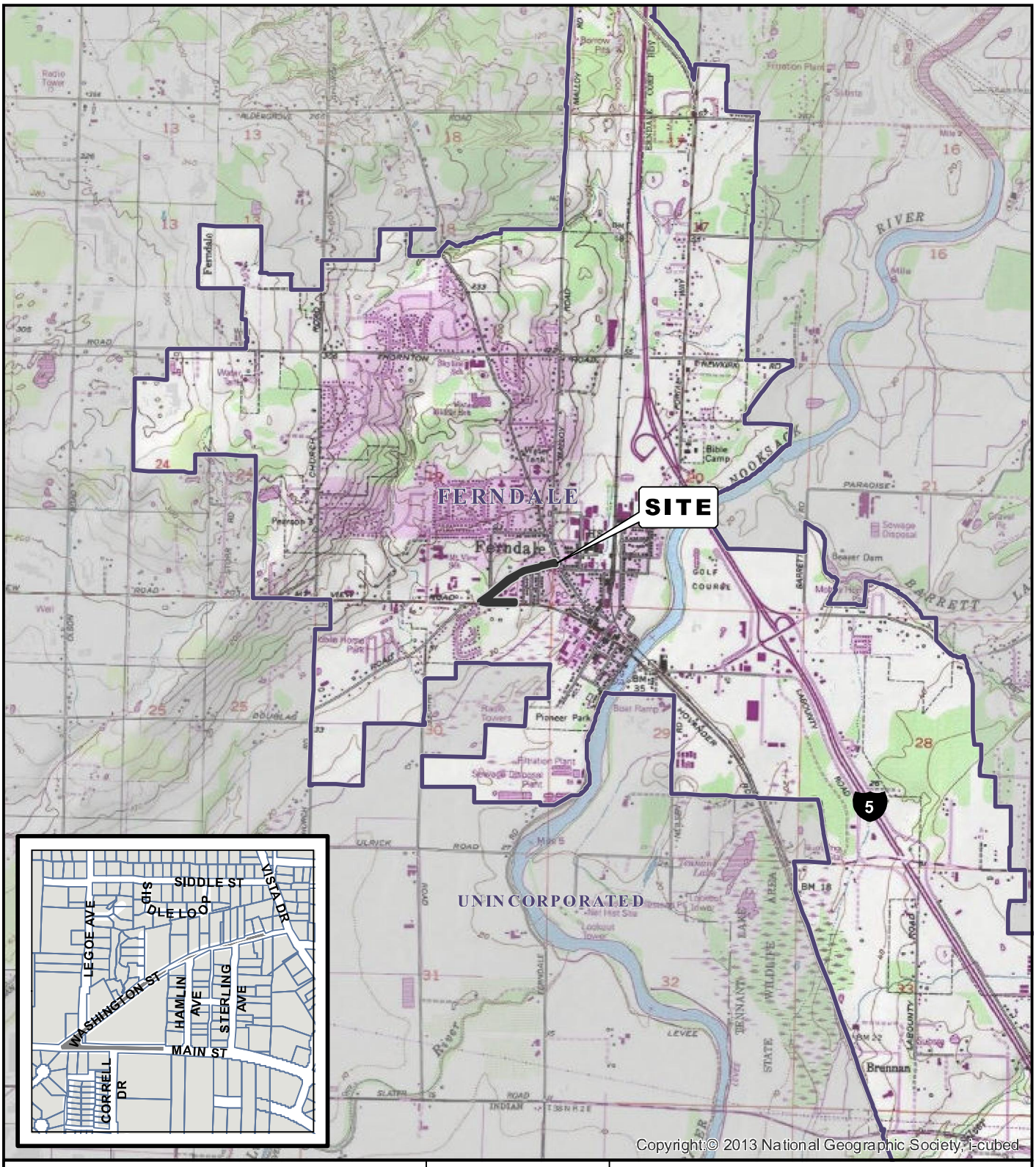
We appreciate the opportunity to be of service on this project. If you have any questions, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Anthony W. Romanick, P.E.
Project Engineer

Matthew A. Miller, P.E.
Principal Engineer

Attachments: Figure 1: Vicinity Map
Figure 2: Site and Exploration Plan
Appendix: Exploration Logs
Laboratory Test Results



DATA SOURCES / REFERENCES:
USGS: 24K SERIES TOPOGRPAHIC MAPS
WHATCOM CO: PARCELS, WATER, 2015
CITY OF BELLINGHAM: STREETS, 2016
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

associated earth sciences incorporated

VICINITY MAP

WASHINGTON ST, MAIN ST TO VISTA DR
FERNDALE, WASHINGTON

PROJ NO.	DATE:	FIGURE:
160465E001	3/17	1

Document Path: G:\GIS_Projects\aaYear2016\160465 WA Main Vista\mxd\160465 Fig1 VM_WAMainVista.mxd

Document Path: G:\GIS_Projects\aaYear2016\160465 WA Main Vista\mxd\160465SM_WAMainVista_11x17.mxd

LEGEND:

- VACUUM ASSISTED BORING
- PARCEL

DATA SOURCES / REFERENCES:
WHATCOM CO: PARCELS 10/15
CITY OF BELLINGHAML: ROADS
BING AERIAL 2010-2011

LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 75 150
FEET

BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

associated earth sciences incorporated

SITE AND EXPLORATION PLAN

WASHINGTON ST, MAIN ST TO VISTA DR
FERNDALE, WASHINGTON

PROJ NO.	DATE:	FIGURE:
160465E001	3/17	2

APPENDIX

Coarse-Grained Soils - More than 50% [1] Retained on No. 200 Sieve	Gravels - More than 50% [1] of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines [5]	GW	Well-graded gravel and gravel with sand, little to no fines
			GP	Poorly-graded gravel and gravel with sand, little to no fines
		≥12% Fines [5]	GM	Silty gravel and silty gravel with sand
			GC	Clayey gravel and clayey gravel with sand
	Sands - 50% [1] or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines [5]	SW	Well-graded sand and sand with gravel, little to no fines
			SP	Poorly-graded sand and sand with gravel, little to no fines
		≥12% Fines [5]	SM	Silty sand and silty sand with gravel
			SC	Clayey sand and clayey sand with gravel
Fine-Grained Soils - 50% [1] or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50		ML	Silt, sandy silt, gravelly silt, silt with sand or gravel
			CL	Clay of low to medium plasticity; silty, sandy, or gravelly clay, lean clay
			OL	Organic clay or silt of low plasticity
	Silts and Clays Liquid Limit 50 or More		MH	Elastic silt, clayey silt, silt with micaceous or diatomaceous fine sand or silt
			CH	Clay of high plasticity, sandy or gravelly clay, fat clay with sand or gravel
			OH	Organic clay or silt of medium to high plasticity
Highly Organic Soils			PT	Peat, muck and other highly organic soils

Terms Describing Relative Density and Consistency

	Density	SPT [2] blows/foot
Coarse-Grained Soils	Very Loose	0 to 4
	Loose	4 to 10
	Medium Dense	10 to 30
	Dense	30 to 50
	Very Dense	>50
	Consistency	**SPT [2] blows/foot**
Fine-Grained Soils	Very Soft	0 to 2
	Soft	2 to 4
	Medium Stiff	4 to 8
	Stiff	8 to 15
	Very Stiff	15 to 30
	Hard	>30

Test Symbols

G = Grain Size
M = Moisture Content
A = Atterberg Limits
C = Chemical
DD = Dry Density
K = Permeability

Component Definitions

Descriptive Term	Size Range and Sieve Number
Boulders	Larger than 12"
Cobbles	3" to 12"
Gravel	3" to No. 4 (4.75 mm)
Coarse Gravel	3" to 3/4"
Fine Gravel	3/4" to No. 4 (4.75 mm)
Sand	No. 4 (4.75 mm) to No. 200 (0.075 mm)
Coarse Sand	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	Smaller than No. 200 (0.075 mm)

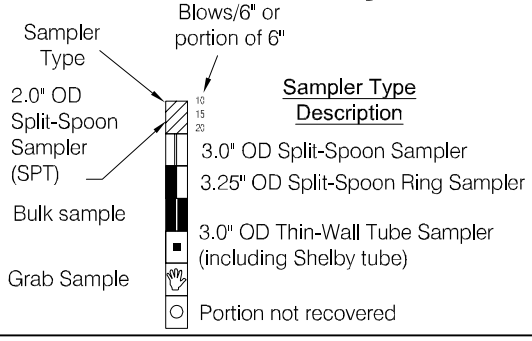
[3] Estimated Percentage

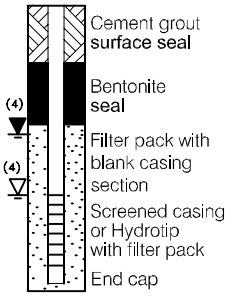
Component	Percentage by Weight
Trace	<5
Some	5 to <12
Modifier (silty, sandy, gravelly)	12 to <30
Very *modifier* (silty, sandy, gravelly)	30 to <50

Moisture Content

Dry - Absence of moisture, dusty, dry to the touch
Slightly Moist - Perceptible moisture
Moist - Damp but no visible water
Very Moist - Water visible but not free draining
Wet - Visible free water, usually from below water table

Symbols





(1) Percentage by dry weight
(2) (SPT) Standard Penetration Test (ASTM D-1586)
(3) In General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)
(4) Depth of ground water
▼ ATD = At time of drilling
▽ Static water level (date)
(5) Combined USCS symbols used for fines between 5% and 12%

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-1	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot 10 20 30 40	Other Tests
				Grass / Topsoil					
				Brown, rootlets.					
				Sumas Stade Outwash					
		S-1		Medium dense, moist, grayish brown, very sandy, GRAVEL, some silt (GP-GM). T-probe 1 inch					
		S-2		Medium dense, wet, grayish brown, fine to coarse sandy GRAVEL, some silt, trace cobbles up to ~4 inch diameter (GP-GM). T-probe 2 inches		▽			
5				Bottom of exploration boring at 5 feet					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

▽ Water Level ()

▽ Water Level at time of drilling (ATD)

Logged by: AWR

Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-2	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Grass / Topsoil					
				Brown, trace rootlets.					
				Sumas Stade Outwash					
		S-1		Medium dense, moist, grayish brown, fine to medium sandy GRAVEL, some silt, trace cobbles up to ~4 inches diameter (GP-GM).					
5		S-2		Medium dense, very moist, grayish brown, fine to medium SAND, some silt, trace coarse sand, some gravel; mottled (SP-SM). T-probe 18 inches					
				T-probe 6 inches at 5.5 feet					
				Bottom of exploration boring at 5.5 feet					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

- Water Level ()
- Water Level at time of drilling (ATD)

Logged by: AWR

Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-3	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot 10 20 30 40	Other Tests
				Grass / Topsoil					
				Brown, trace rootlets.					
				Fill					
		S-1		Dense, moist, dark brown, silty, fine to coarse SAND, some gravel, trace rootlets (SM). T-probe 1 inch					
				As above.					
				Piece of duct line pipe.					
				Sumas Stade Outwash		▽			
		S-2		Medium dense, wet, brown, silty, fine to medium SAND, trace coarse sand, trace gravel (SM). T-probe 4 inches					
				Bottom of exploration boring at 4.5 feet					
5									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample
- M - Moisture
- ▽ Water Level ()
- ▽ Water Level at time of drilling (ATD)

Logged by: AWR
Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-4	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Grass / Topsoil					
				Brown, rootlets.					
				Sumas Stade Outwash					
		S-1		Medium dense, moist, dark grayish brown, very silty, fine SAND, trace to some gravel, trace rootlets (SM). T-probe 2 inches					
				Light seepage at ~1.5 feet.		▽			
				As above.					
				Bellingham Drift					
		S-2		Medium stiff, wet, gray, SILT, trace sand, trace organics; parts of sample appear mottled (ML).					
5				Bottom of exploration boring at 5 feet					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

▽ Water Level ()

▽ Water Level at time of drilling (ATD)

Logged by: AWR

Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-5	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Grass / Topsoil					
				Grayish brown, trace rootlets.					
				Fill					
		S-1		Soft to medium stiff, moist, dark brown, fine sandy SILT, trace gravel, trace organics, trace cobbles up to 4 inch diameter (ML). T-probe 24 inches					
		S-2		**Sumas Stade Outwash**					
				Medium dense, wet, grayish brown, fine to medium SAND, trace coarse sand, some silt (SP-SM).					
5						▽			
				Bottom of exploration boring at 5 feet					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

▽ Water Level ()

▽ Water Level at time of drilling (ATD)

Logged by: AWR

Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-6	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Grass / Topsoil					
				Brown, trace rootlets.					
				Bellingham Drift					
		S-1		Medium stiff, moist, light brown, fine sandy SILT, trace gravel, trace organics; mottled (ML).					
		S-2		Medium stiff to stiff, moist, light brown, fine sandy SILT, trace gravel, trace organics; mottled (ML). T-probe <1 inch					
				Bottom of exploration boring at 3 feet Refusal at 3 feet. No seepage.					
5									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

- Water Level ()
- Water Level at time of drilling (ATD)

Logged by: AWR

Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-7	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Grass / Topsoil					
				Dark brown, organic-rich, trace rootlets.					
				Fill					
		S-1		Very moist, dark brown, silty, fine to medium SAND, organic-rich TOPSOIL. T-probe 24 inches					
				As above.					
				Bellingham Drift					
		S-2		Medium stiff to stiff, moist, light brown (some dark brown), fine sandy SILT, trace gravel, trace organics; mottled (ML).					
		S-3		Medium stiff to stiff, moist, grayish brown, fine sandy SILT, trace gravel, trace organics; mottled (ML).					
5				Bottom of exploration boring at 5 feet No seepage.					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

- Water Level ()
- Water Level at time of drilling (ATD)

Logged by: AWR

Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

associated earth sciences incorporated

Exploration Log

Project Number	Exploration Number	Sheet
160465E001	VB-8	1 of 1

Project Name	Washington Street	Ground Surface Elevation (ft)	
Location	Ferndale, WA	Datum	N/A
Driller/Equipment	APS / Vactor Truck / Air Knife / Vacuum Assisted Hand Auger	Date Start/Finish	3/7/17,3/7/17
Hammer Weight/Drop	N/A	Hole Diameter (in)	~6 inches

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Grass / Topsoil					
				Brown.					
				Fill ?					
		S-1		Medium dense, moist, tan, silty, fine to medium SAND, trace gravel, trace organics (SM). T-probe 1 inch					
				Bellingham Drift		▽			
		S-2		Medium stiff to stiff, wet, grayish brown, fine sandy SILT, trace gravel, trace rootlets (ML).					
				Bottom of exploration boring at 4 feet					
5									

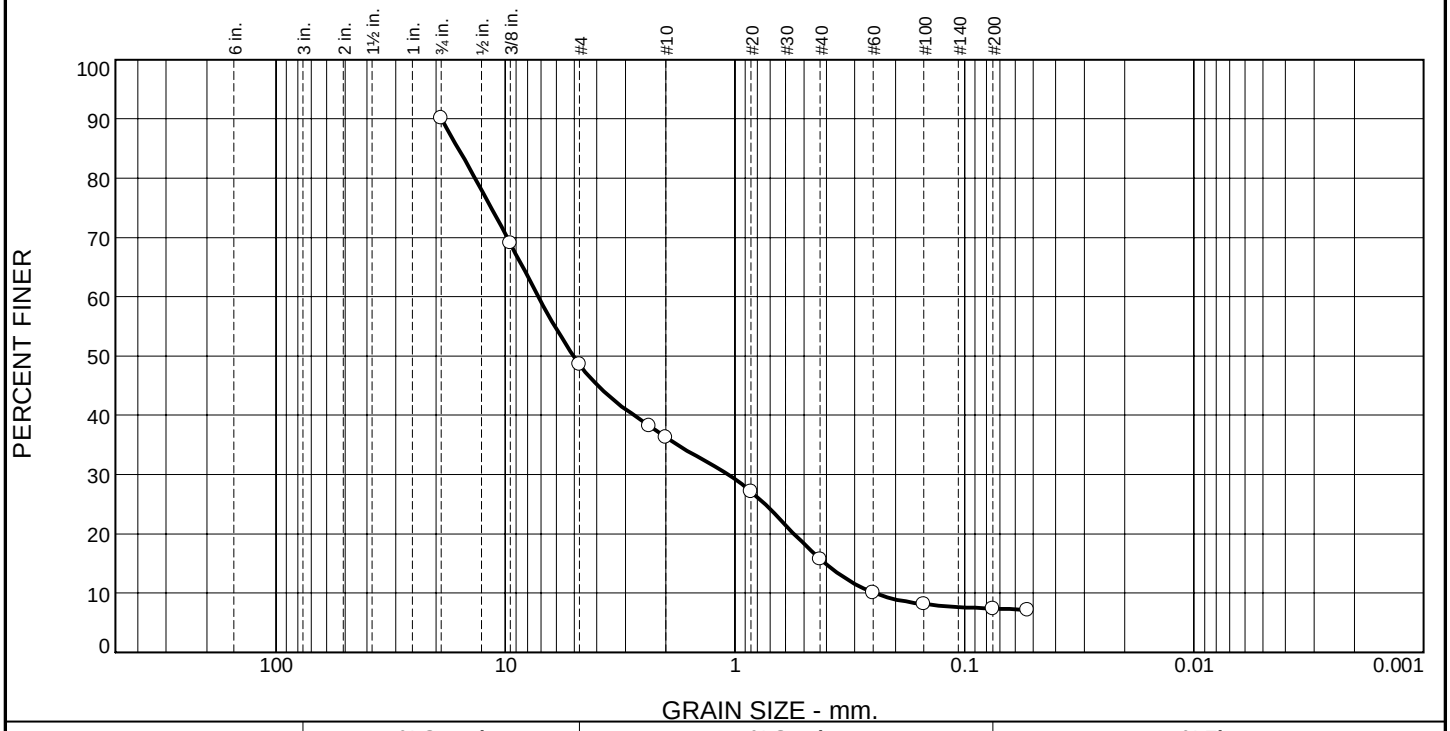
Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample
- M - Moisture
- ▽ Water Level ()
- ▽ Water Level at time of drilling (ATD)

Logged by: AWR
Approved by: JHS

AESIBOR 160465.GPJ November 30, 2017

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		41.5	12.4	20.5	8.3	7.4	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	90.1		
.375	69.0		
#4	48.6		
#8	38.2		
#10	36.2		
#20	27.1		
#40	15.7		
#60	10.1		
#100	8.2		
#200	7.4		
#270	7.2		

* (no specification provided)

Material Description

Very sandy, GRAVEL, some silt

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= GP-GM **AASHTO (M 145)=** A-1-a

Coefficients

D_{90}= 18.9844 D_{85}= 16.0440 D_{60}= 7.1797
D_{50}= 5.0469 D_{30}= 1.0699 D_{15}= 0.4040
D_{10}= 0.2459 C_u= 29.19 C_c= 0.65

Remarks

Date Received: **Date Tested:** 3/17/2017

Tested By: BSP

Checked By: AWR

Title:

Location: On-Site
Sample Number: VB-1/S-1 **Depth:** 2'

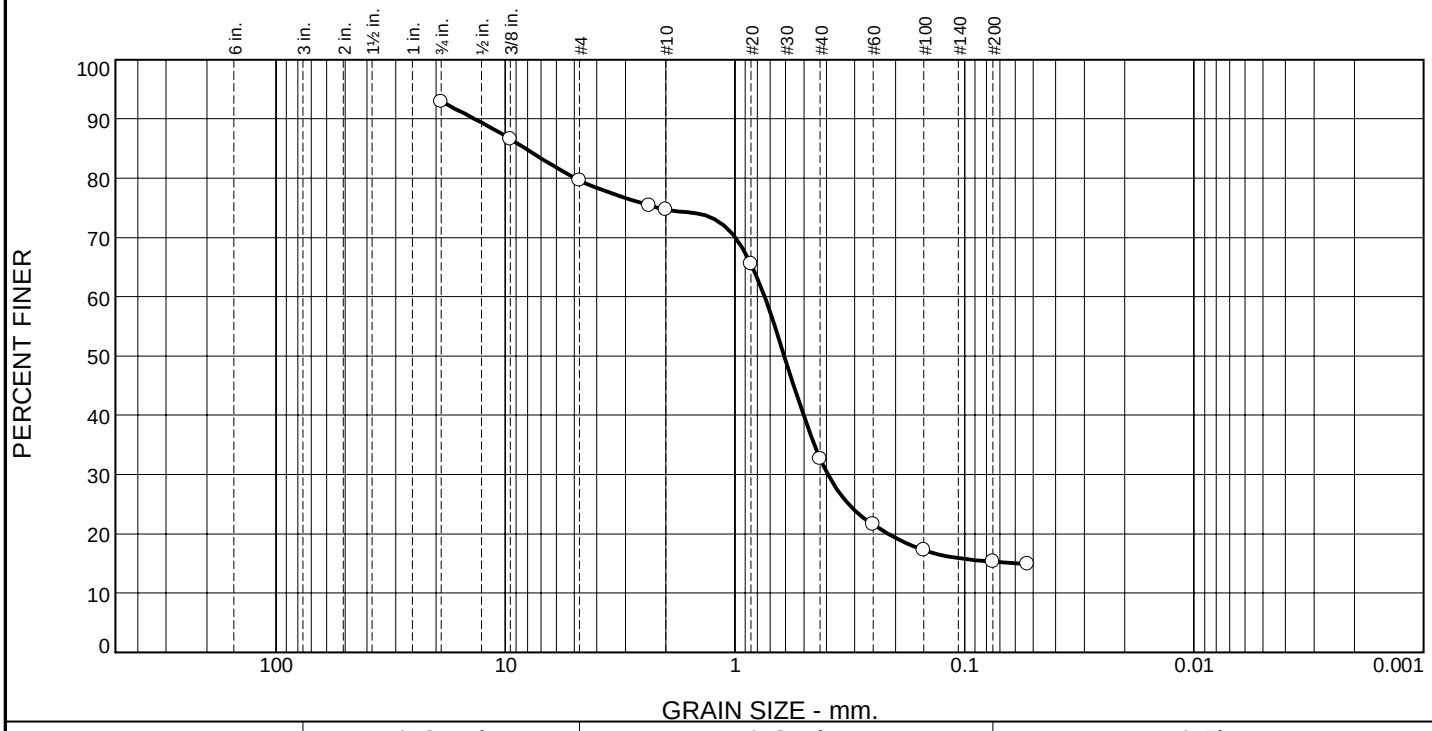
Date Sampled: 3/7/2017

associated earth sciences incorporated

Client: Reichhardt & Ebe Engineering
Project: Washington Street

Project No: 160465 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		13.3	4.9	42.0	17.4	15.3	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	92.9		
.375	86.6		
#4	79.6		
#8	75.4		
#10	74.7		
#20	65.6		
#40	32.7		
#60	21.6		
#100	17.3		
#200	15.3		
#270	14.9		

* (no specification provided)

Material Description

SAND, some silt, some gravel

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= SM **AASHTO (M 145)=** A-1-b

Coefficients

D_{90}= 13.6292 D_{85}= 8.1579 D_{60}= 0.7427
D_{50}= 0.6090 D_{30}= 0.3934 D_{15}= 0.0571
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 3/17/2017

Tested By: BSP

Checked By: AWR

Title:

Location: On-Site
Sample Number: VB-2/S-2 **Depth:** 5'

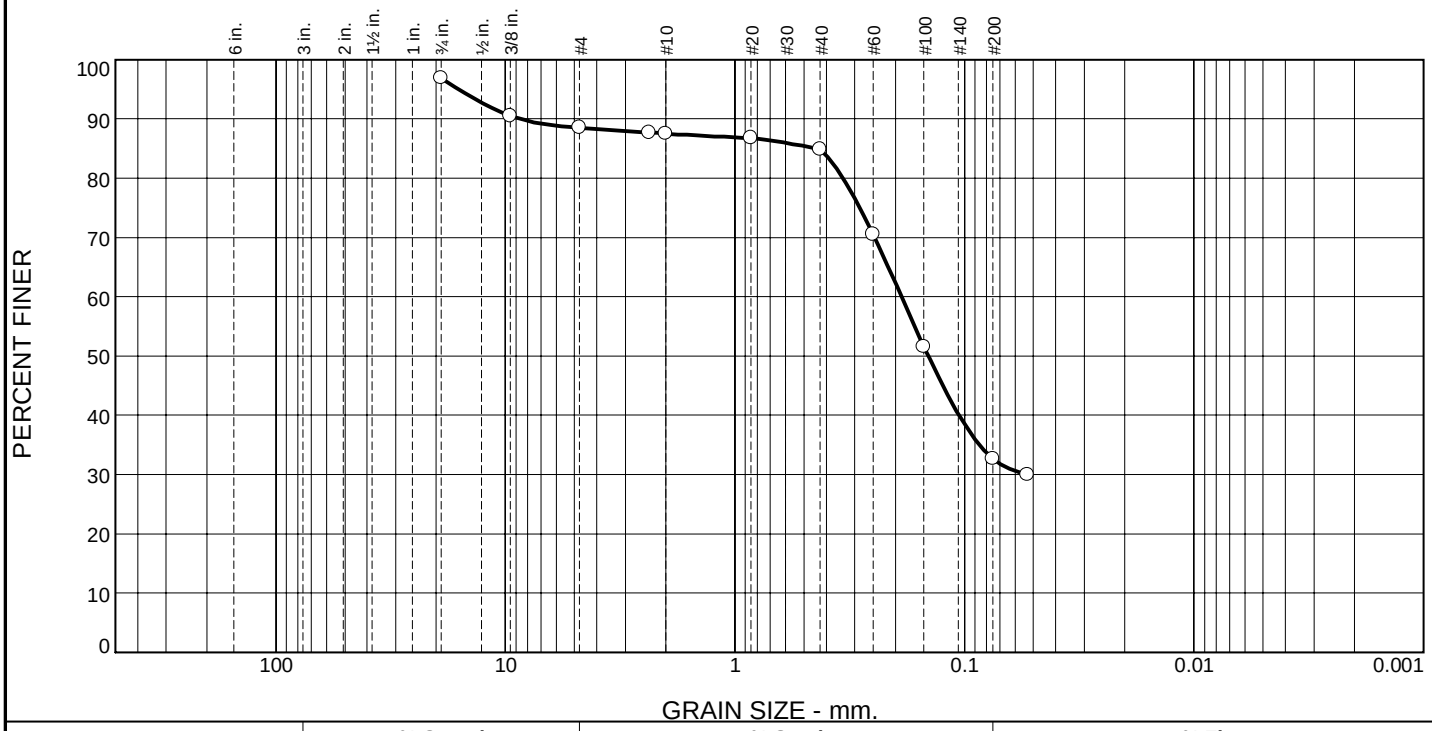
Date Sampled: 3/7/2017

associated earth sciences incorporated

Client: Reichhardt & Ebe Engineering
Project: Washington Street

Project No: 160465 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		8.4	1.0	2.7	52.1	32.7	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	96.9		
.375	90.5		
#4	88.5		
#8	87.7		
#10	87.5		
#20	86.8		
#40	84.8		
#60	70.6		
#100	51.5		
#200	32.7		
#270	30.0		

* (no specification provided)

Material Description

Very silty, SAND, some gravel

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=**

Classification

USCS (D 2487)= SM **AASHTO (M 145)=** A-2-4(0)

Coefficients

D_{90}= 8.6507 D_{85}= 0.4448 D_{60}= 0.1880
D_{50}= 0.1437 D_{30}= 0.0535 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: **Date Tested:** 3/17/2017

Tested By: BSP

Checked By: AWR

Title:

Location: On-Site
Sample Number: VB-4/S-1 **Depth:** 2'

Date Sampled: 3/7/2017

associated earth sciences incorporated

Client: Reichhardt & Ebe Engineering
Project: Washington Street

Project No: 160465 **Figure**

APPENDIX C – NPDES PERMIT

Instructions for Transfer of Coverage

Construction Stormwater General Permit

Instructions

This form is used to process two types of permit transfers: 1) Complete Transfer, or 2) Partial Transfer. Determine which type of transfer applies to your situation before filling out this form.

1. Complete Transfer: The original permittee has sold, or otherwise released control of the entire site to another party.

Required Paperwork for Complete Transfer:

- Either the current permittee, or the new permittee(s), must submit a complete and accurate Transfer of Coverage form to Ecology for each new party. The form must be signed by the current permittee ***and*** the new permittee.

2. Partial Transfer: The original permittee retains control over some portion of the site after selling or releasing control over a portion of the site.

Required Paperwork for Partial Transfer

- Either the current permittee or the new permittee(s) must submit a complete and accurate Transfer of Coverage Form for each new operator to Ecology. The form must be signed by the current permittee and the new permittee.
- For partial transfers, once all transfers are submitted, the original permittee should submit the Notice of Termination only if the portion(s) they still own or control have undergone final stabilization and meet the criteria for termination.

For Your Information

- When this form is 1) completed, 2) signed by the current and new permittee, and 3) submitted to Ecology, permit transfers are effective on the date specified at the top of page 1 (unless Ecology notifies the current permittee and new permittee of its intention to revoke coverage under the General Permit or if Ecology sends notice that the application is incomplete). If no date for the transfer of coverage is specified, Ecology will use the date of the last signature.
- The new permittee should keep a copy of the signed Transfer of Coverage form (which serves as proof of permit coverage) until Ecology sends documentation in the mail.
- Following the transfer, the new permittee must either: (1) use the Stormwater Pollution Prevention Plan (SWPPP) developed by the original operator, and modified as necessary, or (2) develop and use a new SWPPP that meets the requirements of the Construction Stormwater General Permit.
- For projects for which the original permittee has completed a Proposed New Discharge to an Impaired Waterbody Form (ECY 070-399), or for projects that are operating on sites with soil or groundwater contamination: By completing the Transfer of Coverage form, the new permittee will adopt any special provisions made to protect water quality for sites that have existing contamination or that discharge to an impaired waterbody.

To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call 877-833-6341.

This page is intentionally left blank

DEPARTMENT OF ECOLOGY
State of Washington

Transfer of Coverage

Permit # WAR _____

Construction Stormwater General Permit

This form transfers permit coverage for all, or a portion of a site to one or more new operators.

Type of permit transfer (check one): ☐ Partial transfer ☐ Complete transfer

Specific date that permit responsibility, coverage, and liability is transferred to new operator: _____

**If no date is indicated Ecology will use date of last signature*

Please see instructions for details on type of transfer.

Current Operator/Permittee Information

For partial transfers:

- List *total size of project/site* remaining under your operational control following transfer: _____ acres.
- List *total area of soil disturbance* remaining under your operational control following transfer: _____ acres.
- Submitting this form meets the requirement to submit an updated NOI (General Permit Condition G9)

Current Operator/Permittee Name:		Company:		
Business Phone:	Ext:	Mailing Address:		
Cell Phone:	Fax (optional):			
Email:		City:	State:	Zip+4:

Signature* (see signatory requirements in Section VIII): Title:

Date:

New Operator/Permittee Information

I. New Operator/Permittee (Party with operational control over plans and specifications or day-to-day operational control of activities which ensure compliance with Stormwater Pollution Prevention Plan (SWPPP) and permit conditions. Ecology will send correspondence and permit fee invoices to the permittee on record.)

Name:		Company:		
Business Phone:	Ext:	Unified Business Identifier (UBI): *(UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)*		
Cell Phone (Optional):	Fax (Optional):	E-mail:		
Mailing Address:		City:	State:	Zip + 4:

II. Property Owner (The party listed on the County Assessor's records as owner and taxpayer of the parcel[s] for which permit coverage is requested. Ecology will *not* send correspondence and permit fee invoices to the Property Owner. The Property Owner information will be used for emergency contact purposes.)

Name:		Company:		
Business Phone:	Ext:	Unified Business Identifier (UBI): *(UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)*		
Cell Phone (Optional):	Fax (Optional):	E-mail:		
Mailing Address:		City:	State:	Zip + 4:

III. On-Site Contact Person(s) (Typically the Certified Erosion and Sediment Control Lead or Operator/Permittee)

Name:		Company:		
Business Phone:	Ext:	Mailing Address:		
Cell Phone:	Fax(Optional):	City:	State:	Zip+4:
Email:				

IV. Site/Project Information

Site or Project Name

Street Address or Location Description (*If the site lacks a street address, list its specific location. For example, Intersection of Highway 61 and 34.)*

Parcel ID#: _____ *(Optional)*

Type of Construction Activity (*check all that apply*):
- ☐ Residential
- ☐ Commercial
- ☐ Industrial
- ☐ Highway or Road (city ,county, state)
- ☐ Utilities (specify): _____.
- ☐ Other (specify):_____.

Site Acreage
Total size of your site/project (that you own/control): _____acres. *(Note: 1 acre = 43,560 ft^2.)*

Total area of soil disturbance for your site/project over the life of the project: _____acres. Include grading, equipment staging, excavation, borrow pit, material storage areas, dump areas, haul roads, side-cast areas, off-site construction support areas, and all other soil disturbance acreage associated with the project. (Note: 1 acre = 43,560 ft^2)

City (or nearest city):	Zip Code:	Estimated project start-up date (mm/dd/yy):
County:		Estimated project completion date (mm/dd/yy):

Record the latitude and longitude of the *main entrance* to the site or the approximate center of site.

Latitude: _____°N Longitude: _____°W

V. Existing Site Conditions

1. Are you aware of contaminated soils present on the site? ☐ Yes ☐ No

2. Are you aware of groundwater contamination located within the site boundary? ☐ Yes ☐ No

3. If you answered yes to questions 1 or 2, will any contaminated soils be disturbed or will any contaminated groundwater be discharged due to the proposed construction activity? ☐ Yes ☐ No

("Contaminated" and "contamination" here mean containing any hazardous substance (as defined in WAC 173-340-200) that does not occur naturally or occurs at greater than natural background levels.)

If you answered yes to Question 3, please provide detailed information with the NOI (as known and readily available) on the natures and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment Best Management Practices (BMPs) proposed to control the discharge of soil and/or groundwater contaminants in stormwater. This should include information that would be included in related portions of the Stormwater Pollution Prevention Plan (SWPPP) that describe how contaminated and potentially contaminated construction stormwater and dewatering water will be managed.

VI. WQWebDMR (Electronic Discharge Monitoring Reporting)

You must submit monthly discharge monitoring reports using Ecology's WQWebDMR system. To sign up for WQWebDMR, or to register a new site, go to http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, you must submit the Electronic Signature Agreement with your transfer of coverage form. If you have questions on this process, contact Ecology's WQWebDMR staff at WebDMRPortal@ecy.wa.gov or 800/633-6193 or 360-407-7097 (local).

VII. Discharge/Receiving Water Information

Indicate whether your site's stormwater and/or dewatering water could enter surface waters, ***directly and/or indirectly***:

☐ Water will discharge directly or indirectly (through a storm drain system or roadside ditch) into one or more surface waterbodies (wetlands, creeks, lakes, and all other surface waters and water courses).

If your discharge is to a storm sewer system, provide the name of the operator of the storm sewer system:

(e.g., City of Tacoma): _____

☐ Water will discharge to ground with 100% infiltration, with no potential to reach surface waters under any conditions.

If your project includes dewatering, you must include dewatering plans and discharge locations in your site Stormwater Pollution Prevention Plan.

Location of Outfall into Surface Waterbody

Enter the outfall identifier code, waterbody name, and latitude/longitude of the point(s) where the site has the potential to discharge into a waterbody (the outfall). Enter all locations. See illustration of Surface Waterbody Outfall locations at the end of this form.

- Include the names and locations of both direct and indirect discharges to surface waterbodies, even if the risk of discharge is low or limited to periods of extreme weather. Attach a separate list if necessary.
- Give each point a unique 1-4 digit alpha numeric code. This code will be used for identifying these points in WQWebDMR.
- Some large construction projects (for example, subdivisions, roads, or pipelines) may discharge into several waterbodies.
- If the creek or tributary is unnamed, use a format such as "unnamed tributary to Deschutes River."
- If the site discharges to a stormwater conveyance system that in turn flows to a surface waterbody, include the surface waterbody name and location.

Outfall Identifier Code. These cannot be symbols. (Maximum of 4 characters).				Surface Waterbody Name at the Outfall	Latitude Decimal Degrees	Longitude Decimal Degrees
Example: 001A				Example: Puget Sound	47.5289247° N	-122.3123550° W
					° N	° W
					° N	° W
					° N	° W

If your site discharges to a waterbody that is on the impaired waterbodies list (e.g., 303[d] list) for turbidity, fine sediment, high pH, or phosphorus, Ecology will require additional documentation before issuing permit coverage and these sites will be subject to additional sampling and numeric effluent limits (per Permit Condition S8). Ecology will notify you if any additional sampling requirements apply. Information on impaired waterbodies is available online at: http://www.ecy.wa.gov/programs/wq/303d/index.html.

Before signing, please use the following checklist to ensure this form is complete:

☐ All spaces on this form have been completed. (Attach additional sheets if necessary)

☐ The transfer form has been signed by both the current permittee *and* the new permittee(s).

☐ The date permit responsibility was transferred is specified. (See Page 1)

☐ New Operator/Permittee: Before you submit this form to Ecology, please retain a copy for your records – this will serve as proof of permit coverage until documentation arrives from Ecology.

☐ For partial transfers: If the original permittee no longer owns or controls any portions of the site that meet the criteria for termination, the original permittee must submit a Notice of Termination to terminate permit coverage. (http://www.ecy.wa.gov/biblio/ecy02087.html)

☐ For sites with contaminated soils/groundwater or a new discharger to an impaired waterbody: Any special provisions to protect water quality put in place at the time of initial coverage have been reviewed and adopted by the new permittee.

Administrative Order Docket No. _____

VIII. Certification of Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed/Typed Name	Company (operator/permittee only)	Title
Signature of Operator/Permittee		*Date*

Signature of Operator/Permittee requirements:

A. For a corporation: By a responsible corporate officer.
B. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.
C. For a municipality, state, federal, or other public facility: By either a principal executive officer or ranking elected official.

Please sign and return this document to the following address:

Washington Department of Ecology - Stormwater
PO Box 47696
Olympia, WA 98504-7696

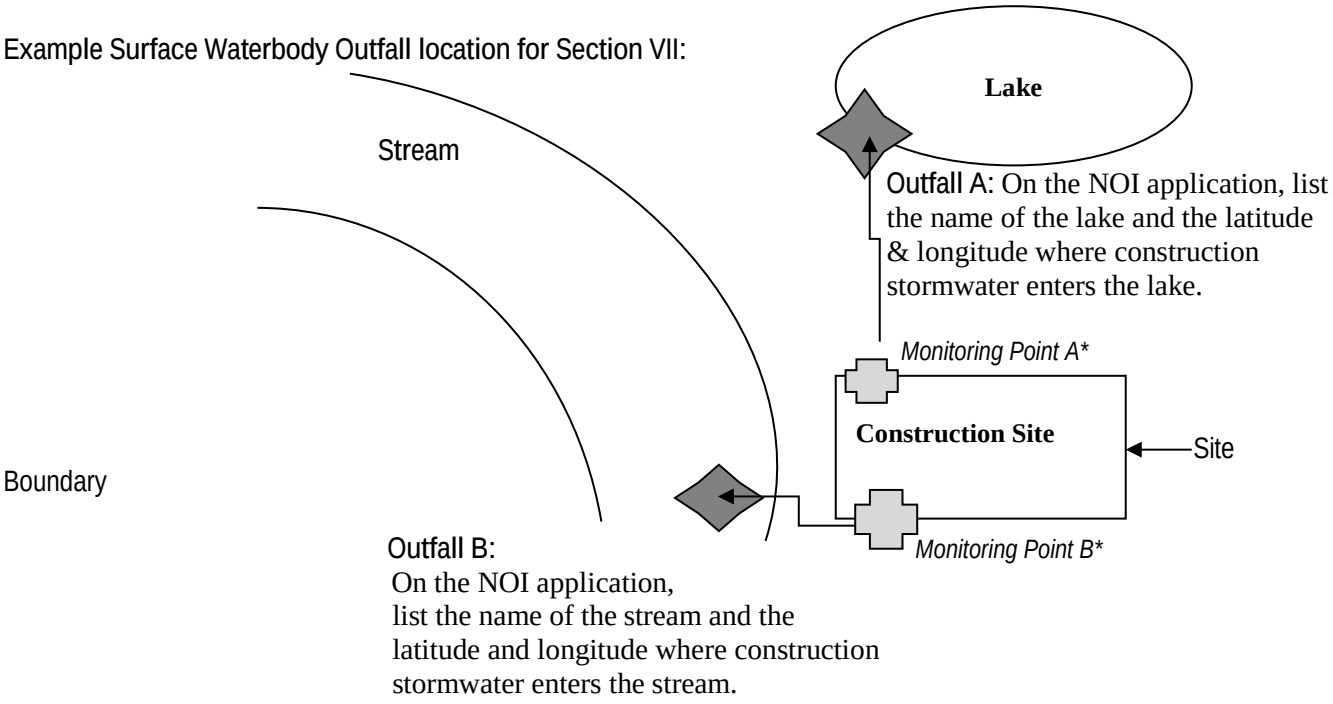
If you have questions about this form, contact the following Ecology staff:

Location	Contact Name	Phone	E-mail
City of Seattle, and Kitsap, Pierce, and Thurston counties	Josh Klimek	360-407-7451	josh.klimek@ecy.wa.gov
Island, King, and San Juan counties	RaChelle Stane	360-407-6556	rachelle.stane@ecy.wa.gov
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla, Whatcom, and Whitman counties.	Shawn Hopkins	360-407-6442	shawn.hopkins@ecy.wa.gov
Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties.	Joyce Smith	360-407-6858	joyce.smith@ecy.wa.gov

You must submit monthly discharge monitoring reports using Ecology's WQWebDMR system. To sign up for WQWebDMR, or to register a new site, go to www.ecy.wa.gov/programs/wq/permits/paris/portal.html. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, you must submit the Electronic Signature Agreement with your application.

If you have questions on this process, contact Ecology's WQWebDMR staff at WQWebPortal@ecy.wa.gov or 800-633-6193 or 360-407-7097 (local).

Example Surface Waterbody Outfall location for Section VII:



*Note: The monitoring points are for illustration only and are not required on this Notice of Intent application form. Monitoring point information will be entered on the monthly discharge monitoring report as required for active permits.

To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call 877-833-6341.

Issuance Date: November 18, 2015
Effective Date: January 1, 2016
Expiration Date: December 31, 2020

Modification Issuance Date: March 22, 2017
Modification Effective Date: May 5, 2017

CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activity

State of Washington
Department of Ecology
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington
(State of Washington Water Pollution Control Act)
and
Title 33 United States Code, Section 1251 et seq.
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions that follow.

Heather R. Bartlett
Water Quality Program Manager
Washington State Department of Ecology

TABLE OF CONTENTS

LIST OF TABLES

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

Table 1: Summary of Required Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S5.A and S8	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
S5.B	Discharge Monitoring Report	Monthly*	Within 15 days following the end of each month
S5.F and S8	Noncompliance Notification – Telephone Notification	As necessary	Within 24-hours
S5.F	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
S9.C	Request for Chemical Treatment Form	As necessary	Written approval from Ecology is required prior to using chemical treatment (with the exception of dry ice or CO_2 to adjust pH)
G2	Notice of Change in Authorization	As necessary	
G6	Permit Application for Substantive Changes to the Discharge	As necessary	
G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
G9	Notice of Permit Transfer	As necessary	
G20	Notice of Planned Changes	As necessary	
G22	Reporting Anticipated Non-compliance	As necessary	

SPECIAL NOTE: *Permittees must submit electronic Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

Table 2: Summary of Required On-site Documentation

Document Title	Permit Conditions
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S9, S5

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal operators and Indian Country as specified in Special Condition S1.E.3.

B. Operators Required to Seek Coverage Under this General Permit:

1. Operators of the following construction activities are required to seek coverage under this CSWGP:

   a. Clearing, grading and/or excavation that results in the disturbance of one or more acres (including off-site disturbance acreage authorized in S1.C.2) and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.

      i. This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and

   b. Any size construction activity discharging stormwater to waters of the State that the Washington State Department of Ecology (Ecology):

      i. Determines to be a significant contributor of pollutants to waters of the State of Washington.

      ii. Reasonably expects to cause a violation of any water quality standard.

2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b. above):

   a. Construction activities that discharge all stormwater and non-stormwater to ground water, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.

   b. Construction activities covered under an Erosivity Waiver (Special Condition S2.C).

   c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

C. Authorized Discharges:

1. *Stormwater Associated with Construction Activity.* Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.)

2. *Stormwater Associated with Construction Support Activity*. This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:

   a. The support activity relates directly to the permitted construction site that is required to have an NPDES permit; and

   b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and

   c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.

3. *Non-Stormwater Discharges*. The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:

   a. Discharges from fire-fighting activities.

   b. Fire hydrant system flushing.

   c. Potable water, including uncontaminated water line flushing.

   d. Hydrostatic test water.

   e. Uncontaminated air conditioning or compressor condensate.

   f. Uncontaminated ground water or spring water.

   g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).

   h. Uncontaminated discharges from foundation or footing drains.

   i. Uncontaminated or potable water used to control dust. Permittees must minimize the amount of dust control water used.

   j. Routine external building wash down that does not use detergents.

   k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special Condition S3.

At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

D. Prohibited Discharges:

The following discharges to waters of the State, including ground water, are prohibited.

1. Concrete wastewater.
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.2 (see Appendix A of this permit).
4. Slurry materials and waste from shaft drilling, including process wastewater from shaft drilling for construction of building, road, and bridge foundations unless managed according to Special Condition S9.D.9.j.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless managed according to Special Condition S9.D.9.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

E. Limits on Coverage

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal operator.

4. Stormwater from facilities located on "Indian Country" as defined in 18 U.S.C.§1151, except portions of the Puyallup Reservation as noted below.

   Indian Country includes:

   a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.

   b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

   c. All off-reservation federal trust lands held for Native American Tribes.

      Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.

6. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

S2. APPLICATION REQUIREMENTS

A. Permit Application Forms

1. Notice of Intent Form/Timeline

   a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.

   b. Operators must apply using the electronic application form (NOI) available on Ecology's website http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

      Department of Ecology
      Water Quality Program - Construction Stormwater
      PO Box 47696
      Olympia, Washington 98504-7696

c. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it on or before the date of the first public notice (see Special Condition S2.B below for details). The 30-day public comment period begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, based on public comments, or any other relevant factors, coverage under the general permit will automatically commence on the thirty-first day following receipt by Ecology of a completed NOI, or the issuance date of this permit, whichever is later; unless Ecology specifies a later date in writing as required by WAC173-226-200(2).

d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 ("demonstrably equivalent" BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, it must provide notice of the selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.

e. Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an updated NOI. Examples of such changes include, but are not limited to:

    i. Changes to the Permittee's mailing address,

    ii. Changes to the on-site contact person information, ***and***

    iii. Changes to the area/acreage affected by construction activity.

f. Applicants must notify Ecology if they are aware of contaminated soils and/or groundwater associated with the construction activity. Provide detailed information with the NOI (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment BMPs proposed to control the discharge of soil and/or groundwater contaminants in stormwater. Examples of such detail may include, but are not limited to:

    i. List or table of all known contaminants with laboratory test results showing concentration and depth,

    ii. Map with sample locations,

    iii. Temporary Erosion and Sediment Control (TESC) plans,

    iv. Related portions of the Stormwater Pollution Prevention Plan (SWPPP) that address the management of contaminated and potentially contaminated construction stormwater and dewatering water,

    v. Dewatering plan and/or dewatering contingency plan.

2. Transfer of Coverage Form

   The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided the Permittee submits a Transfer of Coverage Form in accordance with General Condition G9. Transfers do not require public notice.

B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must contain:

1. A statement that "The applicant is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit".

2. The name, address and location of the construction site.

3. The name and address of the applicant.

4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the number of acres to be disturbed.

5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system.

6. The statement: "Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology's action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, PO Box 47696, Olympia, Washington 98504-7696 Attn: Water Quality Program, Construction Stormwater."

C. Erosivity Waiver

Construction site operators may qualify for an erosivity waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than 5 acres and the site is not a portion of a common plan of development or sale that will disturb 5 acres or greater.

2. Calculation of Erosivity "R" Factor and Regional Timeframe:

   a. The project's rainfall erosivity factor ("R" Factor) must be less than 5 during the period of construction activity, as calculated (see the CSWGP homepage http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html for a link to the EPA's calculator and step by step instructions on computing the "R" Factor in the EPA Erosivity Waiver Fact Sheet). The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:

   b. The entire period of construction activity must fall within the following timeframes:

      i. For sites west of the Cascades Crest: June 15 – September 15.

      ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.

      iii. For sites east of the Cascades Crest, within the Central Basin: no additional timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Average Annual Precipitation Region 2), refer to http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html.

3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:

   a. Comply with applicable local stormwater requirements; ***and***

   b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.

4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b. or for any size construction activity that could reasonably expect to cause a violation of any water quality standard as defined in Special Condition S1.B.1.b.ii.

5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.

6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:

    a. Recalculate the rainfall erosivity "R" factor using the original start date and a new projected ending date and, if the "R" factor is still under 5 *and* the entire project falls within the applicable regional timeframe in Special Condition S2.C.2.b, complete and submit an amended waiver certification form before the original waiver expires; ***or***

    b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

S3. COMPLIANCE WITH STANDARDS

A. Discharges must not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges not in compliance with these standards are not authorized.

B. Prior to the discharge of stormwater and non-stormwater to waters of the State, the Permittee must apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.

C. Ecology presumes that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:

    1. Comply with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.

    2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater technical manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the Phase I Municipal Stormwater Permit are approved by Ecology.)

D. Where construction sites also discharge to ground water, the ground water discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to ground water through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

S4. MONITORING REQUIREMENTS, BENCHMARKS AND REPORTING TRIGGERS

A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

B. Site Inspections

The Permittee's site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points under the Permittee's operational control. (See Special Conditions S4.B.3 and B.4 below for detailed requirements of the Permittee's Certified Erosion and Sediment Control Lead [CESCL].)

Construction sites one acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a certified CESCL. Sites less than one acre may have a person without CESCL certification conduct inspections.

1. The Permittee must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. The Permittee must evaluate the effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

   Based on the results of the inspection, the Permittee must correct the problems identified by:

   a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.

   b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.

   c. Documenting BMP implementation and maintenance in the site log book.

2. The Permittee must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one inspection is required that week.) The Permittee may reduce the inspection frequency for temporarily stabilized, inactive sites to once every calendar month.

3. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:

    a. Site conditions and construction activities that could impact the quality of stormwater, ***and***

    b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges.

4. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the manual referred to in Special Condition S9.C.1 and 2).

5. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:

    a. Inspection date and time.

    b. Weather information, the general conditions during inspection and the approximate amount of precipitation since the last inspection, and precipitation within the last 24 hours.

    c. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.

    d. A description of the locations:

        i. Of BMPs inspected;

        ii. Of BMPs that need maintenance and why;

        iii. Of BMPs that failed to operate as designed or intended; ***and***

        iv. Where additional or different BMPs are needed, and why.

    e. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

    f. Any water quality monitoring performed during inspection.

    g. General comments and notes, including a brief description of any BMP repairs, maintenance or installations made following the inspection.

    h. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.

i. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement: "I certify that this report is true, accurate, and complete to the best of my knowledge and belief."

Table 3: Summary of Primary Monitoring Requirements

Size of Soil Disturbance[1]	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling[2]	CESCL Required for Inspections?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method[3]		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required[4]	Required	Yes

[1] Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

[2] If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of poured concrete or recycled concrete over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH sampling in accordance with Special Condition S4.D.

[3] Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.

[4] Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods

   a. If construction activity involves the disturbance of 5 acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.

   b. If construction activity involves 1 acre or more but fewer than 5 acres of soil disturbance, the Permittee must conduct either transparency sampling **or** turbidity sampling per Special Condition S4.C.

2. Sampling Frequency

   a. The Permittee must sample all discharge points at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site); sampling is not required on sites that disturb less than an acre.

   b. Samples must be representative of the flow and characteristics of the discharge.

   c. Sampling is not required when there is no discharge during a calendar week.

   d. Sampling is not required outside of normal working hours or during unsafe conditions.

   e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).

   f. Sampling is not required before construction activity begins.

   g. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.

3. Sampling Locations

   a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).

   b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.

   c. The Permittee must identify all sampling point(s) on the SWPPP site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.

   d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.

e. The Permittee may discontinue sampling at discharge points in areas of the project where the Permittee no longer has operational control of the construction activity.

4. Sampling and Analysis Methods

a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTUs).

b. The Permittee performs transparency analysis on site with a 1¾-inch-diameter, 60-centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm).

Table 4: Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value	Phone Reporting Trigger Value
Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs	250 NTUs
Transparency	cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm	6 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTUs or less. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information.

a. Turbidity 26 – 249 NTUs, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTUs; or if discharge transparency is less than 33 cm, but equal to or greater than 6 cm, the Permittee must:

i. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.

iii. Document BMP implementation and maintenance in the site log book.

b. Turbidity 250 NTUs or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTUs or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive management process described below.

i. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) number (or through Ecology's Water Quality Permitting Portal [WQWebPortal] – Permit Submittals when the form is available) within 24 hours, in accordance with Special Condition S5.A.

- **Central Region** (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490
- **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
- **Northwest Region** (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
- **Southwest Region** (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

Links to these numbers and the ERTS reporting page are located on the following web site: http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html.

ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

iii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.

iv. Document BMP implementation and maintenance in the site log book.

v. Sample discharges daily until:

a) Turbidity is 25 NTUs (or lower); ***or***

b) Transparency is 33 cm (or greater); ***or***

c) The Permittee has demonstrated compliance with the water quality limit for turbidity:

1) No more than 5 NTUs over background turbidity, if background is less than 50 NTUs, ***or***

2) No more than 10% over background turbidity, if background is 50 NTUs or greater; ***or***

d) The discharge stops or is eliminated.

D. pH Sampling Requirements – Significant Concrete Work or Engineered Soils

If construction activity results in the disturbance of 1 acre or more, ***and*** involves significant concrete work (significant concrete work means greater than 1000 cubic yards poured concrete or recycled concrete used over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer system that drains to surface waters of the State, the Permittee must conduct pH sampling as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. For sites with significant concrete work, the Permittee must begin the pH sampling period when the concrete is first poured and exposed to precipitation, and continue weekly throughout and after the concrete pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).

2. For sites with recycled concrete where monitoring is required, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and must continue until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5 (su).

3. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.

4. During the applicable pH monitoring period defined above, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.

5. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.

6. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:

a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters; ***or***

b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO_2) sparging or dry ice. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO_2 sparging or dry ice.

7. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH sampling results in the site log book.

S5. REPORTING AND RECORDKEEPING REQUIREMENTS

A. High Turbidity Reporting

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTUs or more (or transparency less than or equal to 6 cm) high turbidity reporting level, the Permittee must either call the applicable Ecology Region's Environmental Report Tracking System (ERTS) number by phone within 24 hours of analysis or submit an electronic ERTS report (or submit an electronic report through Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals when the form is available). See the CSWGP web site for links to ERTS and the WQWebPortal: http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html. Also, see phone numbers in Special Condition S4.C.5.b.i.

B. Discharge Monitoring Reports (DMRs)

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G13 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WQWebDMR web application accessed through Ecology's Water Quality Permitting Portal. To find out more information and to sign up for WQWebDMR go to: http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

Permittees who obtain a waiver not to use WQWebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees shall

submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with “no discharge" entered in place of the monitoring results. DMRs are required for the full duration of permit coverage (from issuance date to termination). For more information, contact Ecology staff using information provided at the following web site: www.ecy.wa.gov/programs/wq/permits/paris/contacts.html.

C. Records Retention

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, copy of the permit coverage letter (including Transfer of Coverage documentation), and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of three years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this permit. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

D. Recording Results

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Permittee’s DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment (such as but not limited to spills of fuels or other materials, catastrophic pond or slope failure, and discharges that violate water quality standards), or exceed

numeric effluent limitations (see S8. Discharges to 303(d) or TMDL Waterbodies), the Permittee must, upon becoming aware of the circumstance:

1. Notify Ecology within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (refer to Special Condition S4.C.5.b.i. or www.ecy.wa.gov/programs/wq/stormwater/construction/turbidity.html for Regional ERTS phone numbers).

2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation.

3. Submit a detailed written report to Ecology within five (5) days, of the time the Permittee becomes aware of the circumstances, unless requested earlier by Ecology. The report must be submitted using Ecology's Water Quality Permitting Portal (WQWebPortal) - Permit Submittals, unless a waiver from electronic reporting has been granted according to S5.B. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6).

   Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification is received by Ecology within 24 hours.

G. Access to Plans and Records

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:

   a. General Permit

   b. Permit Coverage Letter

   c. Stormwater Pollution Prevention Plan (SWPPP)

   d. Site Log Book

2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:

a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.

b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:

   i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; ***or***

   ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; ***or***

   iii. Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

S6. PERMIT FEES

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

S7. SOLID AND LIQUID WASTE DISPOSAL

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

A. Special Condition S3, Compliance with Standards

B. WAC 173-216-110

C. Other applicable regulations

S8. DISCHARGES TO 303(d) OR TMDL WATERBODIES

A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-listed Waterbodies

1. Permittees who discharge to segments of waterbodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.

2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2016, or the date when the operator's complete permit application is received by Ecology, whichever is later.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters

Operators of construction sites that discharge to a TMDL or 303(d)-listed waterbody are not eligible for coverage under this permit *unless* the operator:

1. Prevents exposing stormwater to pollutants for which the waterbody is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; ***or***

2. Documents that the pollutants for which the waterbody is impaired are not present at the site, and retains documentation of this finding within the SWPPP; ***or***

3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:

   a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; ***or***

   b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

   Operators of construction sites are eligible for coverage under this permit if Ecology issues permit coverage based upon an affirmative determination that the *discharge will not cause or contribute to the existing impairment.*

C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.

2. As an alternative to the 25 NTUs effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), Permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs. In order to use the water quality standard requirement, the sampling must take place at the following locations:

   a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.

   b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.

3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.

4. Permittees whose discharges exceed the numeric effluent limit shall sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

Table 5: Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit[1]
• Turbidity • Fine Sediment • Phosphorus	Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs, at the point where stormwater is discharged from the site; OR In compliance with the surface water quality standard for turbidity (S8.C.2.a)

[1]Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

D. Discharges to Water Bodies on the 303(d) List for High pH

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

Table 6: pH Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

2. At the Permittee's discretion, compliance with the limit shall be assessed at one of the following locations:

   a. Directly in the 303(d)-listed waterbody segment, inside the immediate area of influence of the discharge; or

   b. Alternatively, the Permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.

3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.

4. Permittees whose discharges exceed the numeric effluent limit shall sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or Another Pollution Control Plan

1. Discharges to a waterbody that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html for more information on TMDLs.

   a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.

      i. The Permittee must sample discharges weekly or as otherwise specified by the TMDL to evaluate compliance with the specific waste load allocations or requirements.

      ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.

   b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements,

compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.

c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.

d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

2. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus that is completed and approved by EPA before January 1, 2016, or before the date the operator's complete permit application is received by Ecology, whichever is later. TMDLs completed after the operator's complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.

S9. STORMWATER POLLUTION PREVENTION PLAN

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

A. The Permittee's SWPPP must meet the following objectives:

1. To implement best management practices (BMPs) to prevent erosion and sedimentation, and to identify, reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.

2. To prevent violations of surface water quality, ground water quality, or sediment management standards.

3. To control peak volumetric flow rates and velocities of stormwater discharges.

B. General Requirements

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:

a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).

b. Potential erosion problem areas.

c. The 13 elements of a SWPPP in Special Condition S9.D.1-13, including BMPs used to address each element.

d. Construction phasing/sequence and general BMP implementation schedule.

e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.

f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the SWPPP. Engineering calculations do not need to be included in the SWPPP for treatment systems that do not require such calculations.

2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:

a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.

b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.

c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. Stormwater Management Manual for Western Washington (most current approved edition at the time this permit was issued), for sites west of the crest of the Cascade Mountains; ***or***

2. Stormwater Management Manual for Eastern Washington (most current approved edition at the time this permit was issued), for sites east of the crest of the Cascade Mountains; ***or***

3. Revisions to the manuals listed in Special Condition S9.C.1. & 2., or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; ***or***

4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable Stormwater Management Manuals, including:

    a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.

    b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 13 elements below in Special Condition S9.D.1-13 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits

    a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.

    b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.

2. Establish Construction Access

    a. Limit construction vehicle access and exit to one route, if possible.

    b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.

    c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.

    d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.

    e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.

3. Control Flow Rates

    a. Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the

velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.

b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvements (for example, impervious surfaces).

c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from siltation during the construction phase.

4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must design, install and maintain such controls to:

a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.

b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.

d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.

e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.

f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide

(PAM), the early application of gravel base on areas to be paved, and dust control.

b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.

c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.

d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion:

West of the Cascade Mountains Crest
During the dry season (May 1 - September 30): 7 days
During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin*
During the dry season (July 1 - September 30): 10 days
During the wet season (October 1 - June 30): 5 days

The Central Basin*, East of the Cascade Mountains Crest
During the dry season (July 1 - September 30): 30 days
During the wet season (October 1 - June 30): 15 days

*Note: The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.

f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

g. The Permittee must minimize the amount of soil exposed during construction activity.

h. The Permittee must minimize the disturbance of steep slopes.

i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

6. Protect Slopes

a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).

b. The Permittee must divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.

c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.

   i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."

   ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.

d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.

e. Place check dams at regular intervals within constructed channels that are cut down a slope.

7. Protect Drain Inlets

   a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.

   b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).

8. Stabilize Channels and Outlets

   a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:

      i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land

cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."

ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.

b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.

b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.

c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.

d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.

e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.

f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete

pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A--Definitions.)

g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.

h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete truck drums or concrete handling equipment onto the ground, or into storm drains, open ditches, streets, or streams. Washout of concrete handling equipment may be disposed of in a designated concrete washout area or in a formed area awating concrete where it will not contaminate surface or ground water. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is prohibited. Do not wash out to formed areas awaiting LID facilities.

i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO_2 or dry ice used to adjust pH.

j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

10. Control Dewatering

a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, into a controlled conveyance system before discharge to a sediment trap or sediment pond.

b. Permittees may discharge clean, non-turbid dewatering water, such as well-point ground water, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that “surface waters of the State” may exist on a construction site as well as off site; for example, a creek running through a site.

c. Other dewatering treatment or disposal options may include:

i. Infiltration.

ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.

iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (see S9.D.9.i. regarding chemical treatment written approval).

iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.

v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.

d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.

b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.

b. Inspection and monitoring – Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.

c. Maintaining an updated construction SWPPP – Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4 and S9.

13. Protect Low Impact Development (LID) BMPs

The primary purpose of LID BMPs/On-site LID Stormwater Management BMPs is to reduce the disruption of the natural site hydrology. LID BMPs are permanent facilities.

a. Permittees must protect all Bioretention and Rain Garden facilities from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the facilities to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden Bioretention/Rain Garden soils, and replacing the removed soils with soils meeting the design specification.

b. Permittees must maintain the infiltration capabilities of Bioretention and Rain Garden facilities by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.

c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements.

d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.

e. Permittees must keep all heavy equipment off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.

E. SWPPP – Map Contents and Requirements

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions:

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.
3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.

10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.

11. Location or proposed location of LID facilities.

S10. NOTICE OF TERMINATION

A. The site is eligible for termination of coverage when it has met any of the following conditions:

1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; ***or***

2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per General Condition G9), and the Permittee no longer has operational control of the construction activity; ***or***

3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.

B. When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology
Water Quality Program – Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

When an electronic termination form is available, the Permittee may choose to submit a complete and accurate Notice of Termination (NOT) form through the Water Quality Permitting Portal rather than mailing a hardcopy as noted above.

The termination is effective on the thirty-first calendar day following the date Ecology receives a complete NOT form, unless Ecology notifies the Permittee that the termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees are required to comply with all conditions and effluent limitations in the permit until the permit has been terminated.

Permittees transferring the property to a new property owner or operator/Permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

A. All permit applications must bear a certification of correctness to be signed:

1. In the case of corporations, by a responsible corporate officer;
2. In the case of a partnership, by a general partner of a partnership;
3. In the case of sole proprietorship, by the proprietor; ***or***
4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

B. All reports required by this permit and other information requested by Ecology (including NOIs, NOTs, and Transfer of Coverage forms) must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section must make the following certification:

> "I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my

knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.

B. To have access to and copy – at reasonable times and at reasonable cost – any records required to be kept under the terms and conditions of this permit.

C. To inspect – at reasonable times – any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor – at reasonable times – any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

A. When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.

B. When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.

C. When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, ***or***

D. When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

A. Violation of any term or condition of this permit.

B. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.

C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

D. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

E. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.

F. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

G. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. The Permittee must reapply using the electronic application form (NOI) available on Ecology's website. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

G9. TRANSFER OF GENERAL PERMIT COVERAGE

Coverage under this general permit is automatically transferred to a new discharger, including operators of lots/parcels within a common plan of development or sale, if:

A. A written agreement (Transfer of Coverage Form) between the current discharger (Permittee) and new discharger, signed by both parties and containing a specific date for transfer of permit responsibility, coverage, and liability (including any Administrative Orders associated with the Permit) is submitted to the Director; and

B. The Director does not notify the current discharger and new discharger of the Director's intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also submit an updated application form (NOI) to the Director indicating the remaining permitted acreage after the transfer.

G10. REMOVED SUBSTANCES

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G15. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than $20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

G20. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

A. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).

B. A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: for sites 5 acres or larger, a 20% or greater increase in acreage disturbed by construction activity.

C. A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.

D. A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G21. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

G22. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate

unavoidable interruption of operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G23. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

G24. APPEALS

A. The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.

B. The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.

C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

G25. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G26. BYPASS PROHIBITED

A. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for

stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.

2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

   c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.

4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

   The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

   a. A description of the bypass and its cause.

   b. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.

   c. A cost-effectiveness analysis of alternatives including comparative resource damage assessment.

   d. The minimum and maximum duration of bypass under each alternative.

   e. A recommendation as to the preferred alternative for conducting the bypass.

f. The projected date of bypass initiation.

g. A statement of compliance with SEPA.

h. A request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.

i. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

   Ecology will consider the following before issuing an administrative order for this type bypass:

   a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

   b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

   c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

   After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

B. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

APPENDIX A – DEFINITIONS

AKART is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the *pollutants* and controlling pollution associated with a discharge.

Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2016, or before the date the operator's complete permit application is received by Ecology, whichever is later.

Applicant means an *operator* seeking coverage under this permit.

Benchmark means a *pollutant* concentration used as a permit threshold, below which a *pollutant* is considered unlikely to cause a water quality violation, and above which it may. When *pollutant* concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not water quality standards and are not numeric effluent limitations; they are indicator values.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: *stormwater* associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Buffer means an area designated by a local *jurisdiction* that is contiguous to and intended to protect a sensitive area.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Day A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

Calendar Week (same as **Week**) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

Certified Erosion and Sediment Control Lead (CESCL) means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the SWMM).

Chemical Treatment means the addition of chemicals to *stormwater* and/or authorized non-stormwater prior to filtration and discharge to surface waters.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Common Plan of Development or Sale means a site where multiple separate and distinct *construction activities* may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

Composite Sample means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots.

Concrete Wastewater means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When *stormwater* comingles with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to *waters of the State*, including *ground water*.

Construction Activity means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land. Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, site preparation, soil compaction, movement and stockpiling of topsoils, and demolition activity.

Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "*hazardous substance*" and WAC 173-340-200.

Contaminated Groundwater means groundwater which contains *contaminants*, *pollutants*, or *hazardous substances* that do not occur naturally or occur at levels greater than natural background.

Contaminated Soil means soil which contains *contaminants*, *pollutants*, or *hazardous substances* that do not occur naturally or occur at levels greater than natural background.

Demonstrably Equivalent means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.

2. The *pollutant* removal performance expected from the BMPs selected.
3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

Department means the Washington State Department of Ecology.

Detention means the temporary storage of *stormwater* to improve quality and/or to reduce the mass flow rate of discharge.

Dewatering means the act of pumping *ground water* or *stormwater* away from an active construction site.

Director means the Director of the Washington State Department of Ecology or his/her authorized representative.

Discharger means an owner or *operator* of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Engineered Soils means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to *surface water* or to *ground water* than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Federal Operator is an entity that meets the definition of "*Operator*" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of

the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

Final Stabilization (same as **fully stabilized** or **full stabilization**) means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (examples of permanent non-vegetative stabilization methods include, but are not limited to riprap, gabions or geotextiles) which prevents erosion.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

Hazardous Substance means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(10) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

Injection Well means a well that is used for the subsurface emplacement of fluids. (See Well.)

Jurisdiction means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of *pollutants* to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

Notice of Termination (NOT) means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

Operator means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Permittee means individual or entity that receives notice of coverage under this general permit.

pH means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

pH Monitoring Period means the time period in which the pH of *stormwater* runoff from a site must be tested a minimum of once every seven days to determine if *stormwater* pH is between 6.5 and 8.5.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which *pollutants* are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See Fact Sheet for further explanation.)

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any *waters of the State* as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If *stormwater* commingles with process wastewater, the commingled water is considered process wastewater.

Receiving Water means the waterbody at the point of discharge. If the discharge is to a *storm sewer system*, either surface or subsurface, the receiving water is the waterbody to which the storm system discharges. Systems designed primarily for other purposes such as for ground water drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey *stormwater* are considered the receiving water.

Representative means a *stormwater* or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate *composite sample*, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

Responsible Corporate Officer for the purpose of signatory authority means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

Sensitive Area means a waterbody, wetland, stream, aquifer recharge area, or channel migration zone.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Significant Amount means an amount of a *pollutant* in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a *pollutant* that has a reasonable potential to cause a violation of surface or ground water quality or sediment management standards.

Significant Concrete Work means greater than 1000 cubic yards poured concrete or recycled concrete used over the life of a project.

Significant Contributor of Pollutants means a facility determined by Ecology to be a contributor of a significant amount(s) of a *pollutant*(s) to waters of the State of Washington.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent *pollutants* from entering *stormwater*. A few examples of source control

BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the *sanitary sewer* or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Drain means any drain which drains directly into a *storm sewer system*, usually found along roadways or in parking lots.

Storm Sewer System means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying *stormwater*. This does not include systems which are part of a *combined sewer* or Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Stormwater Management Manual (SWMM) or **Manual** means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat *pollutants* in *stormwater*.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of *stormwater*.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington.

Temporary Stabilization means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent "*final stabilization*."

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a *pollutant* that a waterbody can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single *pollutant* from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the *pollutant*. The calculation must also account for seasonable variation in water quality.

Transfer of Coverage (TOC) means a request for transfer of coverage under this general permit as specified by General Condition G9 of this permit.

Treatment BMPs means BMPs that are intended to remove *pollutants* from *stormwater*. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

Transparency means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a "turbidity tube."

Turbidity means the clarity of water expressed as nephelometric turbidity units (NTUs) and measured with a calibrated turbidimeter.

Uncontaminated means free from any contaminant. See definition of "*contaminant*" and WAC 173-340-200.

Waste Load Allocation (WLA) means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

Water-only Based Shaft Drilling is a shaft drilling process that uses water only and no additives are involved in the drilling of shafts for construction of building, road, or bridge foundations.

Water quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Well means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See Injection well.)

Wheel Wash Wastewater means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When *stormwater* comingles with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

APPENDIX B – ACRONYMS

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
CFR	Code of Federal Regulations
CKD	Cement Kiln Dust
cm	Centimeters
CTB	Cement-Treated Base
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
FR	Federal Register
LID	Low Impact Development
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UIC	Underground Injection Control
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality
WWHM	Western Washington Hydrology Model

APPENDIX D – WSDOT TC PLANS

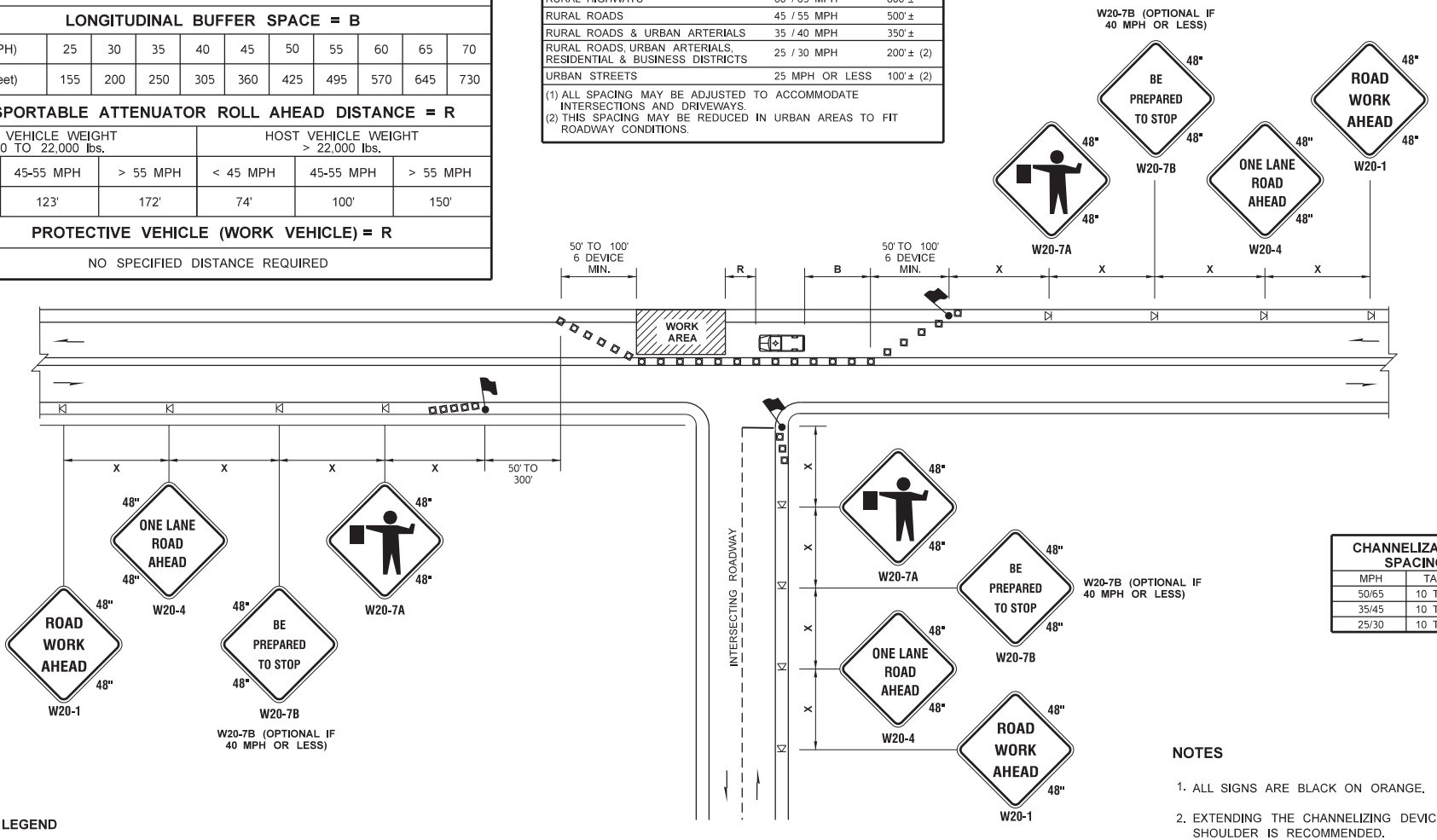
BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R
NO SPECIFIED DISTANCE REQUIRED

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



CHANNELIZATION DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
50/65	10 TO 20	80
35/45	10 TO 20	60
25/30	10 TO 20	40

LEGEND

- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE

ONE-LANE, TWO-WAY TRAFFIC CONTROL WITH FLAGGERS

NOT TO SCALE

NOTES

1. ALL SIGNS ARE BLACK ON ORANGE.
2. EXTENDING THE CHANNELIZING DEVICE TAPER ACROSS SHOULDER IS RECOMMENDED.
3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE THE **STANDARD SPECIFICATIONS** FOR ADDITIONAL DETAILS.
4. SEE **SPECIAL PROVISIONS** FOR WORK HOUR RESTRICTIONS.

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL\(TC) Work Zone Traffic Control\(TC-1) One Lane, Two Way Traffic Control with Flaggers\TC-1.dgn						Plot 1
TIME	3:05:14 PM			REGION NO. / STATE: WASH	FED.AID PROJ.NO.	Washington State Department of Transportation	PLAN REF NO: TC1
DATE	1/2/2018			JOB NUMBER			
PLOTTED BY	lliddelf			CONTRACT NO.	LOCATION NO.	TRAFFIC CONTROL PLAN	SHEET OF SHEETS
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE		

SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)										
SHOULDER WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
8'	40	40	60	90	-	-	-	-	-	-
10'	40	60	90	90	-	-	-	-	-	-

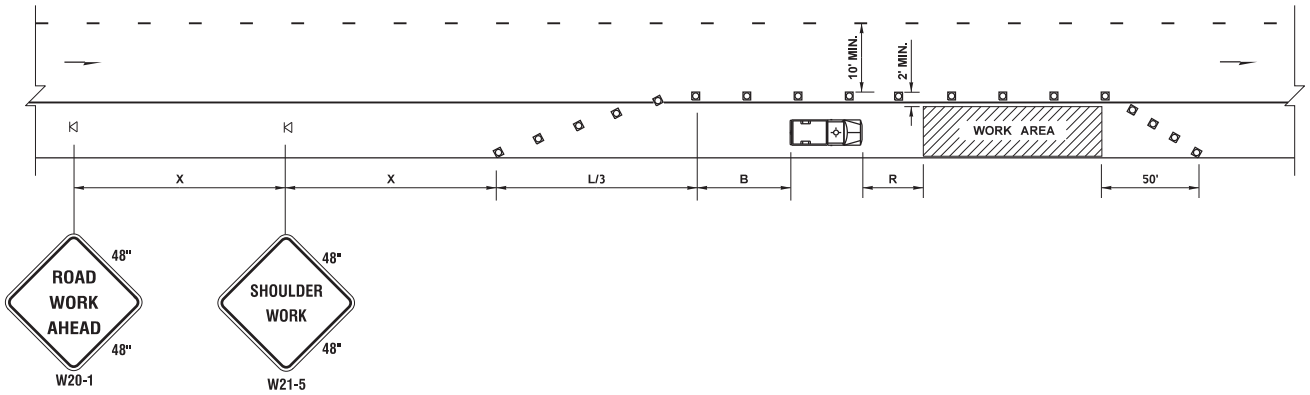
USE A 3 DEVICES TAPER FOR SHOULDERS LESS THEN 8'

BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R
NO SPECIFIED DISTANCE REQUIRED

CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35/40	30	60
25/30	20	40



LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE

SHOULDER CLOSURE - LOW SPEED

(40 MPH OR LESS)

NOT TO SCALE

NOTES

1. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
2. ALL SIGNS ARE BLACK ON ORANGE.

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL\(TC) Work Zone Traffic Control\(TC-5) Shoulder Closure - Low Speed (40 MPH or Less)\TC-5.dgn			REGION NO. / STATE	FED.AID PROJ.NO.		Plot 1
TIME	2:59:41 PM			WASH		Washington State Department of Transportation	PLAN REF NO TC5
DATE	1/2/2018			JOB NUMBER			
PLOTTED BY	lddelf						SHEET
DESIGNED BY							OF
ENTERED BY							SHEETS
CHECKED BY				CONTRACT NO.	LOCATION NO.		
PROJ. ENGR.						P.E. STAMP BOX DATE	P.E. STAMP BOX DATE
REGIONAL ADM.	REVISION	DATE	BY				TRAFFIC CONTROL PLAN

MINIMUM TAPER LENGTH = L (feet)

LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	-	-	-
11	115	165	225	295	495	550	605	660	-	-
12	125	180	245	320	540	600	660	720	-	-

SIGN SPACING = X (1)

RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE SPACING (feet)

MPH	TAPER	TANGENT
50/70	40	80
35/45	30	60
25/30	20	40

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

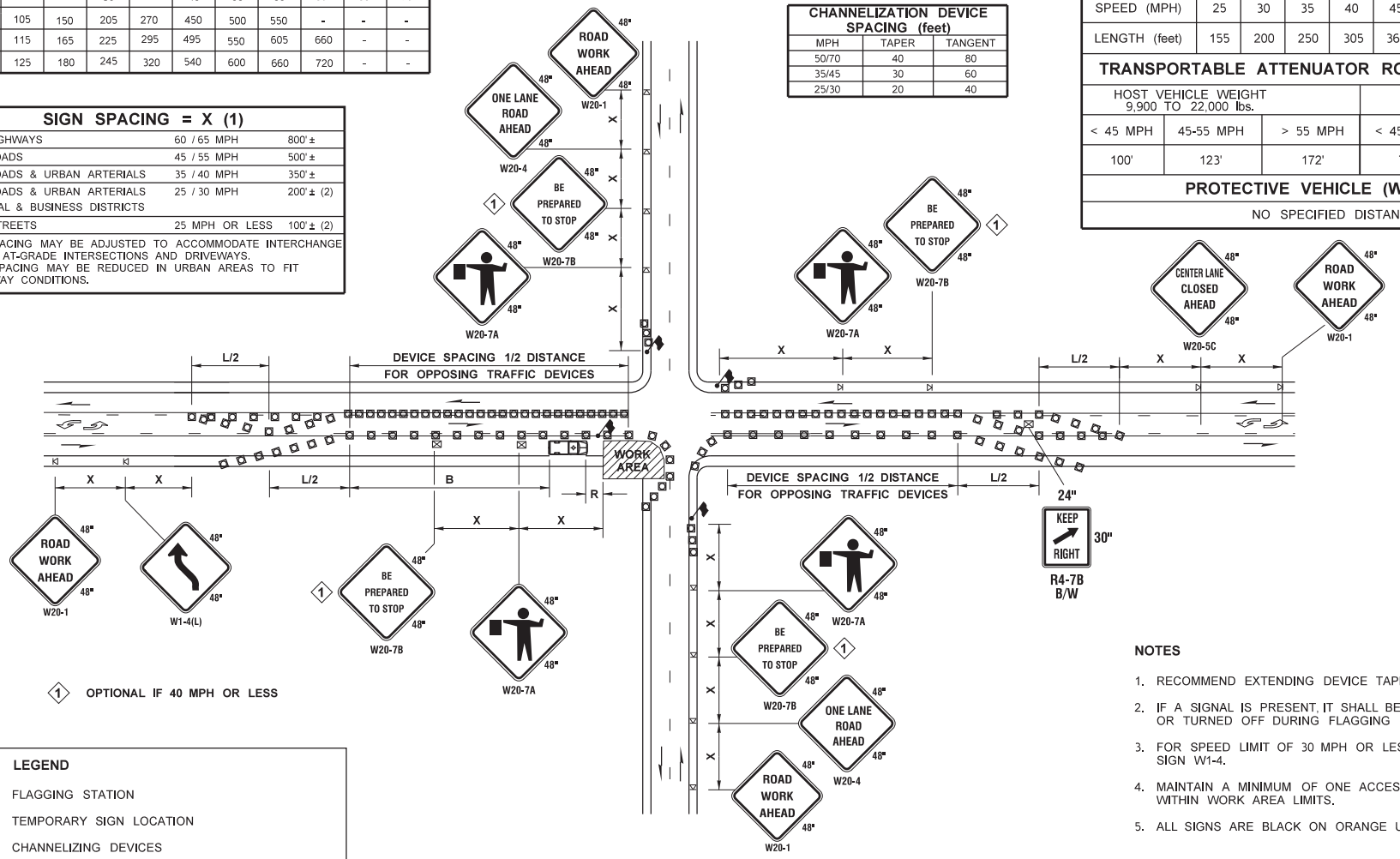
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R

HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R

NO SPECIFIED DISTANCE REQUIRED



LEGEND

- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE - RECOMMENDED
- TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

NOTES

1. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
2. IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS.
3. FOR SPEED LIMIT OF 30 MPH OR LESS USE SIGN W1-3 IN LIEU OF SIGN W1-4.
4. MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
5. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.

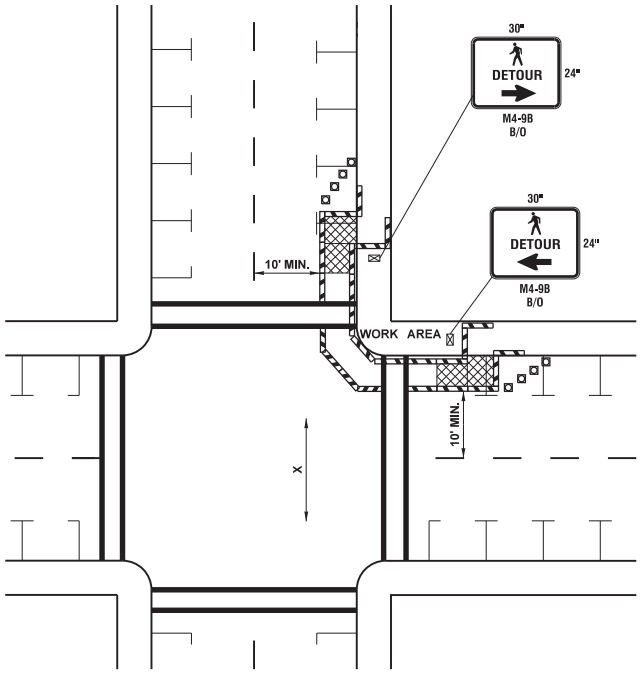
INTERSECTION LANE CLOSURE - THREE LANE ROADWAY

NOT TO SCALE

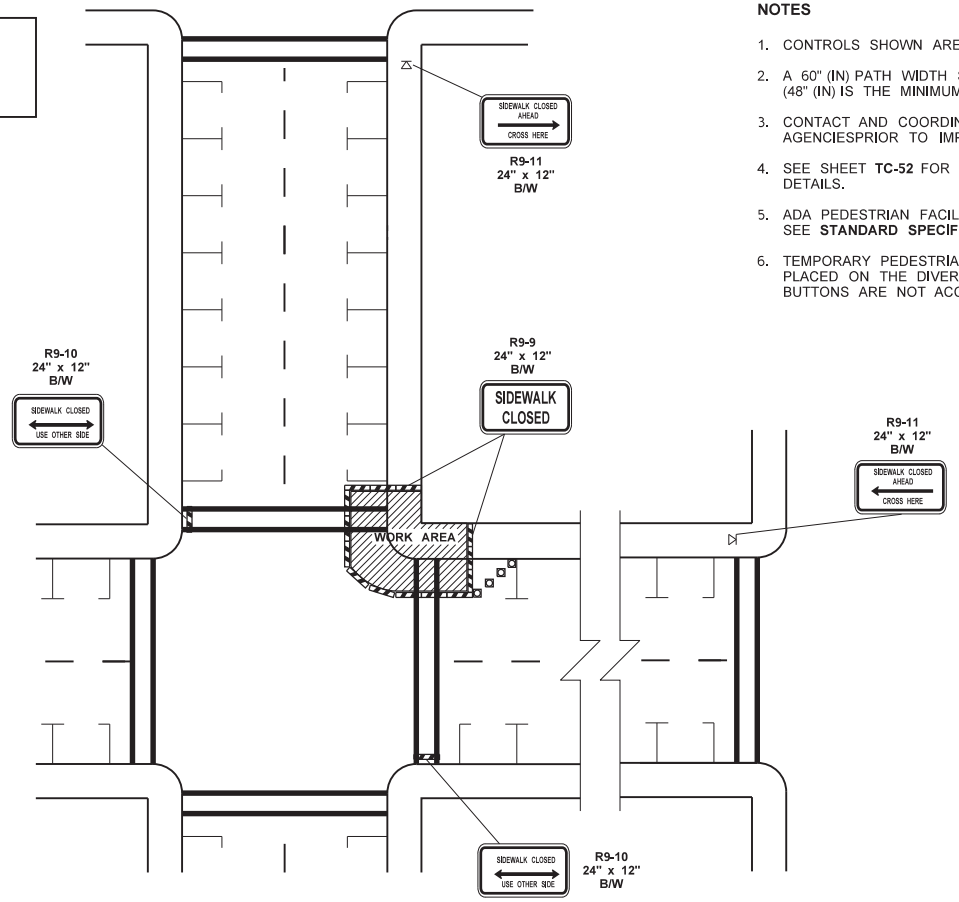
FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL\(TC) Work Zone Traffic Control\(TC-14) Intersection Lane Closure - Three Lane Roadway\TC-14.dgn			REGION NO. / STATE	FED.AID PROJ.NO.		Plot 1
TIME	6:59:33 AM			WASH			PLAN REF NO TC14
DATE	1/3/2018			JOB NUMBER			
PLOTTED BY	lddelf						SHEET
DESIGNED BY				CONTRACT NO.	LOCATION NO.		OF
ENTERED BY							SHEETS
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE	Washington State Department of Transportation	TRAFFIC CONTROL PLAN

NO PARKING R8-3 24" x 30" R/W

INSTALL ON TYPE 2 BARRICADES THROUGHOUT THE WORK AREA 24 HOURS PRIOR TO IMPLEMENTING TRAFFIC CONTROL. PRIOR NOTIFICATION OF LOCAL LAW ENFORCEMENT REQUIRED.



SIDEWALK DIVERSION



SIDEWALK DETOUR

NOTES

1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
2. A 60" (IN) PATH WIDTH SHOULD BE MAINTAINED (48" (IN) IS THE MINIMUM).
3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIESPRIOR TO IMPLEMENTING ANY CLOSURES.
4. SEE SHEET **TC-52** FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
5. ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED. SEE **STANDARD SPECIFICATION 1-10.2(1)B.**
6. TEMPORARY PEDESTRIAN PUSH BUTTONS SHALL BE PLACED ON THE DIVERTED PATH WHEN EXISTING BUTTONS ARE NOT ACCESSIBLE TO PEDESTRIANS.

LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PEDESTRIAN CHANNELIZING DEVICES
- TEMPORARY PEDESTRIAN RAMP FOR SIDEWALKS

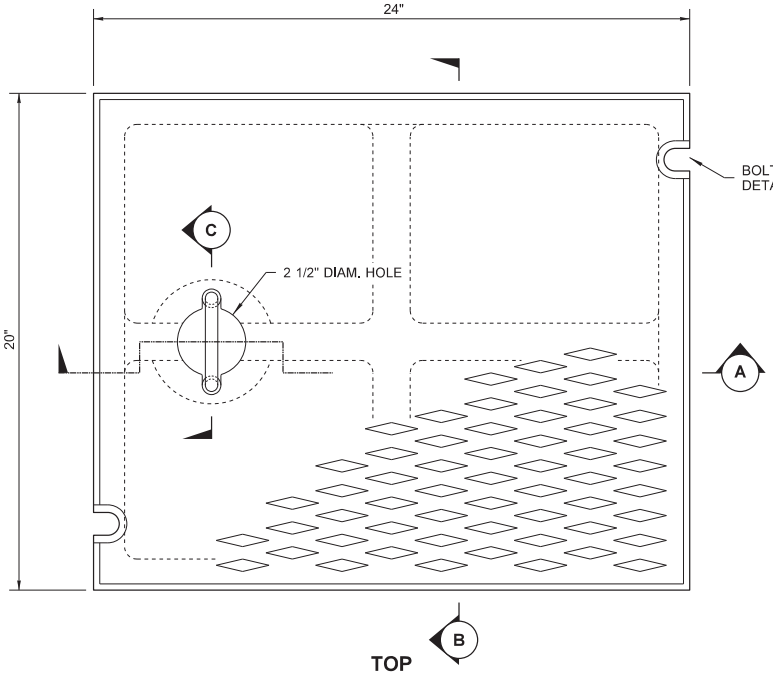
INTERSECTION PEDESTRIAN TRAFFIC CONTROL

NOT TO SCALE

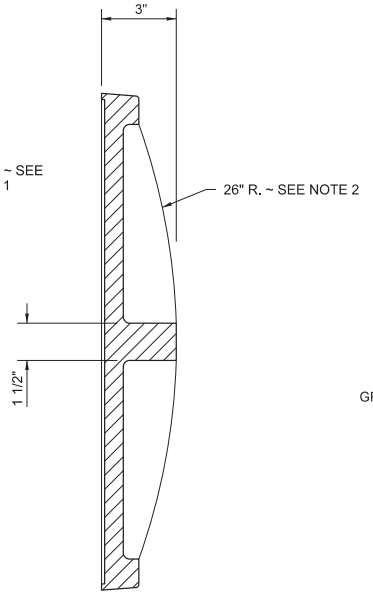
FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL\(TC) Work Zone Traffic Control\(TC-16) Intersection Pedestrian Traffic Control\TC-16.dgn								Plot 1
TIME	11:26:56 AM				REGION NO. / STATE	FED.AID PROJ.NO.		Washington State Department of Transportation	PLAN REF NO TC16
DATE	1/9/2018				WASH				
PLOTTED BY	lilddelf				JOB NUMBER				
DESIGNED BY									
ENTERED BY									
CHECKED BY					CONTRACT NO.	LOCATION NO.			
PROJ. ENGR.							P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE	
REGIONAL ADM.		REVISION	DATE	BY				PEDESTRIAN CONTROL AND PROTECTION	SHEET OF SHEETS

APPENDIX E – WSDOT STANDARD PLANS

DRAWN BY: FERN LIDDELL



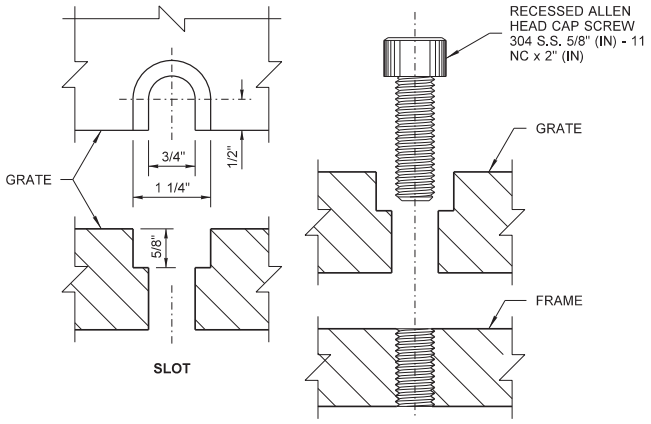
TOP



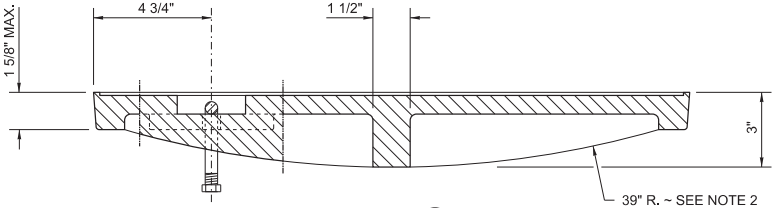
SECTION (B)

NOTES

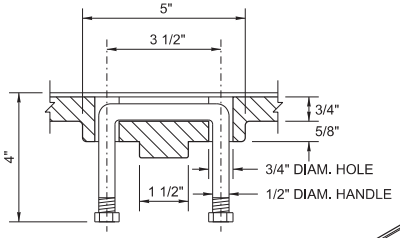
1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC × 2" (in) Allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
2. Alternative reinforcing designs are acceptable in lieu of the rib design.
3. Refer to **Standard Specification Section 9-05.15(2)** for additional requirements.
4. For frame details, see **Standard Plan B-30.10.**



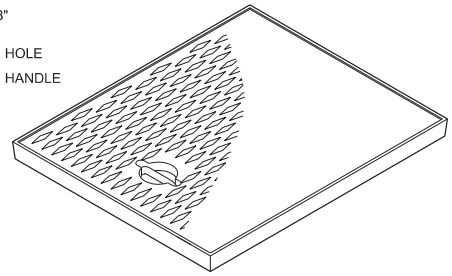
BOLT-DOWN DETAILS
SEE NOTE 1



SECTION (A)



SECTION (C)



ISOMETRIC

JULIE HEILMAN
STATE OF WASHINGTON
41819
REGISTERED
PROFESSIONAL ENGINEER

Heilman, Julie
Jan 25 2017 2:59 PM

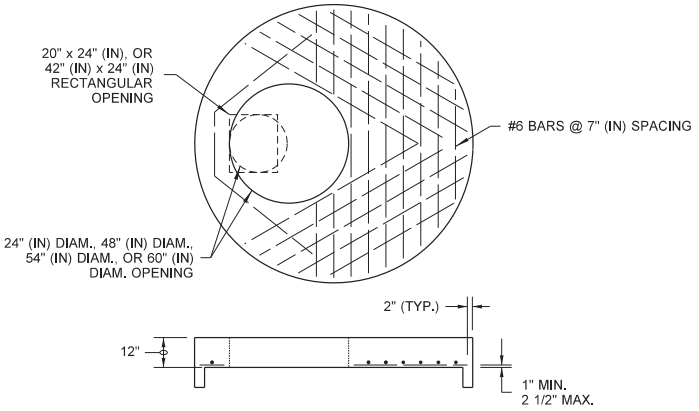
RECTANGULAR SOLID METAL COVER

STANDARD PLAN B-30.20-03

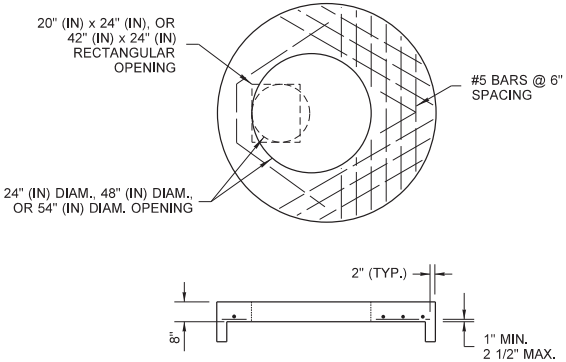
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jan 26 2017 6:51 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

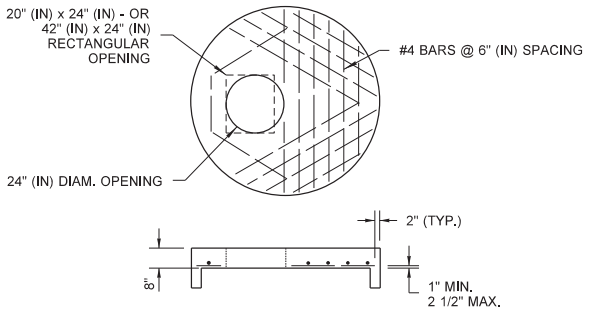
DRAWN BY: FERN LIDDELL



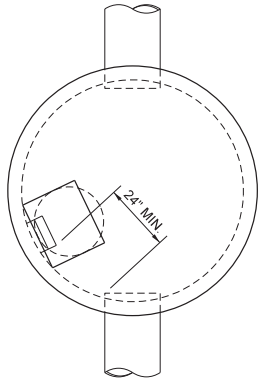
84" (IN) or 96" (IN) FLAT SLAB TOP



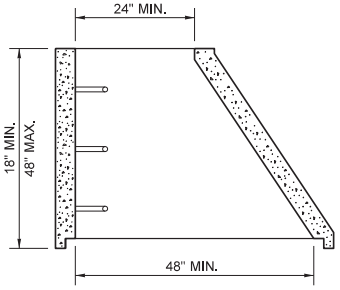
72" (IN) FLAT SLAB TOP



48" (IN), 54", or 60" (IN) FLAT SLAB TOP



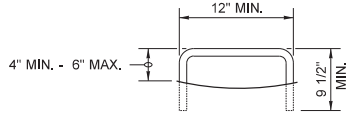
TYPICAL ORIENTATION FOR ACCESS AND STEPS



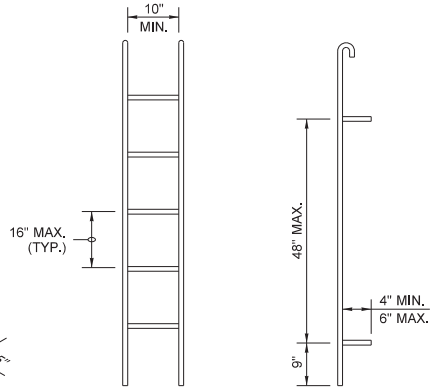
ECCENTRIC CONE SECTION

NOTE

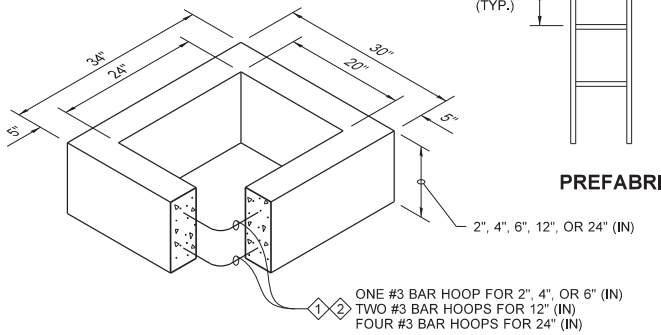
1. Ladder rungs for manholes and catch basins shall meet the requirements of **AASHTO M 199.**



STEP

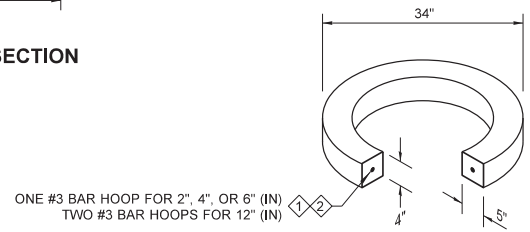


PREFABRICATED LADDER



RECTANGULAR ADJUSTMENT SECTION

1. As an acceptable alternative to rebar, wire mesh having a minimum area of 0.12 square inches per foot may be used for adjustment sections.
2. As an acceptable alternative to conventional steel reinforcment, manufacturers shall use Synthetic Structural Fibers meeting the requirements of **Standard Specification Section 9-05.50(10).**



CIRCULAR ADJUSTMENT SECTION

For rectangular and circular adjustment sections, approved alternate material compositions are acceptable in lieu of precast concrete designs

JULIE HEILMAN
STATE OF WASHINGTON
41819
REGISTERED
PROFESSIONAL ENGINEER

Heilman, Julie
Jan 25 2017 3:01 PM

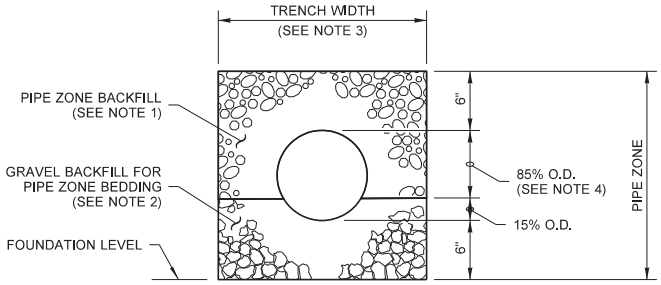
MISCELLANEOUS DETAILS FOR DRAINAGE STRUCTURES STANDARD PLAN B-30.90-02

SHEET 1 OF 1 SHEET

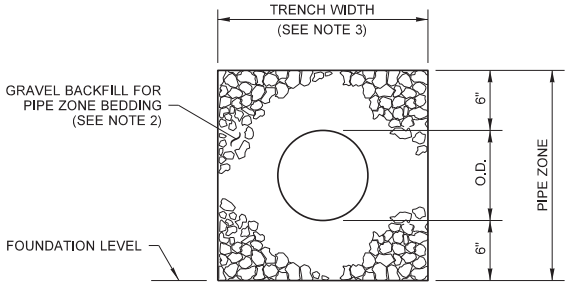
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jan 26 2017 6:52 AM

STATE DESIGN ENGINEER
Washington State Department of Transportation

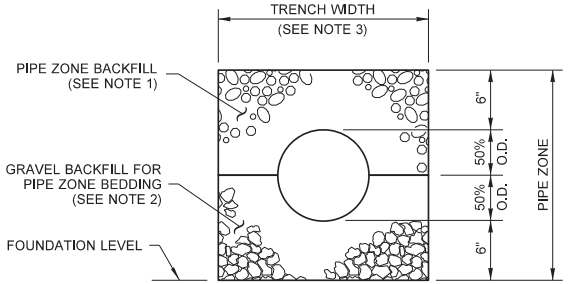
DRAWN BY: FERN LIDDELL



CONCRETE AND DUCTILE IRON PIPE



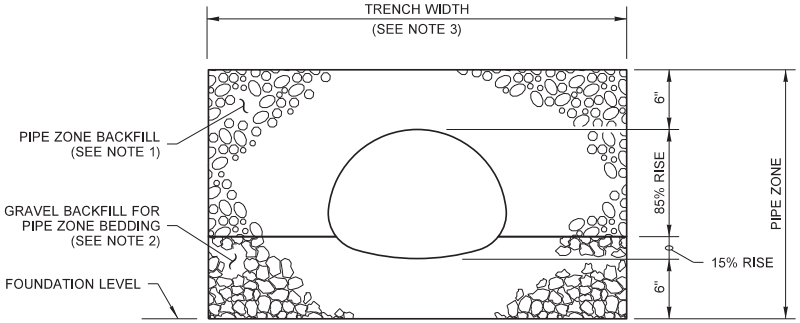
THERMOPLASTIC PIPE



METAL AND STEEL RIB
REINFORCED POLYETHYLENE PIPE

NOTES

1. See **Standard Specifications Section 7-08.3(3)** for Pipe Zone Backfill.
2. See **Standard Specifications Section 9-03.12(3)** for Gravel Backfill for Pipe Zone Bedding.
3. See **Standard Specifications Section 2-09.4** for Measurement of Trench Width.
4. For sanitary sewer installation, concrete pipe shall be bedded to spring line.



PIPE ARCHES

CLEARANCE BETWEEN PIPES FOR MULTIPLE INSTALLATIONS		
PIPE	**SIZE**	**MINIMUM DISTANCE BETWEEN BARRELS**
CIRCULAR PIPE (DIAMETER)	**12" to 24"**	**12"**
	30" to 96"	**DIAM. /2**
	102" to 180"	**48"**
PIPE ARCH (SPAN) METAL ONLY	**18" to 36"**	**12"**
	43" to 142"	**SPAN /3**
	148" to 200"	**48"**

JULIE HEILMAN
STATE OF WASHINGTON
41819
REGISTERED
PROFESSIONAL ENGINEER

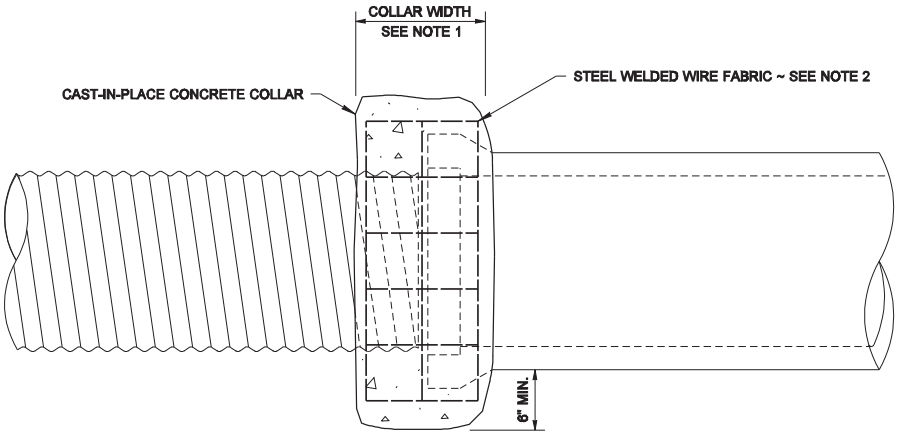
Heilman, Julie
Jan 25 2017 3:01 PM

PIPE ZONE BEDDING AND BACKFILL

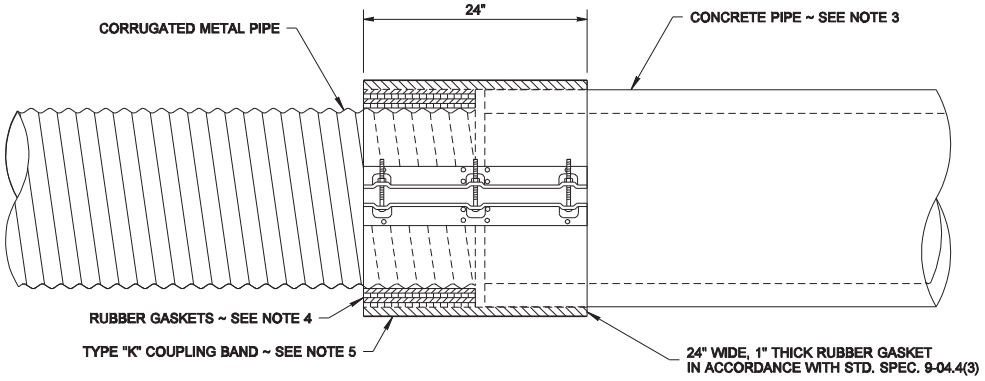
STANDARD PLAN B-55.20-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jan 26 2017 6:53 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



CONCRETE COLLAR OPTION



COUPLING BAND OPTION

NOTES

1. The Concrete Collar width shall be one half of the outside pipe diameter of the largest pipe. The minimum Concrete Collar width shall be 12". Concrete Collars may be used with all pipe materials and diameters. The Concrete Collar option shall only be used to extend existing pipes.

2. Steel Welded Wire Fabric shall be in accordance with Standard Specification 9-07.7. Install two wraps for size 6 × 6 W1.4 × W1.4 (10 Gage) Steel Welded Wire Fabric or one wrap for any of the following sizes:
   6 × 6 W2.1 × W2.1 (8 Gage)
   6 × 6 W2.9 × W2.9 (6 Gage)
   4 × 4 W2.9 × W2.9 (6 Gage)
   4 × 4 W4.0 × W4.0 (4 Gage)

3. When a Coupling Band connection requires attachment to the bell end of a concrete pipe, the bell end of the pipe shall be removed before the connection is installed.

4. Increase the outside diameter of the metal pipe to match the outside diameter of the concrete pipe by installing 12" wide rubber gaskets, thickness as required (Coupling Band only). The rubber gaskets shall be in accordance with Standard Specification 9-04.4(3).

5. Use a flat Type K Coupling Band. Type K Coupling Bands with dimples are not allowed for the installation detail shown. The Coupling Band option shall only be used for extending existing pipes that have an inside diameter of 36" or less.

EXPIRES JULY 1, 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.

CONNECTION DETAILS FOR DISSIMILAR CULVERT PIPE

STANDARD PLAN B-60.20-00

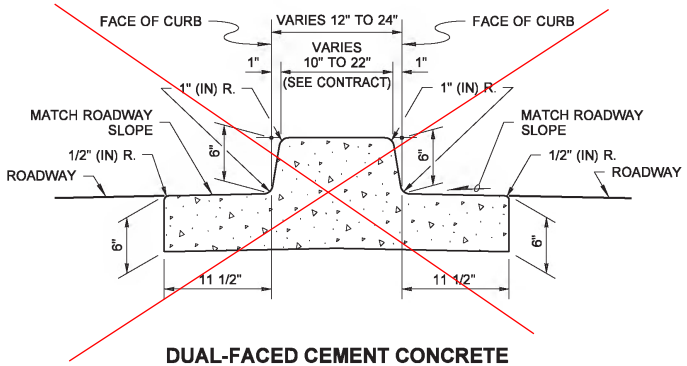
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

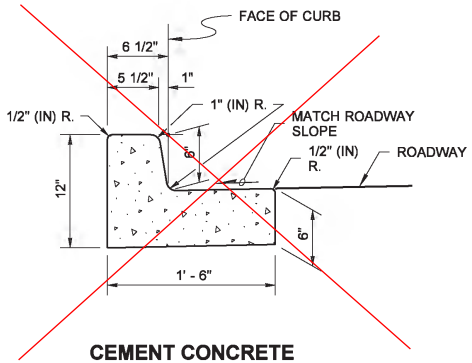
Harold J. Peterfeso *06-08-06*

STATE DESIGN ENGINEER — DATE

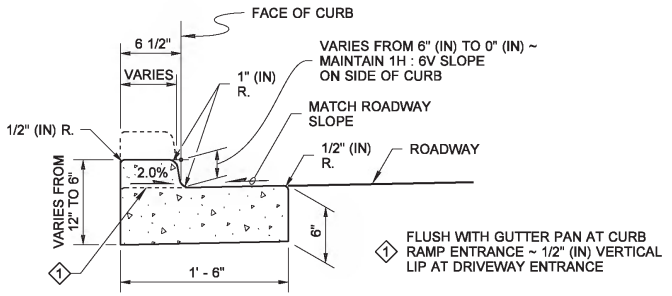
Washington State Department of Transportation



DUAL-FACED CEMENT CONCRETE TRAFFIC CURB AND GUTTER

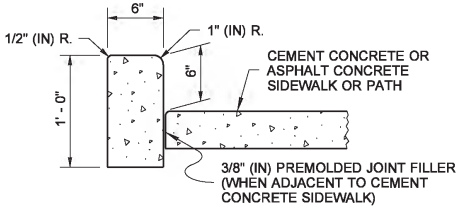


CEMENT CONCRETE TRAFFIC CURB AND GUTTER

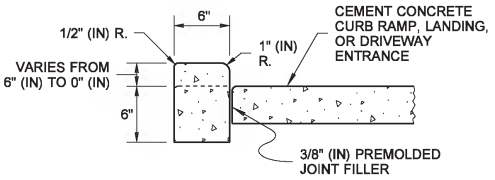


DEPRESSED CURB SECTION

AT CURB RAMPS AND DRIVEWAY ENTRANCES



CEMENT CONCRETE PEDESTRIAN CURB

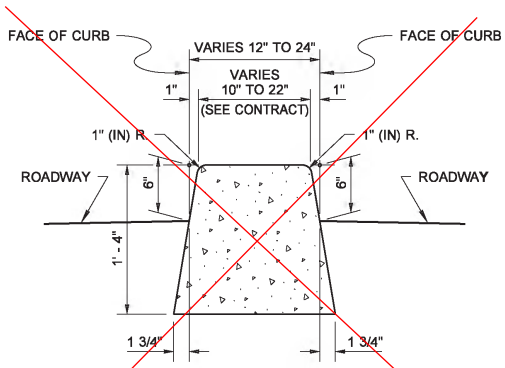


CEMENT CONCRETE PEDESTRIAN CURB

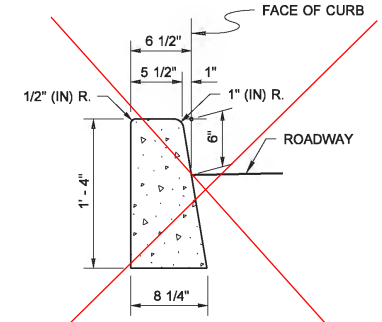
AT CURB RAMPS, LANDINGS, AND DRIVEWAY ENTRANCES

NOTE

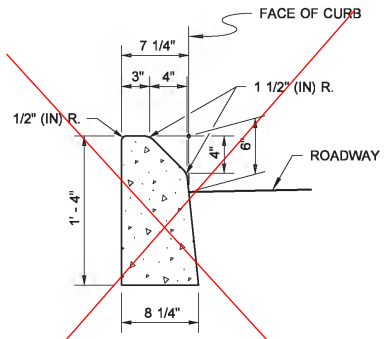
1. See **Standard Plan F-30.10** for Curb Expansion and Contraction Joint spacing and see **Standard Specification Sections 8-04 and 9-04** for additional requirements.



DUAL-FACED CEMENT CONCRETE TRAFFIC CURB



CEMENT CONCRETE TRAFFIC CURB



MOUNTABLE CEMENT CONCRETE TRAFFIC CURB

DRAWN BY: FERN LIDDELL

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED
PROFESSIONAL ENGINEER

Barry, Ed
May 6 2014 3:31 PM

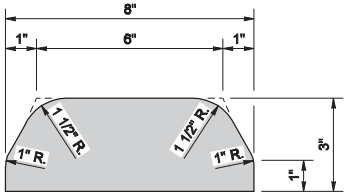
CEMENT CONCRETE CURBS

STANDARD PLAN F-10.12-03

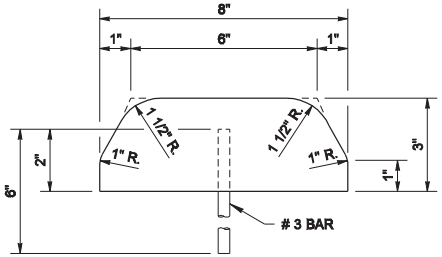
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 11 2014 1:25 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

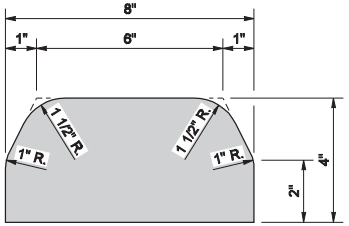
DRAWN BY: BILL BERENS



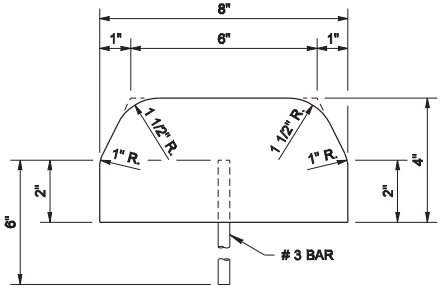
TYPE 1
(HOT MIX ASPHALT)



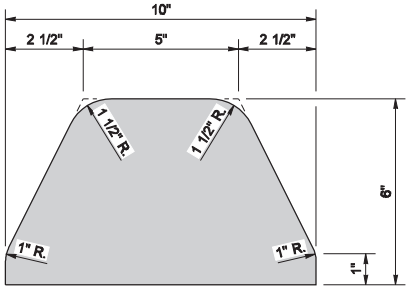
TYPE 4
(CEMENT CONCRETE)



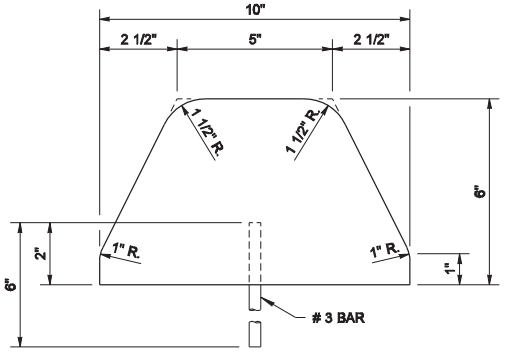
TYPE 2
(HOT MIX ASPHALT)



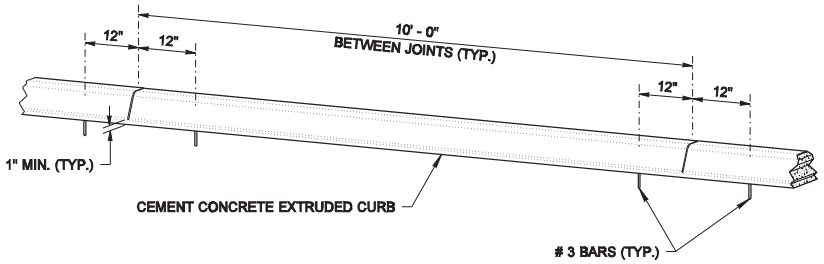
TYPE 5
(CEMENT CONCRETE)



TYPE 3
(HOT MIX ASPHALT)



TYPE 6
(CEMENT CONCRETE)



SPACING OF ANCHOR BARS
(FOR TYPES 4, 5, AND 6)

NOTE

JOINTS MAY BE FORMED DURING INSTALLATION USING A RIGID DIVIDER OR SAWCUT AFTER CONCRETE CURES TO MINIMUM STRENGTH.

KEN LEROY SMITH
STATE OF WASHINGTON
31805
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES AUGUST 26, 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.

EXTRUDED CURB

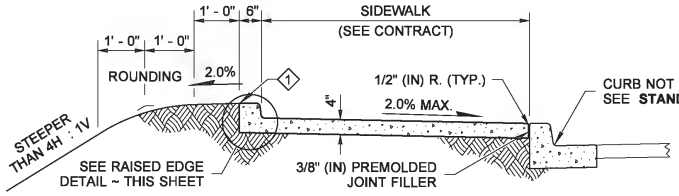
STANDARD PLAN F-10.42-00

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

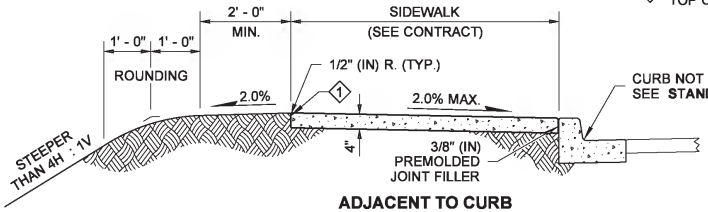
Ken L. Smith — STATE DESIGN ENGINEER
01-23-07 — DATE

Washington State Department of Transportation

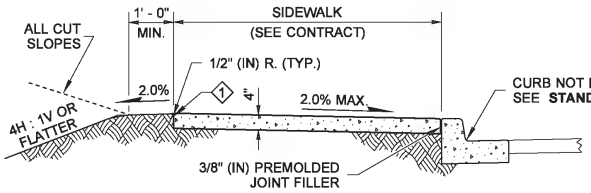


WITH RAISED EDGE

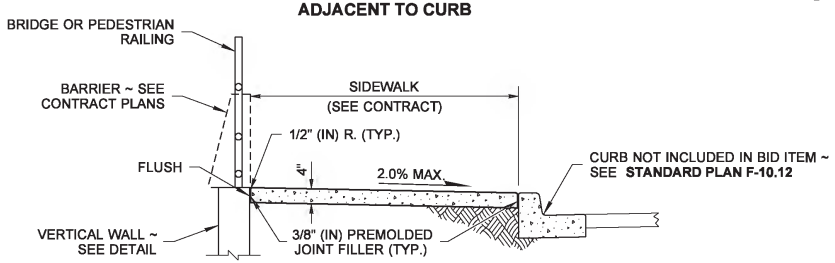
1 FINISHED GRADE 1" (IN) BELOW TOP OF CONCRETE SURFACE



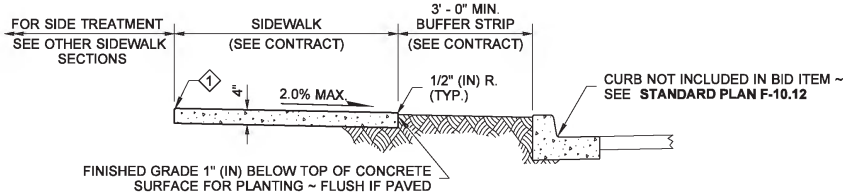
ADJACENT TO CURB
(STEEP FILL SLOPES)



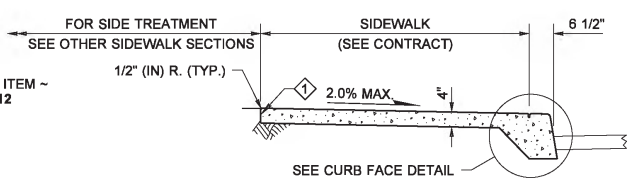
ADJACENT TO CURB



ADJACENT TO CURB AND RAILING OR WALL



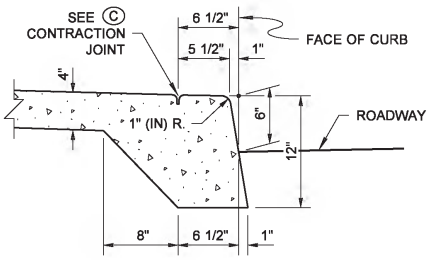
ADJACENT TO BUFFER STRIP



MONOLITHIC CEMENT CONCRETE CURB AND SIDEWALK

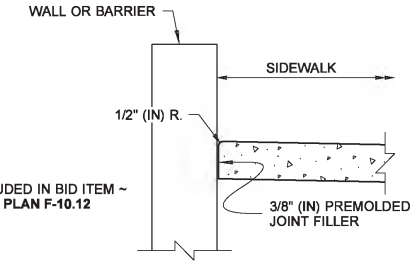
NOTE

1. Four feet of the sidewalk width shall be the minimum pedestrian accessible route free of vertical and horizontal obstructions. Gratings, Access Covers, Junction Boxes, Cable Vaults, Pull Boxes and other appurtenances within the sidewalk must have slip resistant surfaces, be flush with surface, and match grade of the sidewalk.

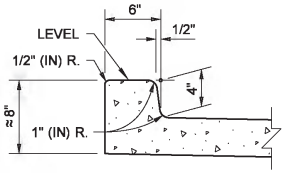


CURB FACE DETAIL

EXTEND SIDEWALK TRANSVERSE EXPANSION JOINTS TO INCLUDE CURB (FULL DEPTH)

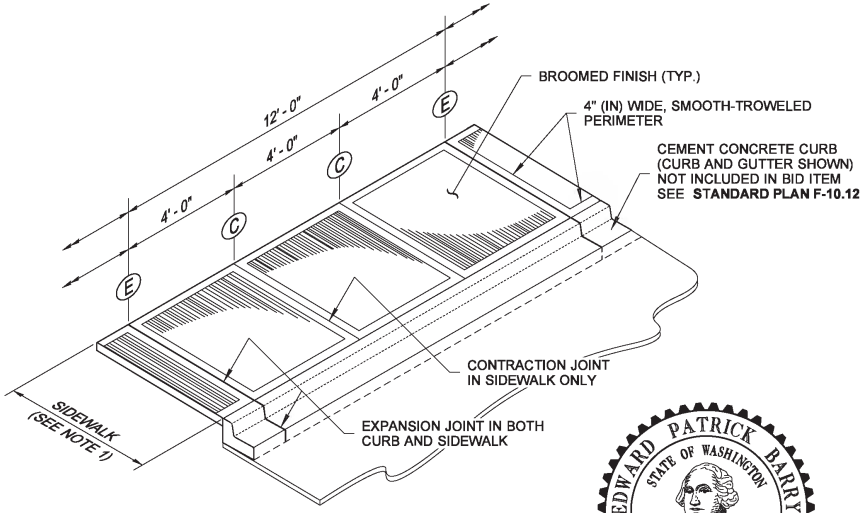


SIDEWALK ADJACENT TO WALL DETAIL



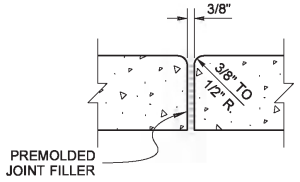
RAISED EDGE DETAIL

EXTEND SIDEWALK TRANSVERSE JOINTS TO INCLUDE RAISED EDGE

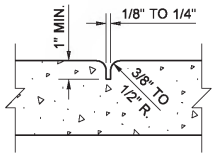


ISOMETRIC VIEW

JOINT AND FINISH DETAIL



E EXPANSION JOINT



C CONTRACTION JOINT

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED
PROFESSIONAL ENGINEER

Barry, Ed
May 6 2014 3:41 PM

CEMENT CONCRETE SIDEWALK

STANDARD PLAN F-30.10-03

SHEET 1 OF 1 SHEET

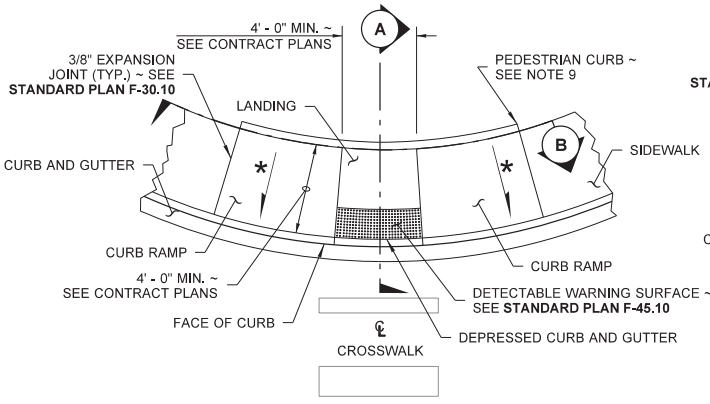
APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 11 2014 1:25 PM

STATE DESIGN ENGINEER

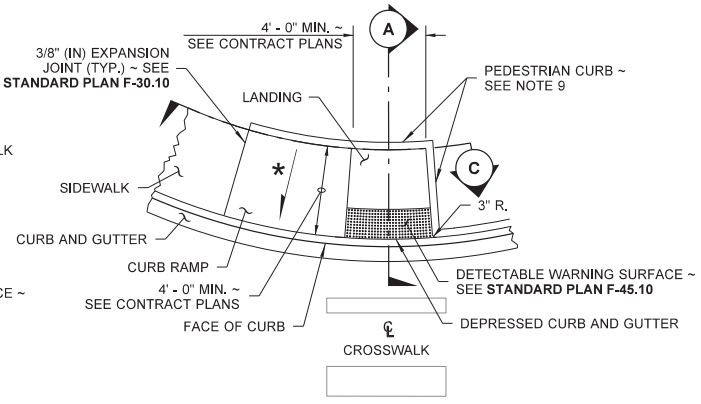
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

DRAWN BY: FERN LIDDELL

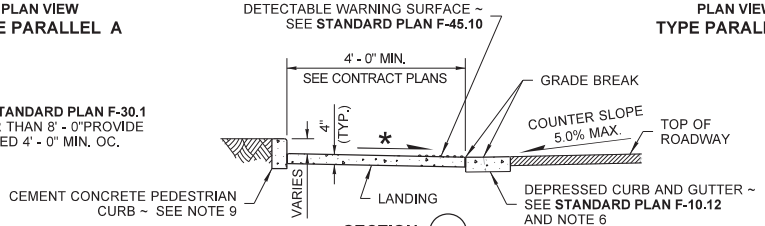


PLAN VIEW
TYPE PARALLEL A

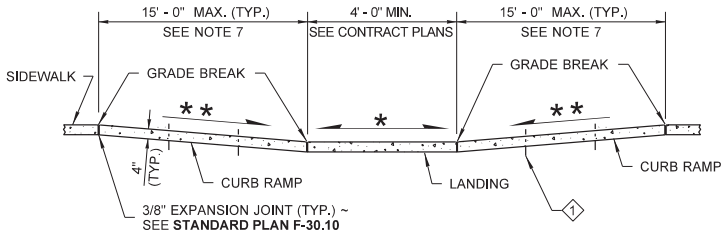


PLAN VIEW
TYPE PARALLEL B

1 CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.1** FOR CURB RAMP LENGTHS GREATER THAN 8' - 0"PROVIDE CONTRACTION JOINT EQUALLY SPACED 4' - 0" MIN. OC.

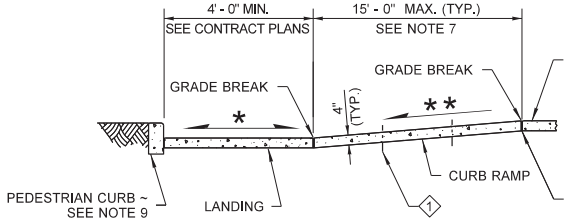


SECTION (A)



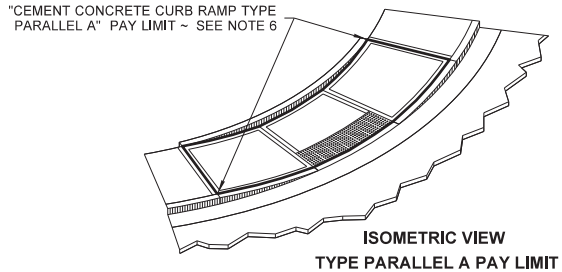
SECTION (B)

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)

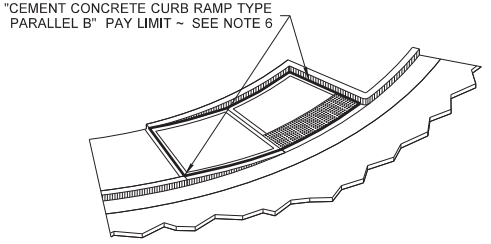


SECTION (C)

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)



ISOMETRIC VIEW
TYPE PARALLEL A PAY LIMIT



ISOMETRIC VIEW
TYPE PARALLEL B PAY LIMIT

NOTES

1. At marked crosswalks, the connection between the landing and the roadway must be contained within the width of the crosswalk markings.
2. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
3. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the Landing connects to the roadway.
4. See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
5. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
6. The Bid Item "Cement Concrete Curb Ramp Type __" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
7. The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include abutting landing(s) in the15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
8. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14.**
9. Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.

LEGEND

◁▷	SLOPE IN EITHER DIRECTION
*	1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
* *	7.5% OR FLATTER RECOMMENDED FOR DESIGN/ FORMWORK (8.3% MAX.) ~ SEE NOTE 7

R. SCOTT ZELLER
STATE OF WASHINGTON
28680
REGISTERED
PROFESSIONAL ENGINEER

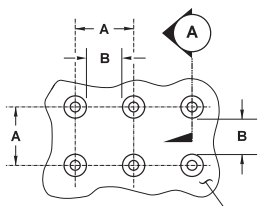
Zeller, Scott
Jun 24 2016 7:19 AM

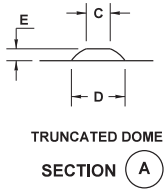
PARALLEL CURB RAMP

STANDARD PLAN F-40.12-03

SHEET 1 OF 1 SHEET

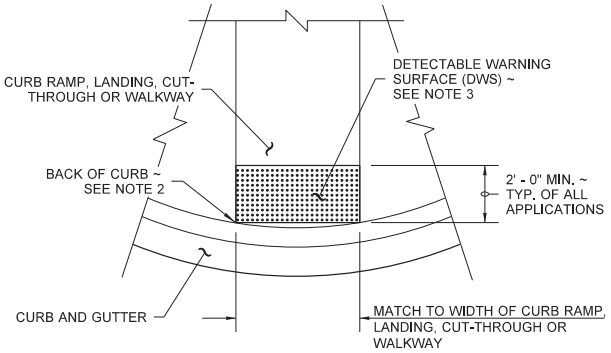
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 29 2016 2:27 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation





	MIN.	MAX.
A	1.60"	2.40"
B	0.65"	—
C	0.45"	0.90"
D	0.9"	1.40"
E	0.2"	0.2"

TRUNCATED DOME DETAILS

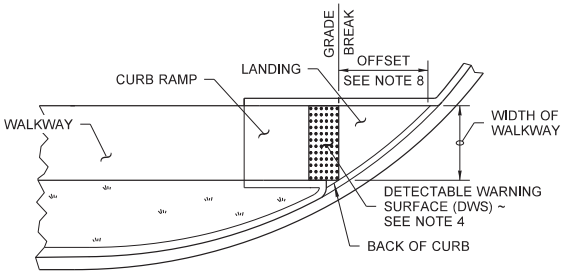


DETECTABLE WARNING SURFACE DETAIL

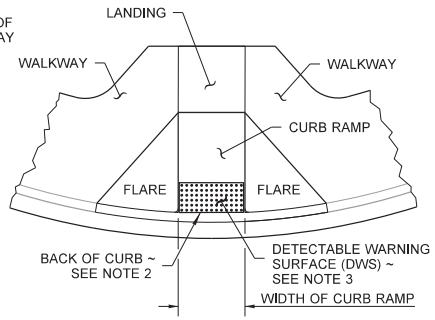
NOTES

1. The Detectable Warning Surface (DWS) shall extend the full width of the curb ramp, landing, or other roadway entrance as applicable. Exception: If the Manufacturer of the DWS requires a concrete border around the DWS, a variance of up to 2 inches on each side of the DWS is permitted.
2. The Detectable Warning Surface (DWS) shall be placed at the back of curb, with the two leading corners of the DWS panel placed adjacent to the back of the curb, and with no more than a 2 inch gap between the DWS and the back of the curb measured at the center of the DWS panel. Exception: If the Manufacturer of the selected DWS requires a concrete border around the DWS, a variance of up to 2 inches from the back of the curb is permitted (measured at the leading corners of the DWS panel).
3. The rows of truncated domes shall be aligned to be perpendicular to the grade break at the back of curb.
4. The rows of truncated domes shall be aligned to be parallel to the direction of travel.
5. If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
6. See **Standard Plans** for sidewalk and curb ramp details.
7. If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail.
8. When the grade break between the curb ramp and the landing is less than or equal to 5 ft. from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp directly above the grade break.

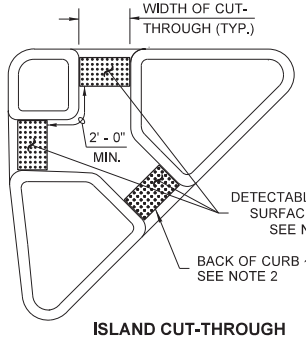
DRAWN BY: FERN LIDDELL



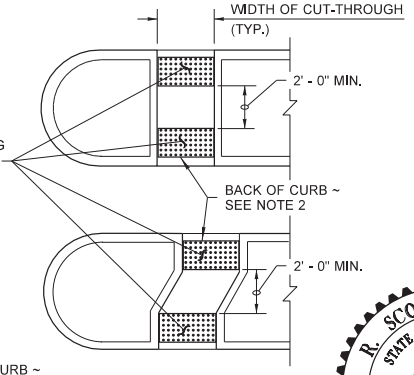
SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING ≤ 5 FT. FROM BACK OF CURB)
(SEE NOTE 6)



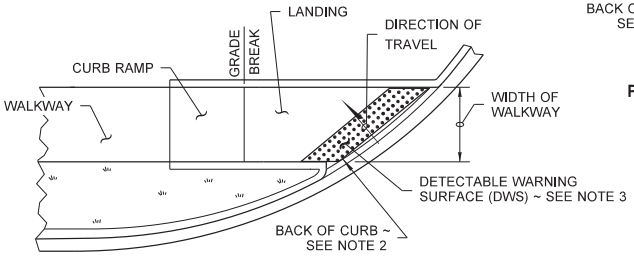
PERPENDICULAR CURB RAMP
(SEE NOTE 6)



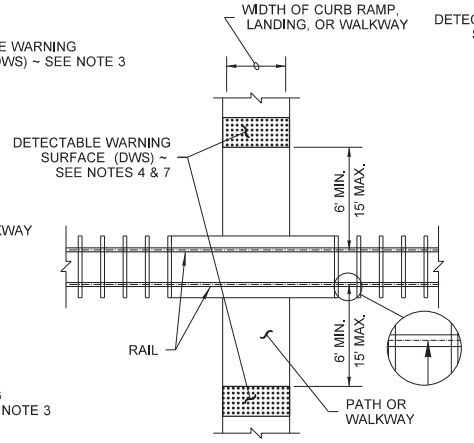
ISLAND CUT-THROUGH



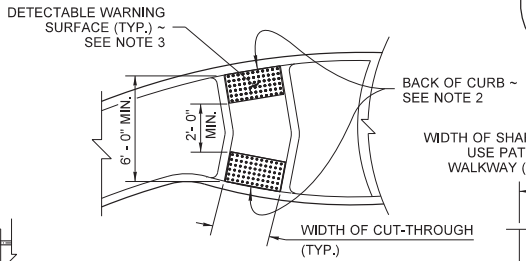
MEDIAN CUT-THROUGH



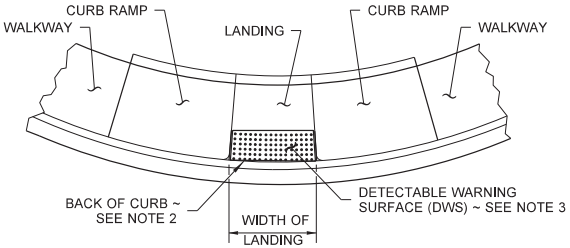
SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING > 5 FT. FROM BACK OF CURB)
(SEE NOTE 6)



PEDESTRIAN RAILROAD CROSSING

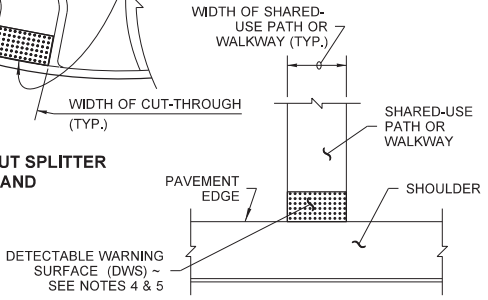


ROUNDABOUT SPLITTER ISLAND



PARALLEL CURB RAMP
(SEE NOTE 6)

PLACEMENT GUIDELINES



SHARED-USE PATH CONNECTION

R. SCOTT ZELLER
STATE OF WASHINGTON
28680
REGISTERED
PROFESSIONAL ENGINEER

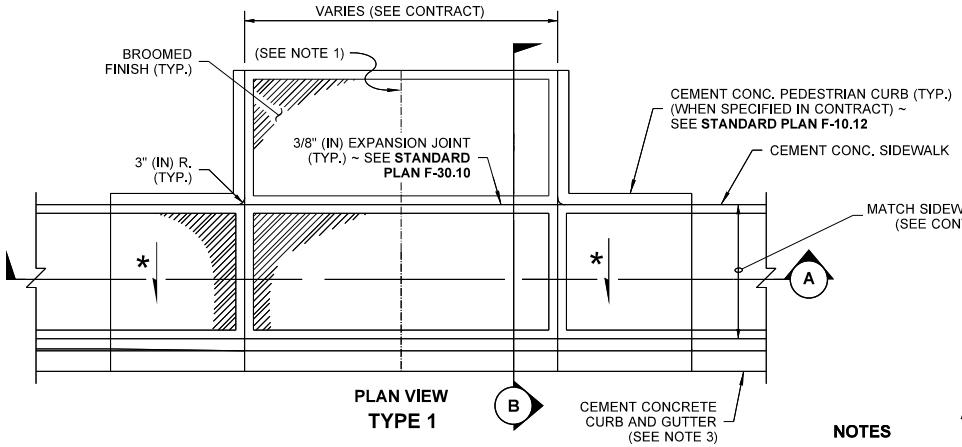
Zeller, Scott
Jul 12 2016 4:25 PM

DETECTABLE WARNING SURFACE

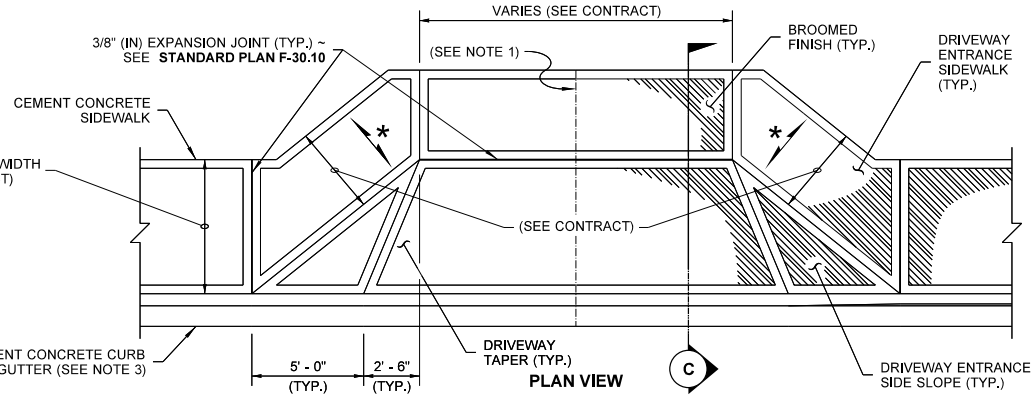
STANDARD PLAN F-45.10-02

SHEET 1 OF 1 SHEET

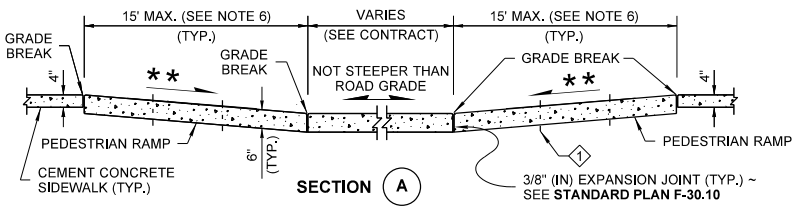
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 15 2016 2:26 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation



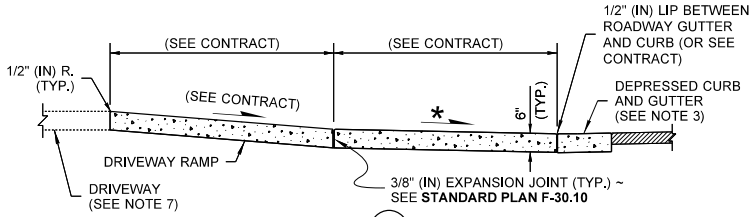
PLAN VIEW
TYPE 1



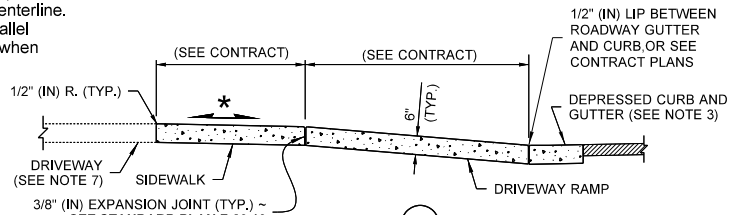
PLAN VIEW
TYPE 2



SECTION (A)



SECTION (B)



SECTION (C)

NOTES

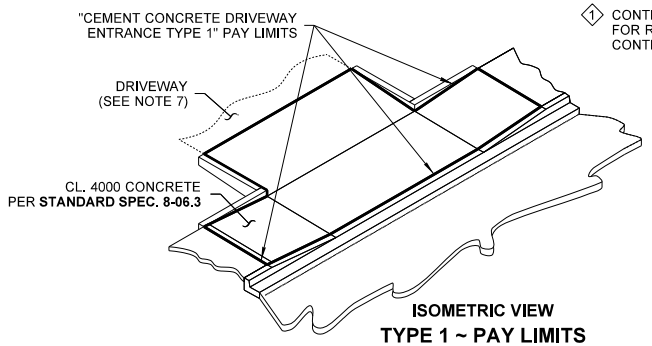
1. When the driveway width exceeds 15' (ft), construct a full depth expansion joint with 3/8" (in) joint filler along the driveway centerline. See **Standard Plan F-30.10.** Construct expansion joints parallel with the centerline as required at 15' (ft) maximum spacing when driveway widths exceed 30' (ft).
2. See **Standard Plan F-30.10** for sidewalk details.
3. Curb and Gutter shown; see the Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb Details.
4. Avoid placing drainage structures, junction boxes or other obstructions in front of driveway entrances.
5. Where "GRADE BREAK" is called out, the entire length of the line between the two adjacent surface planes shall be flush.
6. The Pedestrian Ramp length is not required to exceed15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length (measured from back of sidewalk) the running slope of the pedestrian ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet.
7. Beyond limits shown. Pay item does not include driveway. See Contract Plans.

LEGEND

SLOPE IN EITHER DIRECTION

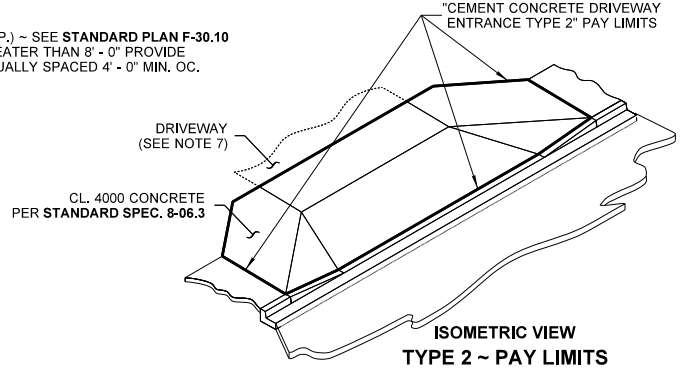
* 1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)

** 7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.) (SEE NOTE 6)



ISOMETRIC VIEW
TYPE 1 ~ PAY LIMITS

1 CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.10** FOR RAMP LENGTHS GREATER THAN 8' - 0" PROVIDE CONTRACTION JOINT EQUALLY SPACED 4' - 0" MIN. OC.



ISOMETRIC VIEW
TYPE 2 ~ PAY LIMITS

DRAWN BY: FERN LIDDELL

R. SCOTT ZELLER — STATE OF WASHINGTON — 28680 — REGISTERED PROFESSIONAL ENGINEER

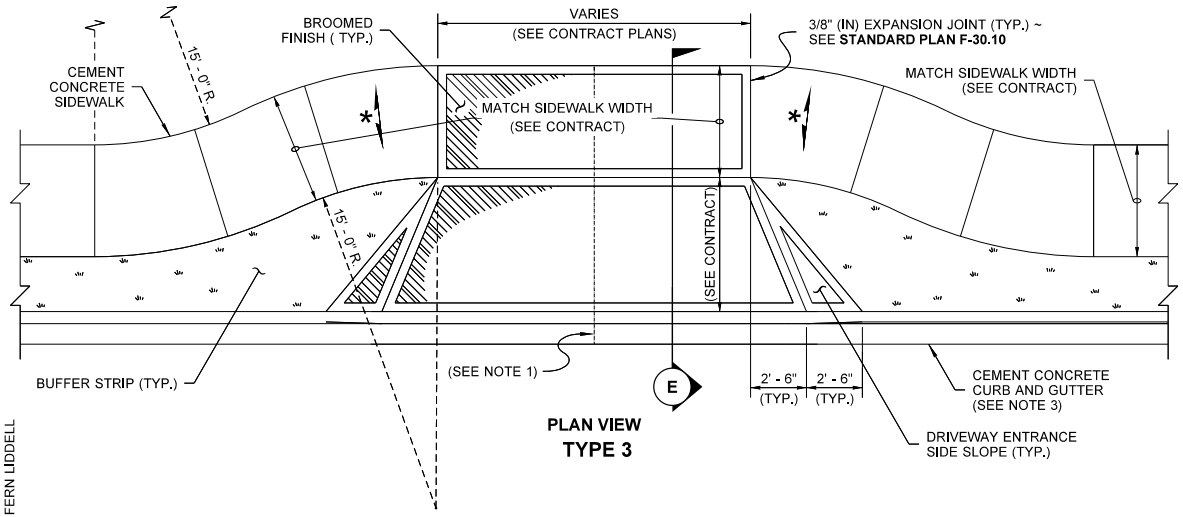
Zeller, Scott
Jul 12 2016 4:26 PM

CEMENT CONCRETE DRIVEWAY ENTRANCE TYPES 1, 2, 3, & 4

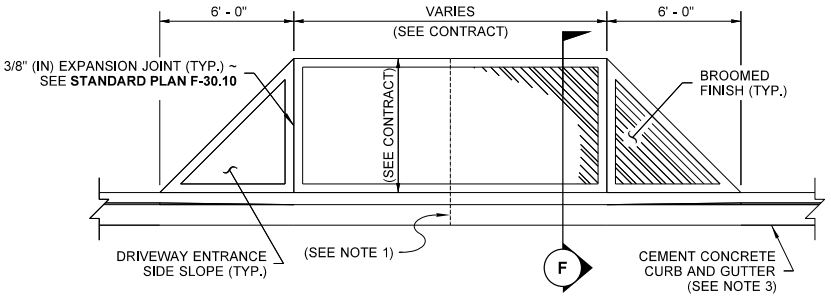
STANDARD PLAN F-80.10-04

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 15 2016 2:27 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

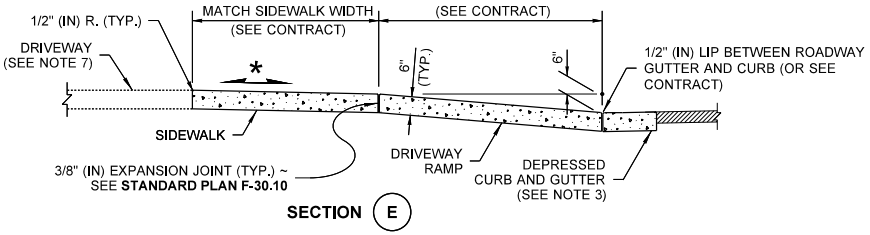


PLAN VIEW
TYPE 3

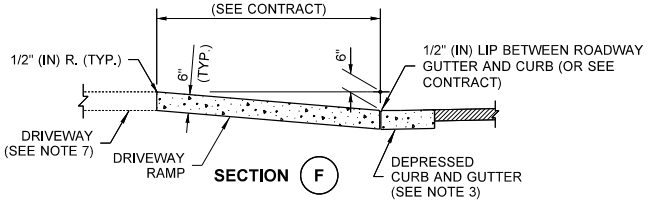


PLAN VIEW
TYPE 4 *

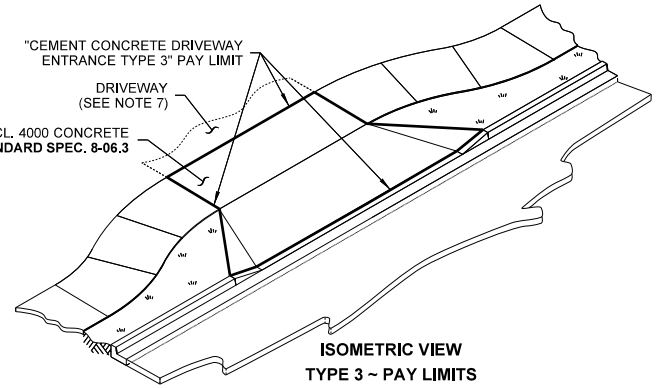
* THIS ENTRANCE TYPE SHALL NOT BE USED ALONG A PEDESTRIAN ROUTE



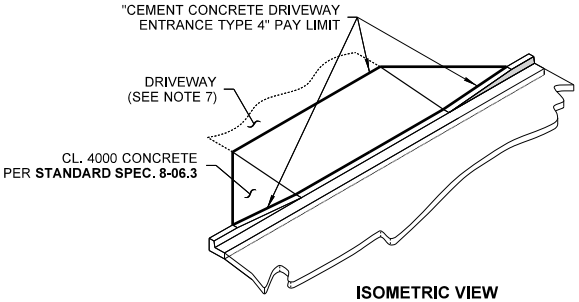
SECTION (E)



SECTION (F)



ISOMETRIC VIEW
TYPE 3 ~ PAY LIMITS



ISOMETRIC VIEW
TYPE 4 ~ PAY LIMITS

DRAWN BY: FERN LIDDELL

R. SCOTT ZELLER
STATE OF WASHINGTON
28680
REGISTERED
PROFESSIONAL ENGINEER

Zeller, Scott
Jul 18 2016 7:07 AM

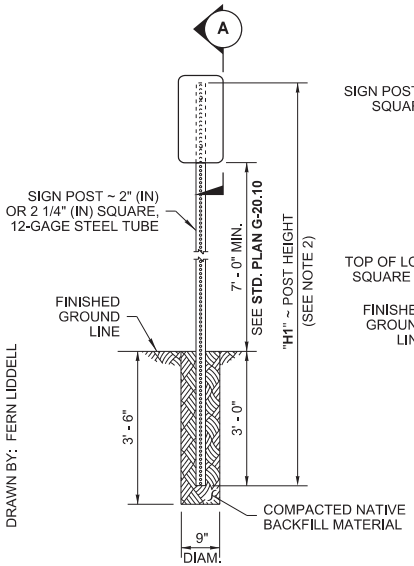
CEMENT CONCRETE DRIVEWAY ENTRANCE TYPES 1, 2, 3, & 4

STANDARD PLAN F-80.10-04

SHEET 2 OF 2 SHEETS

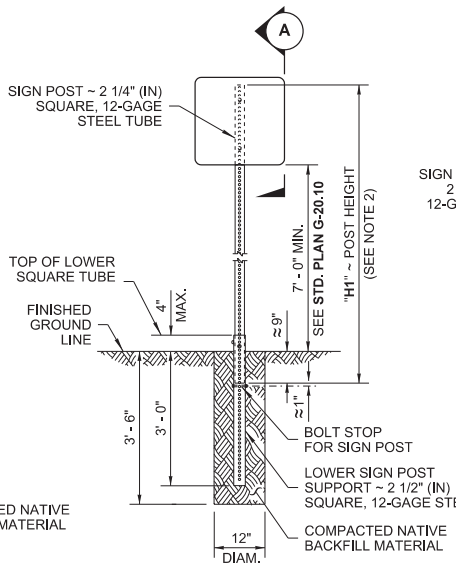
APPROVED FOR PUBLICATION
Carpenter, Jeff
Carpenter, Jeff
Jul 18 2016 12:22 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



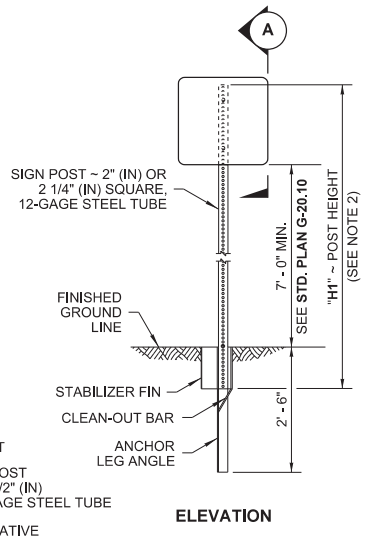
ELEVATION

TYPE ST-1 SIGN SUPPORT



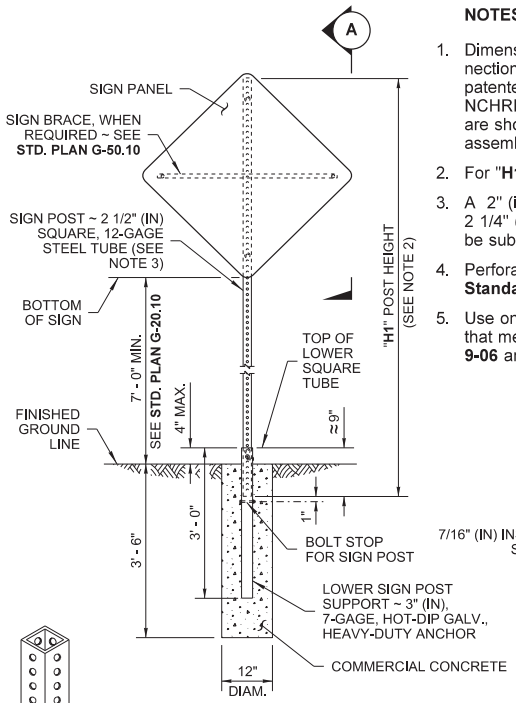
ELEVATION

TYPE ST-2 SIGN SUPPORT



ELEVATION

TYPE ST-3 SIGN SUPPORT

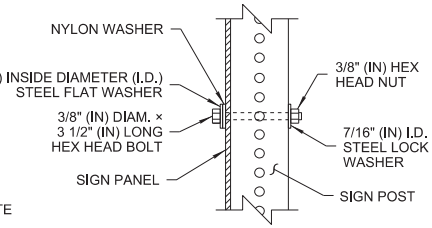


ELEVATION

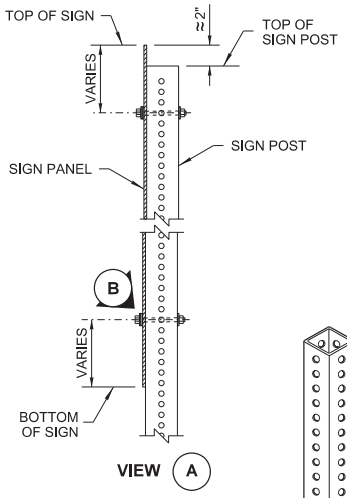
TYPE ST-4 SIGN SUPPORT

NOTES

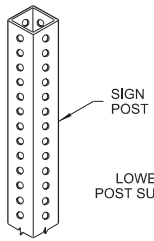
1. Dimensions for the parts used to assemble the base connections are intentionally not shown. Base connections are patented, manufactured products that are in compliance with NCHRP 350 crash test criteria. The base connection details are shown on this plan only to illustrate how the parts are assembled.
2. For "**H1**", refer to the Sign Specification Sheet in the Contract.
3. A 2" (in) post with a 2 1/4" (in) PSST anchor or a 2 1/4" (in) post with a 2 1/2" (in) PSST anchor may be substituted. See Contract Plans.
4. Perforated square steel post shall meet the requirements of **Standard Specification 9-06**.
5. Use only base connection manufacturer supplied hardware that meets the requirements of **Standard Specifications 9-06** and **9-28**.



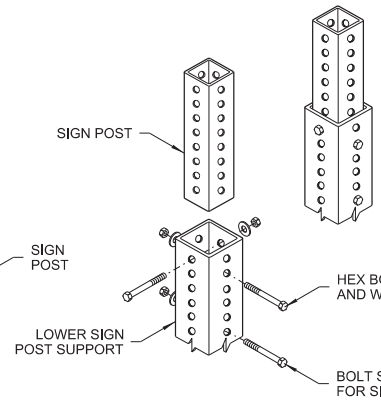
DETAIL B



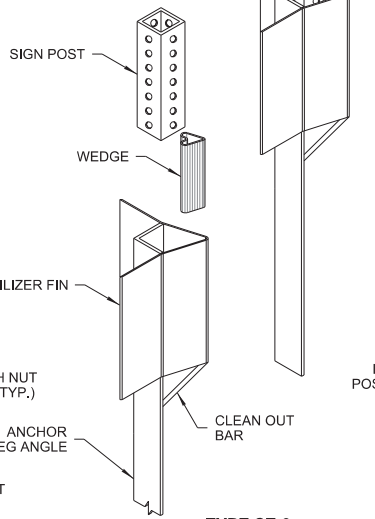
VIEW A



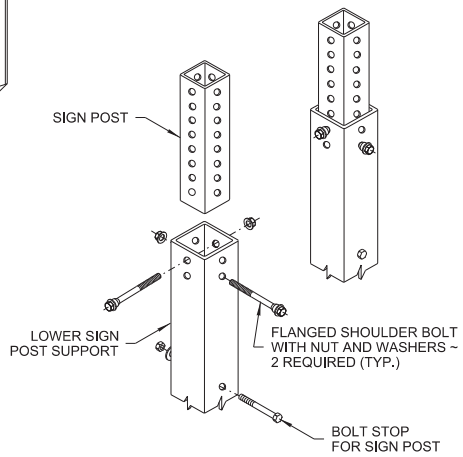
TYPE ST-1



TYPE ST-2



TYPE ST-3



TYPE ST-4

JOHN C. NISBET
STATE OF WASHINGTON
29115
REGISTERED
PROFESSIONAL ENGINEER

Nisbet, John
Jun 27 2017 3:24 PM

STEEL SIGN SUPPORT TYPES ST-1 - ST-4 INSTALLATION DETAILS

STANDARD PLAN G-24.50-04

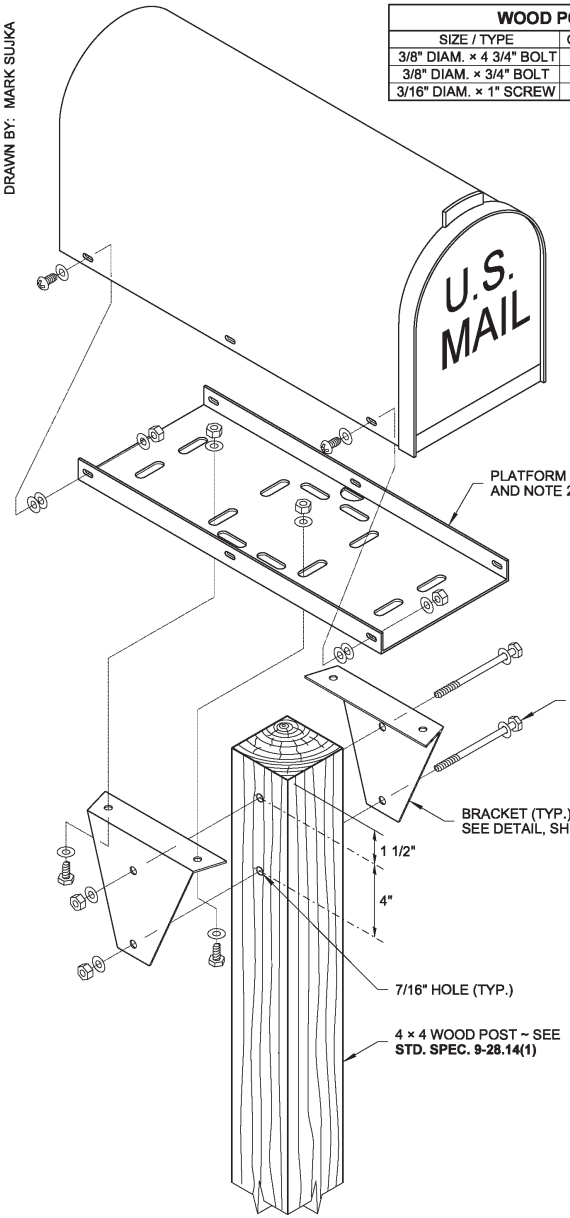
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 11 2017 1:21 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: MARK SUJKA

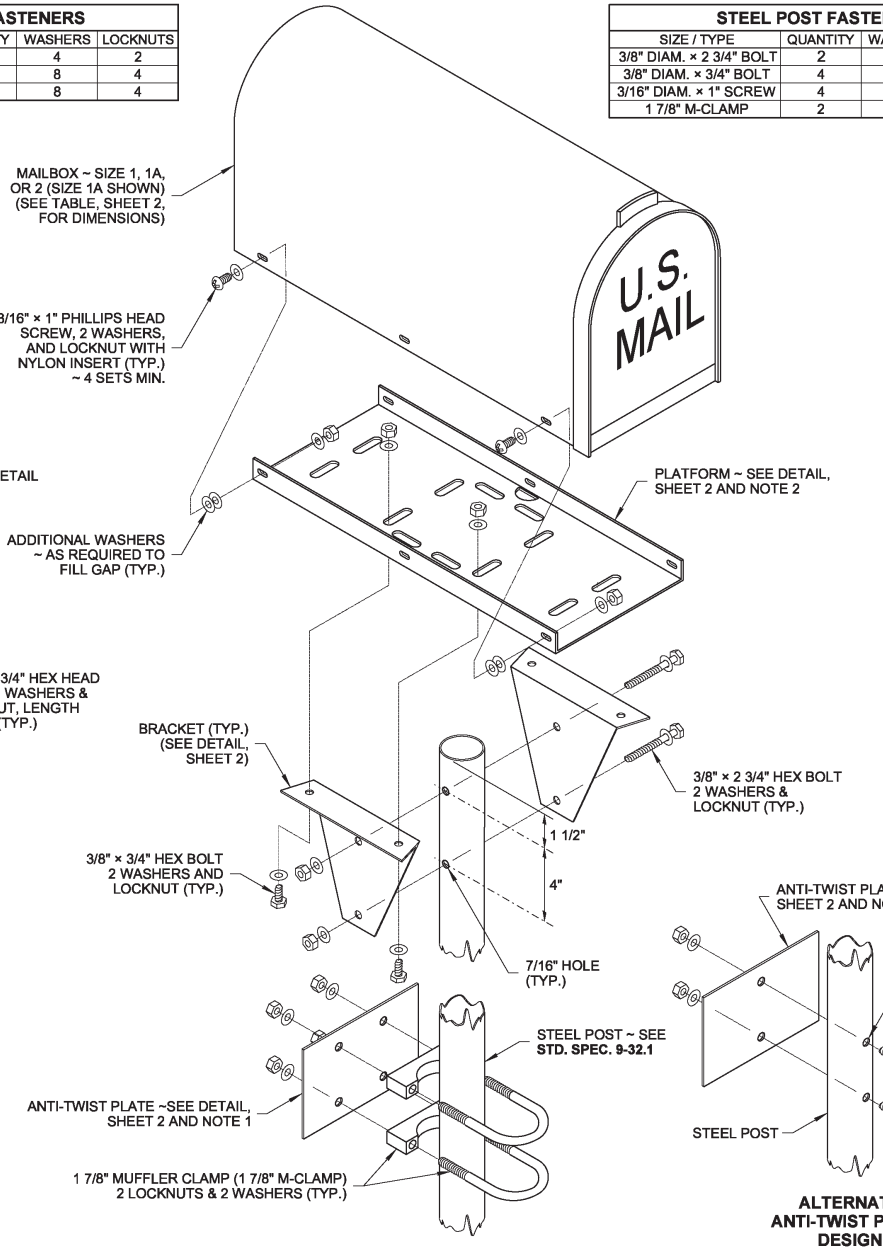
WOOD POST FASTENERS			
SIZE / TYPE	QUANTITY	WASHERS	LOCKNUTS
3/8" DIAM. × 4 3/4" BOLT	2	4	2
3/8" DIAM. × 3/4" BOLT	4	8	4
3/16" DIAM. × 1" SCREW	4	8	4

STEEL POST FASTENERS			
SIZE / TYPE	QUANTITY	WASHERS	LOCKNUTS
3/8" DIAM. × 2 3/4" BOLT	2	4	2
3/8" DIAM. × 3/4" BOLT	4	8	4
3/16" DIAM. × 1" SCREW	4	8	4
1 7/8" M-CLAMP	2	4	4

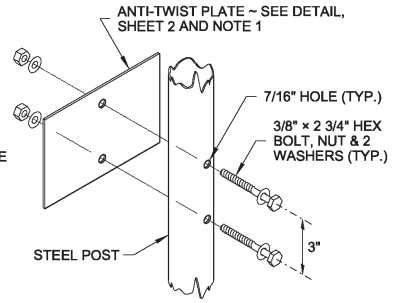


WOOD POST ASSEMBLY DETAIL

SEE **STEEL POST ASSEMBLY DETAIL** FOR SPECIFICATIONS NOT SHOWN



STEEL POST ASSEMBLY DETAIL



ALTERNATE ANTI-TWIST PLATE DESIGN

NOTES

1. A socket and wedge anchoring system that meets the NCHRP 350 crash test criteria may be substituted in lieu of the anti-twist plate designs shown. Anti-twist plates are not required for wood post installations.
2. The platform design shown on this plan features slots that accommodate several types of mailbox supports; only those slots necessary for assembling the type being installed are required. An adjustable platform may be used in lieu of this design, but it must fit the bracket design shown on this plan. Brackets are required for all single-post installations. Field drilling may be necessary.
3. Center the mailbox on the platform to ensure space for the mailbox door to open and to allow space for installing the fasteners (see ALIGNMENT DETAIL, Sheet 2). Spacing of mailbox mounting holes varies among manufacturers. Attachment of the mailbox to the platform may require drilling additional holes through the mailbox to fit the platform.
4. Attach a newspaper box to a steel post with two 1 7/8" Muffler Clamps spaced 4" apart. Field drill 7/16" holes in the newspaper box to fit. Use 2 1/2" × 1/4" lag bolts to attach newspaper boxes to wood posts. Newspaper boxes must not extend beyond the front of the mailbox when the mailbox door is closed.
5. A Type 2 Support **(Standard Plan H-70.20)** is required when 2 or more mailboxes are to be installed on one support.

MAILBOX SUPPORT TYPE 1

STANDARD PLAN H-70.10-01

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

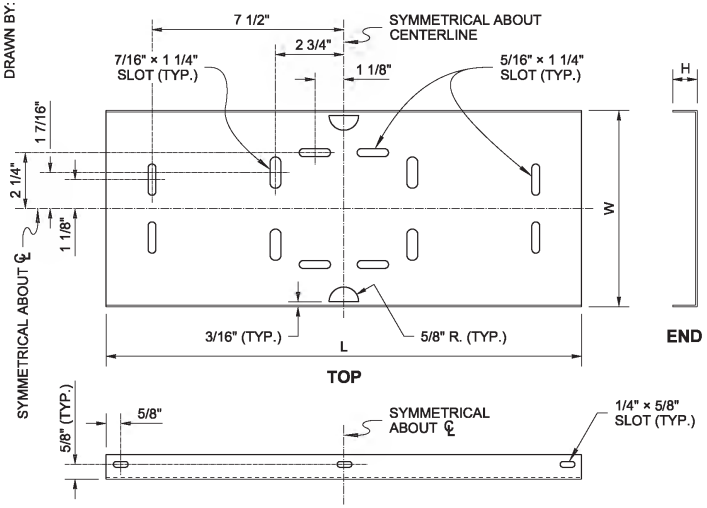
Pasco Bakotich III — STATE DESIGN ENGINEER

02-07-12 — DATE

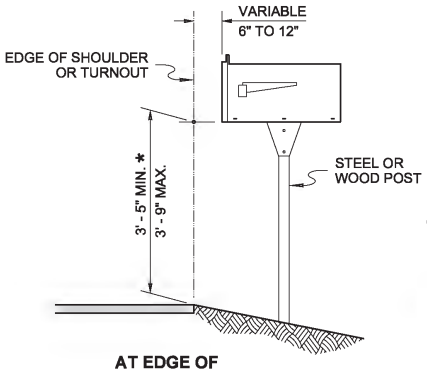
Washington State Department of Transportation

DRAWN BY: MARK SUJKA

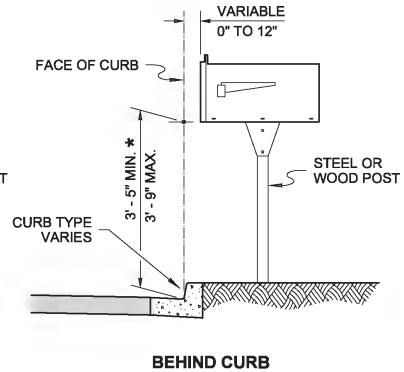
MAILBOX & PLATFORM DIMENSIONS						
SIZE	MAILBOX DIMENSIONS			PLATFORM DIMENSIONS		
	L	W	H	L	W	H
1	19"	6 1/2"	8 1/2"	17"	6"	1"
1A	21"	8"	10 1/2"	19"	7 1/2"	1"
2	24"	11 1/2"	13 1/2"	21"	11"	1"



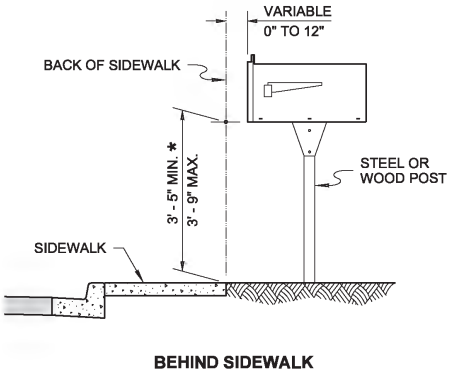
PLATFORM DETAIL



AT EDGE OF SHOULDER



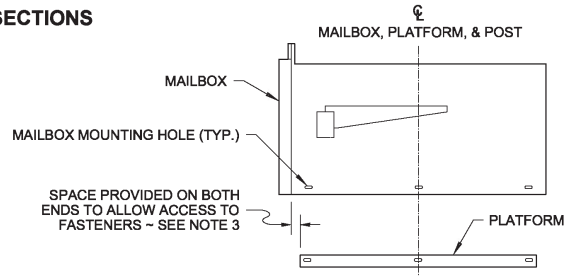
BEHIND CURB



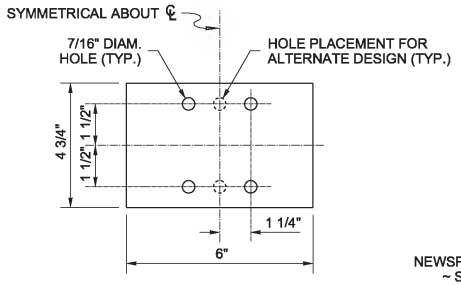
BEHIND SIDEWALK

* UNLESS OTHERWISE SHOWN IN THE PLANS

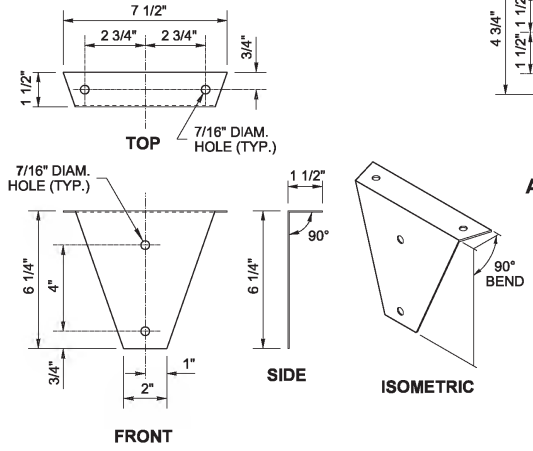
MAILBOX PLACEMENT SECTIONS



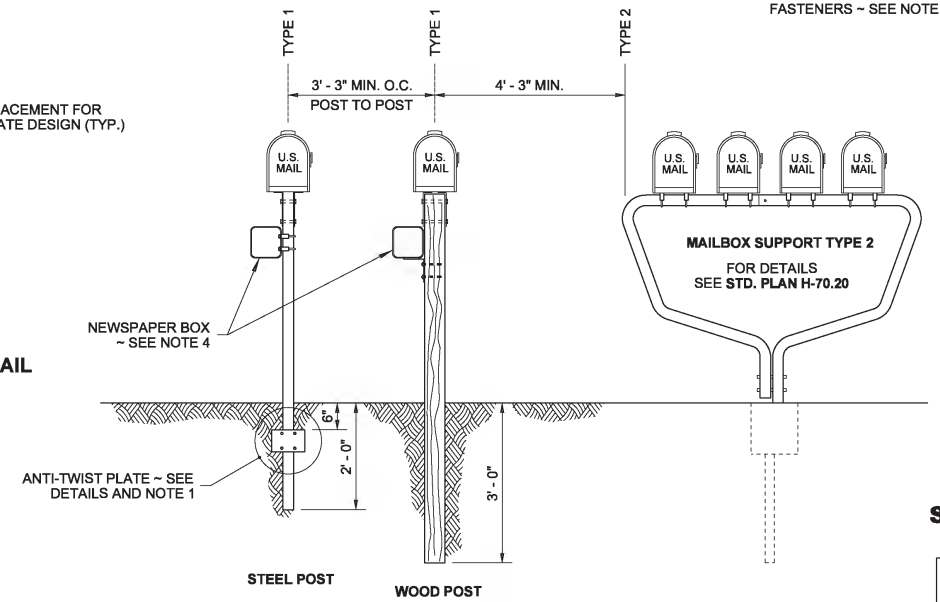
ALIGNMENT DETAIL



ANTI-TWIST PLATE DETAIL



BRACKET DETAIL



POST PLACEMENT DETAIL

BAKOTICH, PASCO III
STATE OF WASHINGTON
24557
REGISTERED
PROFESSIONAL ENGINEER

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.

MAILBOX SUPPORT TYPE 1

STANDARD PLAN H-70.10-01

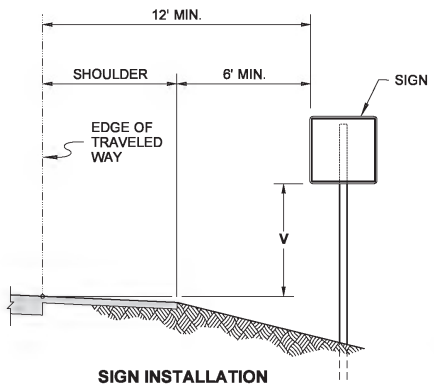
SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

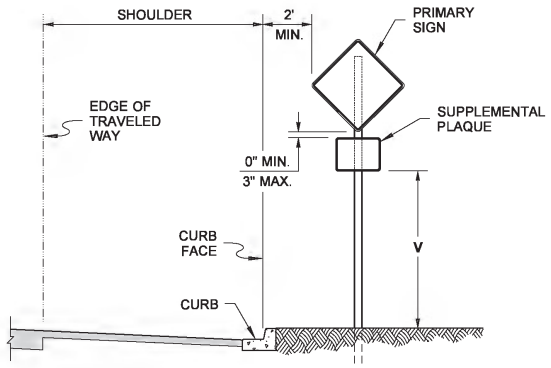
Pasco Bakotich III — STATE DESIGN ENGINEER

02-07-12 — DATE

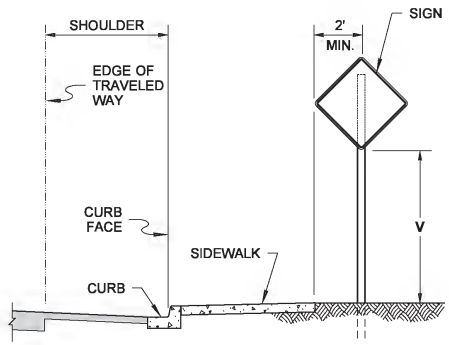
Washington State Department of Transportation



SIGN INSTALLATION (FILL SECTION)



SIGN INSTALLATION (CURB SECTION)



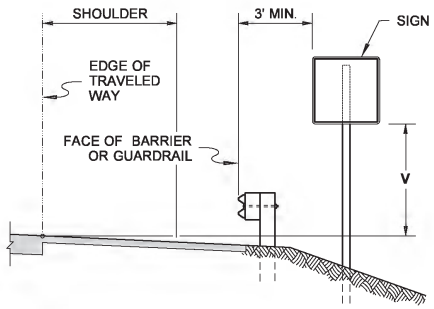
SIGN INSTALLATION (SIDEWALK AND CURB SECTION)

NOTES

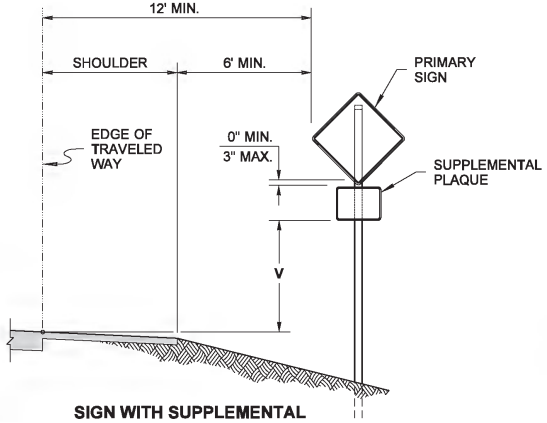
1. For sign installation details, see **Standard Plan G - series.**
2. Where it is impractical to locate a sign with the lateral offset, a minimum of 2'(ft) offset may be used. A 1'(ft) lateral offset may be used in business, commercial or residential areas.
3. The "**V**" height for signs, with an area 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

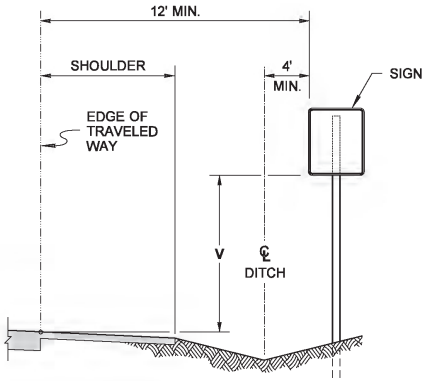
DRAWN BY: FERN LIDDELL



SIGN INSTALLATION (BEHIND TRAFFIC BARRIER)



SIGN WITH SUPPLEMENTAL PLAQUE INSTALLATION (FILL SECTION)



SIGN INSTALLATION (DITCH SECTION)

JOHN C. NISBET
STATE OF WASHINGTON
29115
REGISTERED
PROFESSIONAL ENGINEER

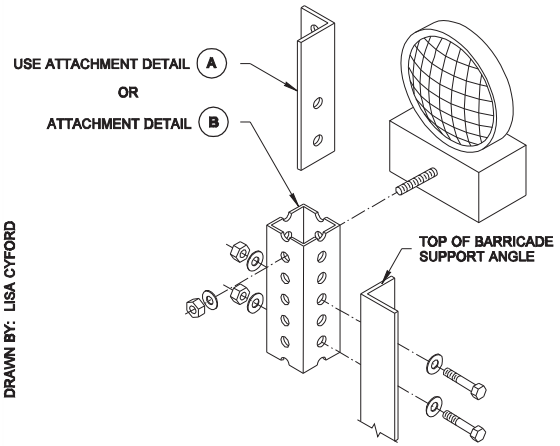
Nisbet, John
May 16 2016 9:57 AM

CLASS A CONSTRUCTION SIGNING INSTALLATION
STANDARD PLAN K-80.10-01

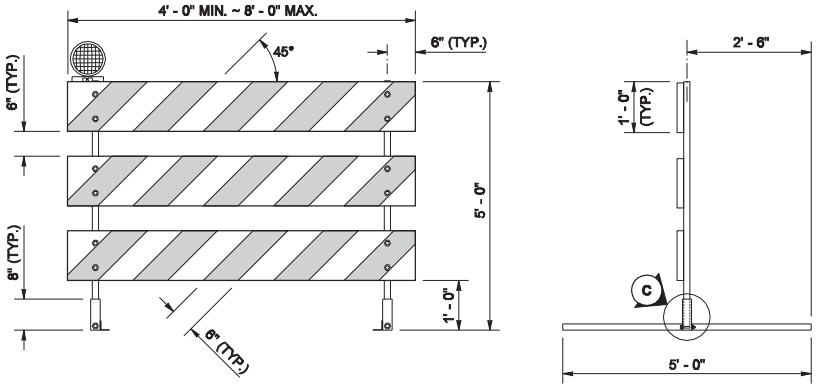
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 1 2016 4:20 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: LISA CYFORD



WARNING LIGHT ATTACHMENT DETAIL



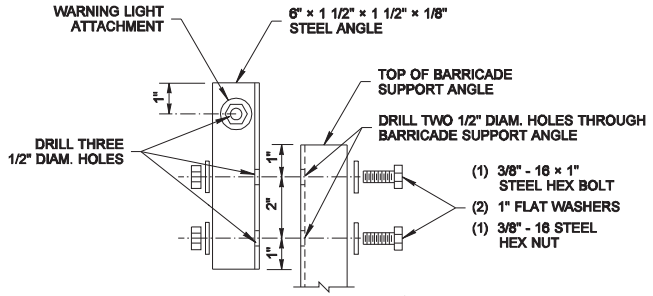
ELEVATION

SIDE

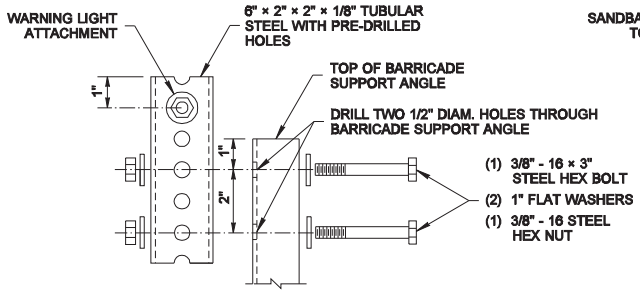
TYPE 3 BARRICADE

NOTES

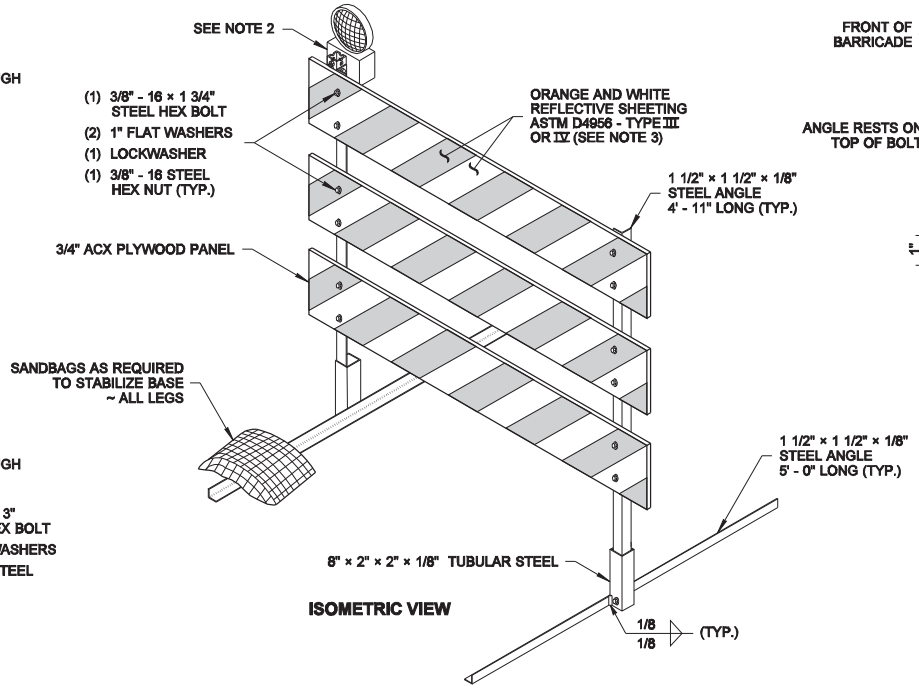
1. All fasteners may be zinc plated, galvanized or stainless steel. All steel angle and tubular steel shall be hot-rolled, high carbon steel, painted or galvanized.
2. Install one lightweight Type A Low-Intensity flashing warning light on the traffic side of the barricade. Install two Type A Low-Intensity 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.



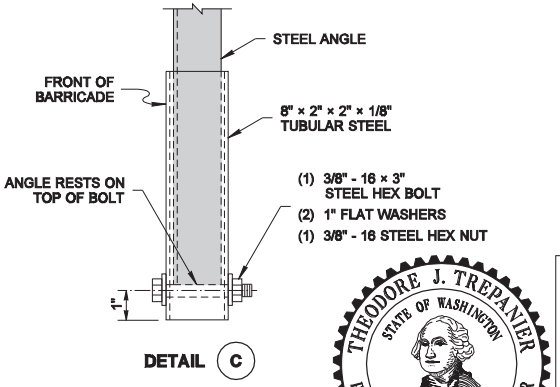
ATTACHMENT DETAIL A



ATTACHMENT DETAIL B



ISOMETRIC VIEW



DETAIL C

THEODORE J. TREPANIER
STATE OF WASHINGTON
25335
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES AUGUST 9, 2007

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

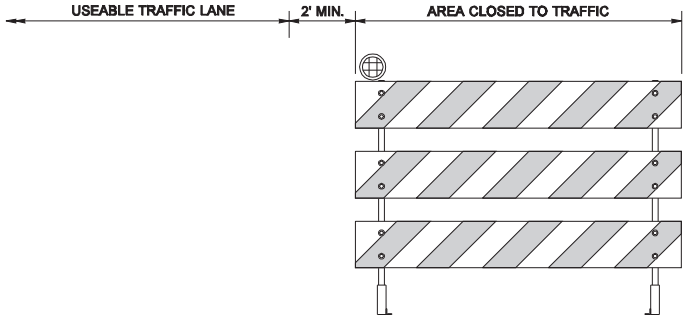
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Kevin J. Dayton — STATE DESIGN ENGINEER — *12-20-06* — DATE

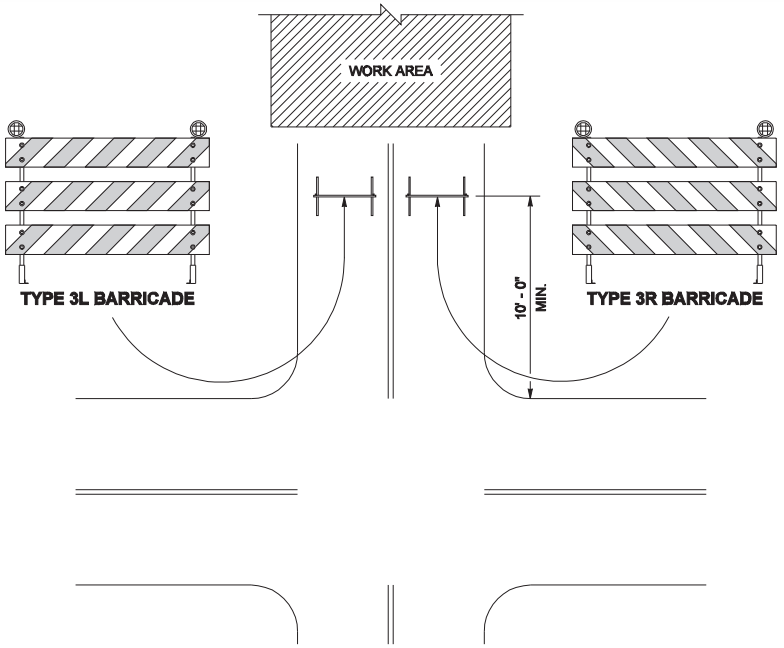
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

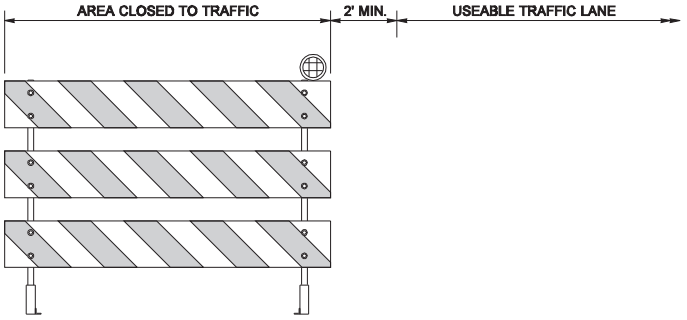


TYPE 3L BARRICADE

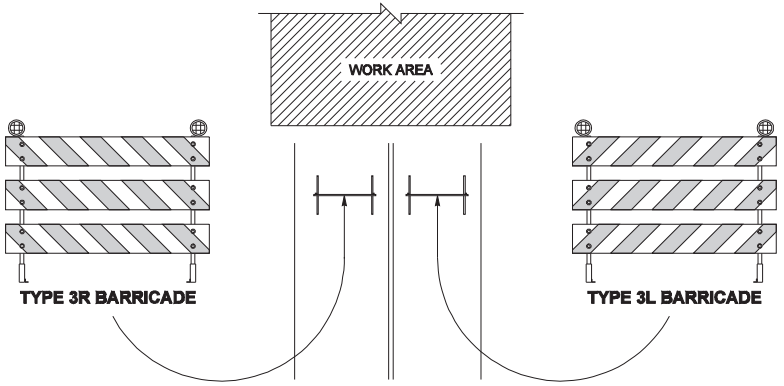
STRIPES ON THE BARRICADES SHALL SLOPE
DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS



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

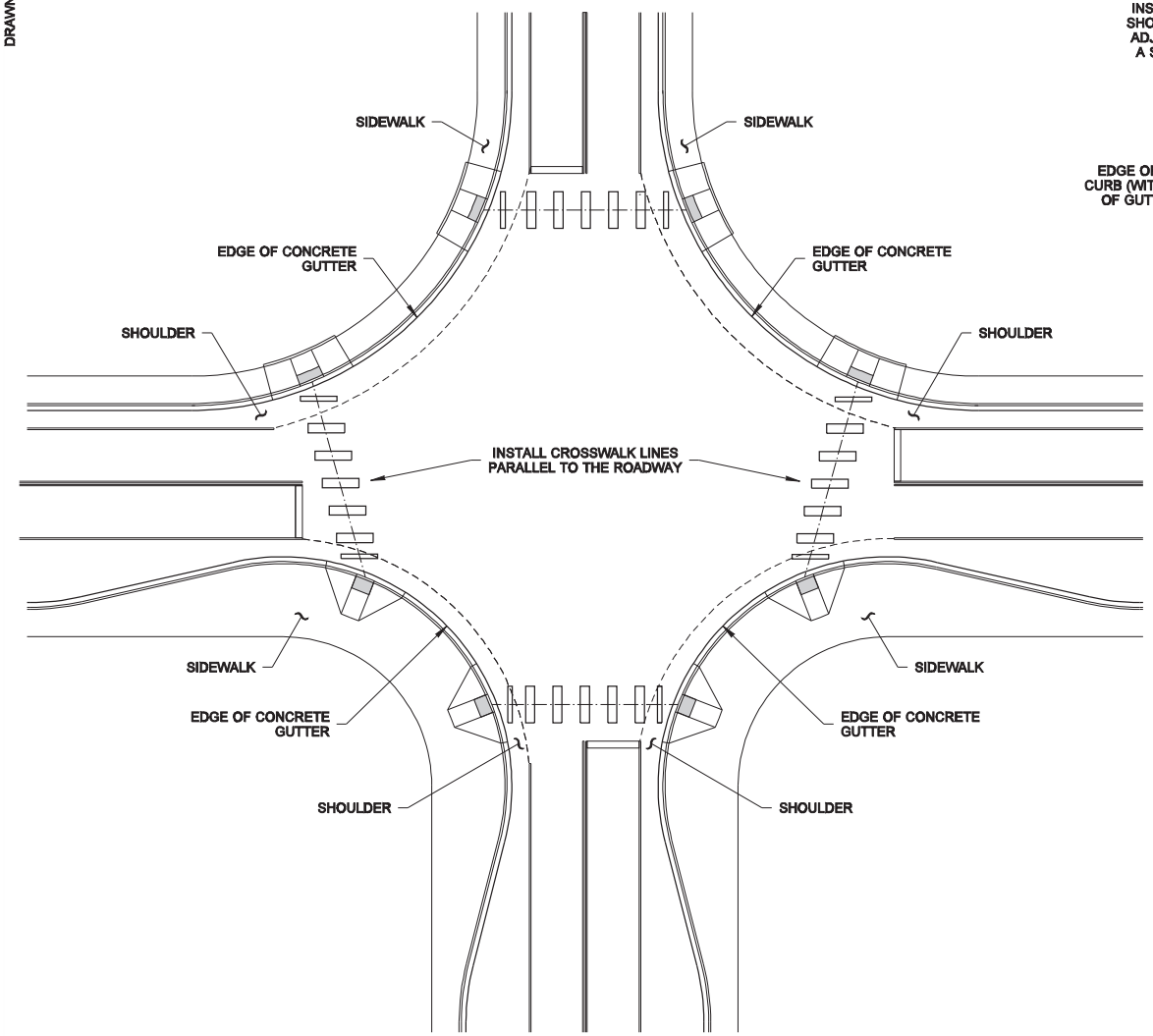
APPROVED FOR PUBLICATION

Kevin J. Dayton — STATE DESIGN ENGINEER

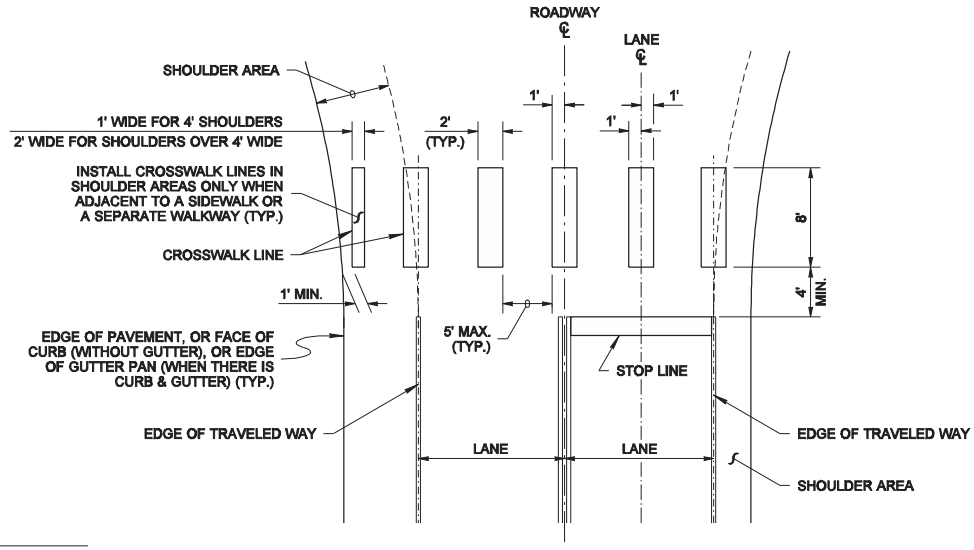
12-20-06 — DATE

Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



TYPICAL APPLICATIONS



DETAIL

NOTES

1. See the Contract Plans for locations of crosswalk centerlines.
2. To the maximum extent possible, curb ramp centerline should be perpendicular to the crosswalk centerline.
3. To the maximum extent possible, crosswalks should be perpendicular to the centerline of the traveled way.

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.

CROSSWALK LAYOUT

STANDARD PLAN M-15.10-01

SHEET 1 OF 1 SHEET

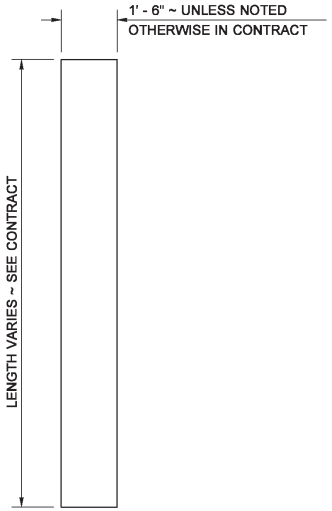
APPROVED FOR PUBLICATION

Ken L. Smith — STATE DESIGN ENGINEER

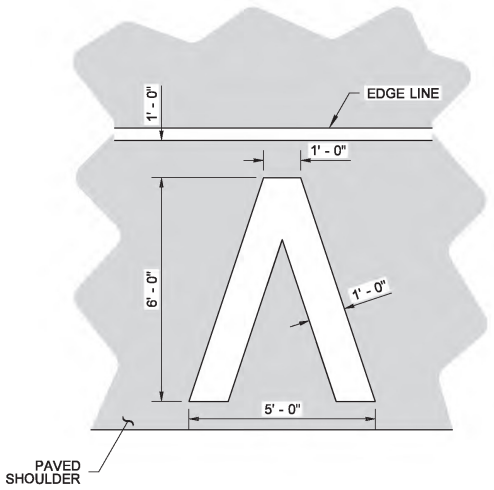
02-06-07 — DATE

Washington State Department of Transportation

DRAWN BY: LISA CYFORD

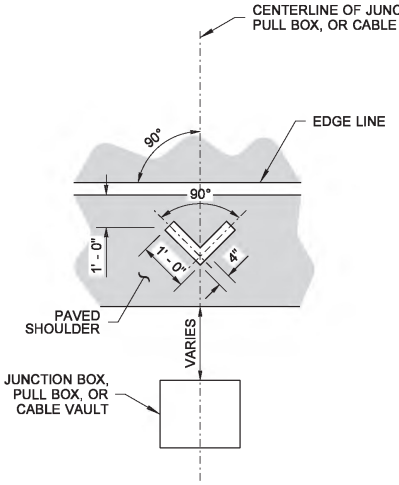


STOP LINE



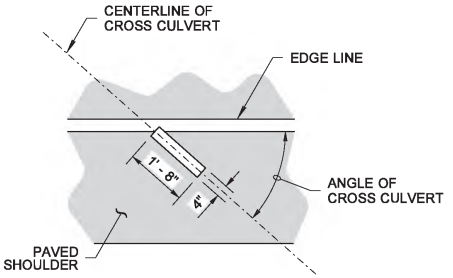
MARKING AREA = 11.73 SQ.FT.

HALF-MILE MARKER



MARKING AREA = 0.56 SQ. FT.

JUNCTION BOX, PULL BOX, OR CABLE VAULT MARKINGS



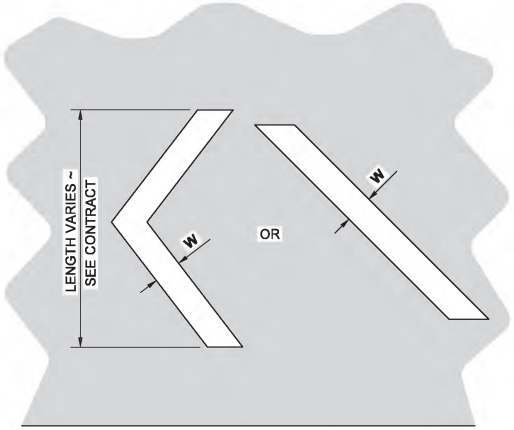
MARKING AREA = 0.56 SQ.FT.

CROSS CULVERT

DRAINAGE MARKING

NOTE

1. If Rumble Strips are present, install marking outside of the Rumble Strip.

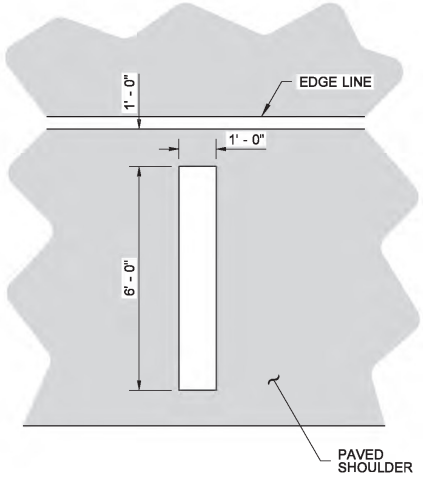


WHITE OR YELLOW ~ SEE CONTRACT

CHEVRON OR DIAGONAL

CROSSHATCH MARKING

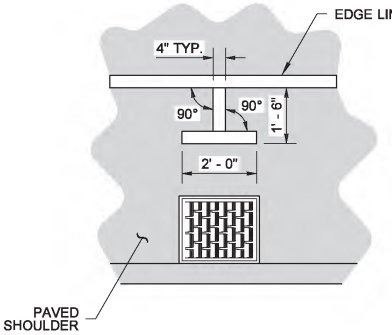
W = 8" (IN) FOR POSTED SPEED LIMIT OF 40 MPH OR LOWER
W = 12" (IN) FOR POSTED SPEED LIMIT OF 45 MPH OR HIGHER



MARKING AREA = 6.00 SQ.FT.

FULL MILE MARKER

AERIAL SURVEILLANCE MARKERS



MARKING AREA = 1.06 SQ.FT.

DRAINAGE STRUCTURE INLET

DRAINAGE MARKING

BRIAN J. WALSH
STATE OF WASHINGTON
36103
REGISTERED
PROFESSIONAL ENGINEER

Walsh, Brian
Jun 24 2014 2:35 PM

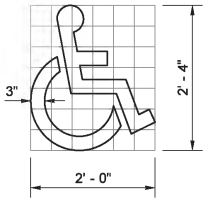
SYMBOL MARKINGS MISCELLANEOUS

STANDARD PLAN M-24.60-04

SHEET 1 OF 2 SHEETS

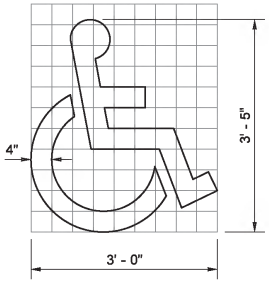
APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 24 2014 4:43 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: LISA CYFORD



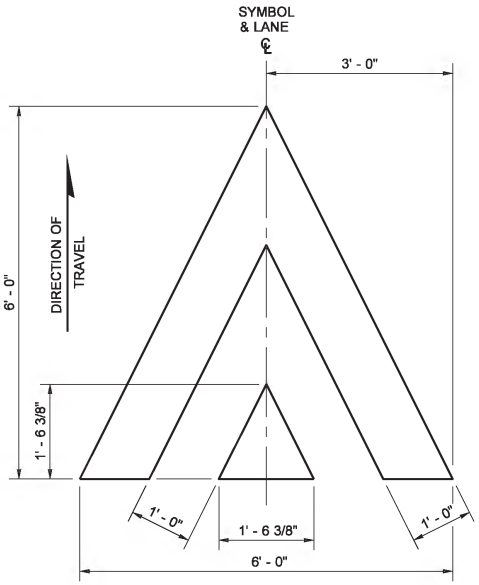
GRID IS 4" (IN) SQUARE MARKING AREA = 1.41 SQ.FT.

ACCESS PARKING SPACE SYMBOL (MINIMUM)



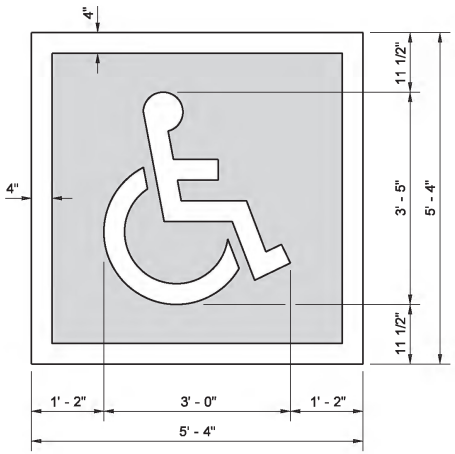
GRID IS 4" (IN) SQUARE MARKING AREA = 3.09 SQ.FT.

ACCESS PARKING SPACE SYMBOL (STANDARD)



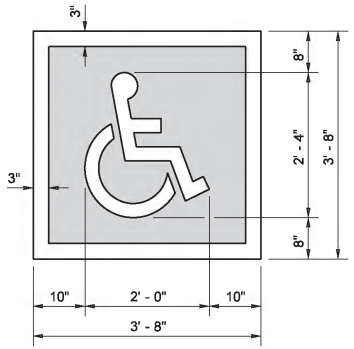
MARKING AREA = 12.08 SQ.FT.

SPEED BUMP SYMBOL



TOTAL MARKING AREA = 28.44 SQ.FT.
WHITE = 9.76 SQ.FT. BLUE = 18.69 SQ.FT.

ACCESS PARKING SPACE SYMBOL (STANDARD)
WITH BLUE BACKGROUND AND WHITE BORDER
(REQUIRED FOR CEMENT CONCRETE SURFACES)

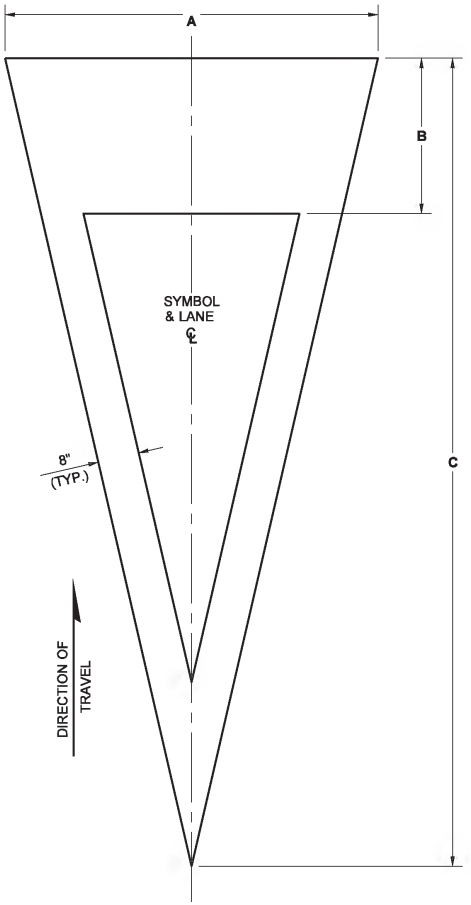


TOTAL MARKING AREA = 13.44 SQ.FT.
WHITE = 4.82 SQ.FT. BLUE = 8.62 SQ.FT.

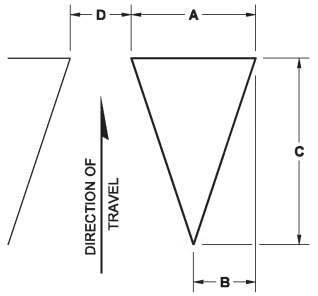
ACCESS PARKING SPACE SYMBOL (MINIMUM)
WITH BLUE BACKGROUND AND WHITE BORDER
(REQUIRED FOR CEMENT CONCRETE SURFACES)

SYMBOL MARKING		A	B	C	D	USE	MARKING AREA
YIELD AHEAD SYMBOL	TYPE 1	6' - 0"	2' - 6"	13' - 0"	N/A	LESS THAN 45 MPH	25.90 SQ.FT.
	TYPE 2	6' - 0"	3' - 0"	20' - 0"	N/A	45 MPH OR GREATER	36.54 SQ.FT.
YIELD LINE SYMBOL	TYPE 1	1' - 0"	6"	1' - 6"	6"	LESS THAN 45 MPH	0.75 SQ.FT.
	TYPE 2	2' - 0"	1' - 0"	3' - 0"	1' - 0"	45 MPH OR GREATER	3.00 SQ.FT.
	TYPE 2	2' - 0"	1' - 0"	3' - 0"	1' - 0"	ROUNDABOUT ENTRY *	3.00 SQ.FT.

* MINIMUM OF 4 IN LANE



YIELD AHEAD SYMBOL



YIELD LINE SYMBOL
(MULTIPLE SYMBOLS REQUIRED FOR TRANSVERSE YIELD LINE ~ SEE CONTRACT)

BRIAN J. WALSH
STATE OF WASHINGTON
36103
REGISTERED
PROFESSIONAL ENGINEER

Walsh, Brian
Jun 24 2014 2:37 PM

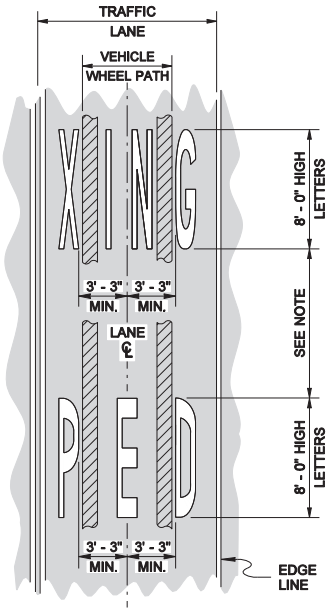
SYMBOL MARKINGS MISCELLANEOUS

STANDARD PLAN M-24.60-04

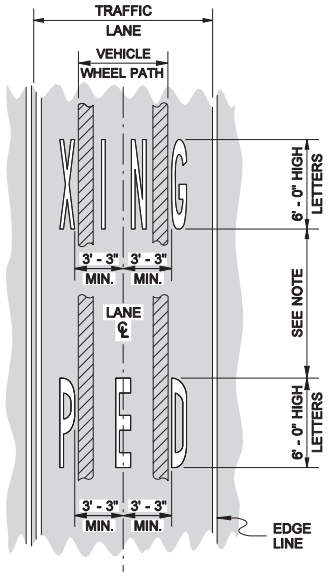
SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 24 2014 4:43 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

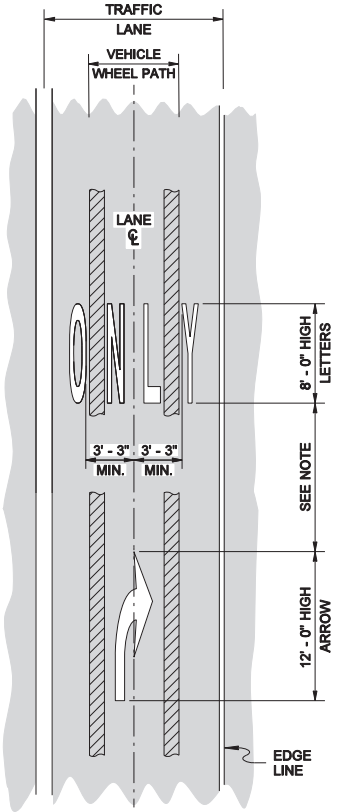
DRAWN BY: LISA CYFORD



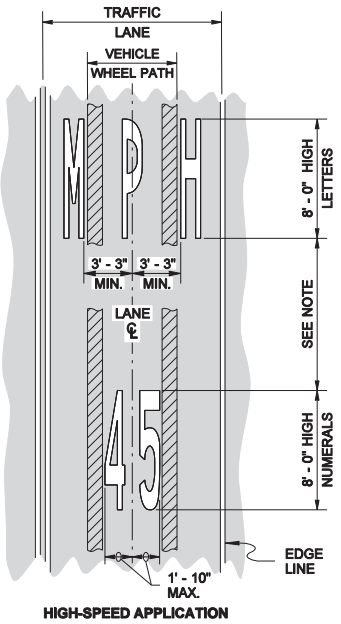
HIGH-SPEED APPLICATION



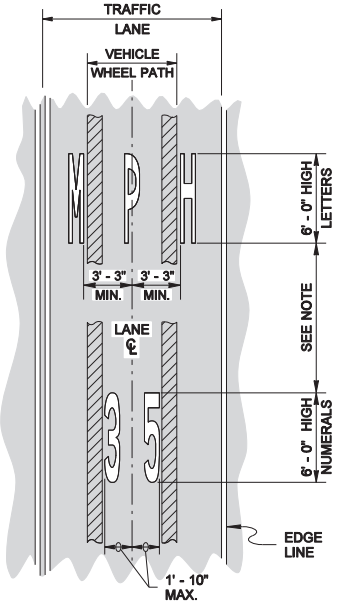
LOW-SPEED APPLICATION



HIGH-SPEED APPLICATION



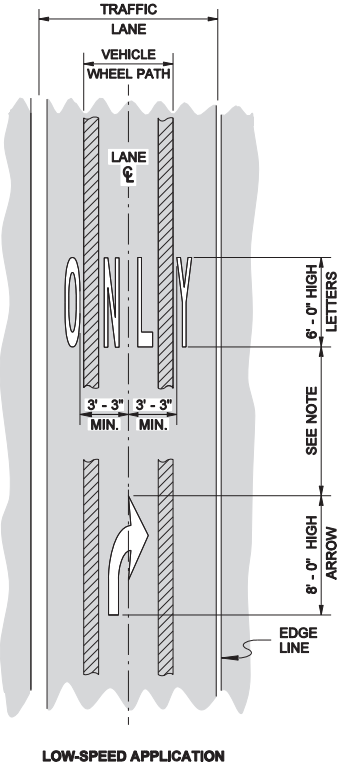
HIGH-SPEED APPLICATION



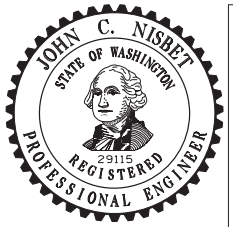
LOW-SPEED APPLICATION

NOTE

1. Typically, four times the letter or numeral height ~ minimum, up to ten times ~ maximum, or according to Plans.



LOW-SPEED APPLICATION



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.

TRAFFIC LETTER AND NUMERAL APPLICATIONS

STANDARD PLAN M-80.10-01

SHEET 1 OF 2 SHEETS

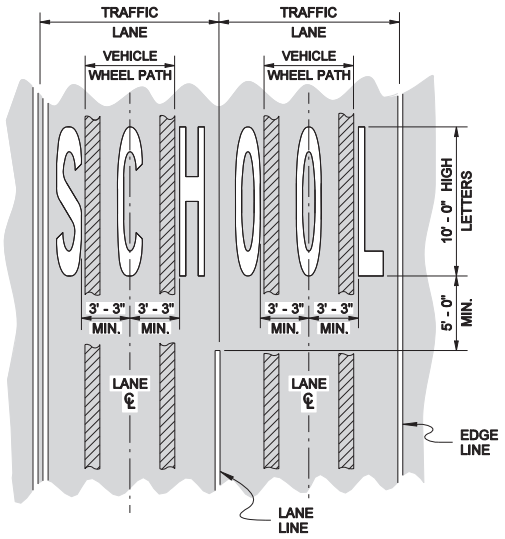
APPROVED FOR PUBLICATION

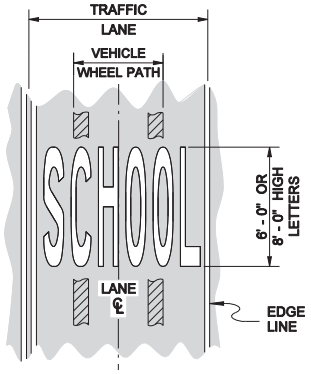
Pasco Bakotich III — STATE DESIGN ENGINEER

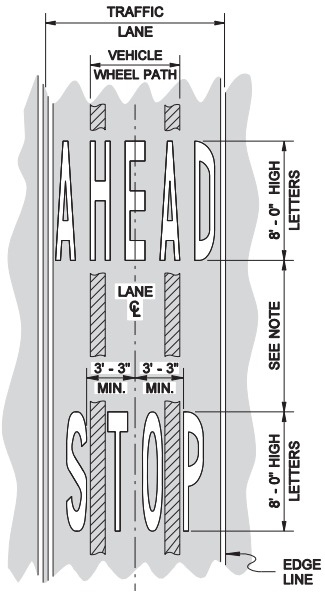
06-03-11 — DATE

Washington State Department of Transportation

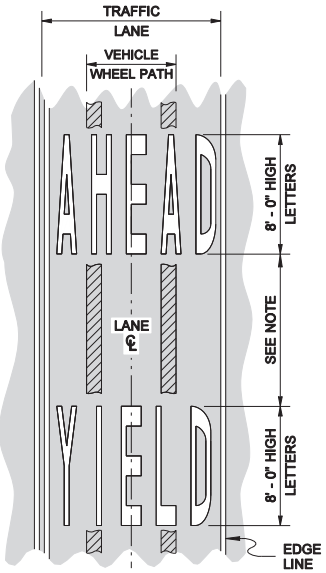
DRAWN BY: LISA CYFORD



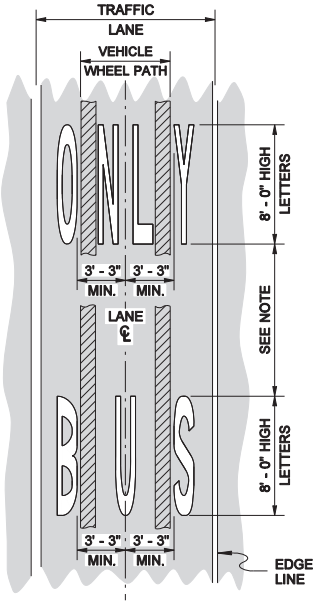




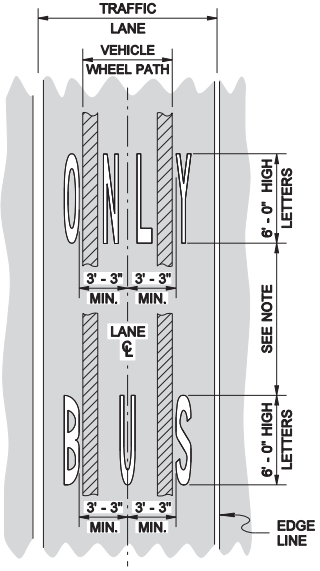
HIGH-SPEED APPLICATION



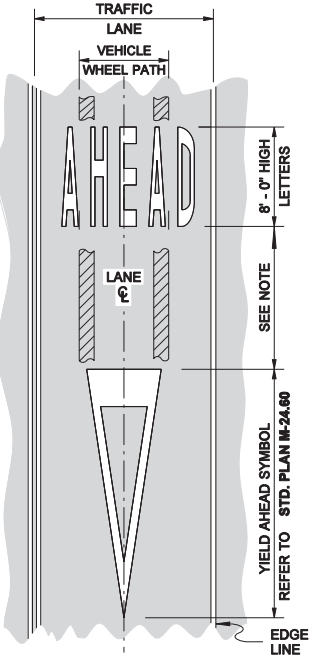
HIGH-SPEED APPLICATION



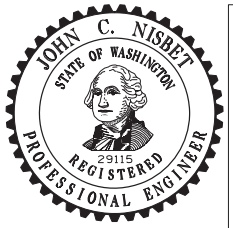
HIGH-SPEED APPLICATION



LOW-SPEED APPLICATION



HIGH-SPEED APPLICATION



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.

TRAFFIC LETTER AND NUMERAL APPLICATIONS

STANDARD PLAN M-80.10-01

SHEET 2 OF 2 SHEETS

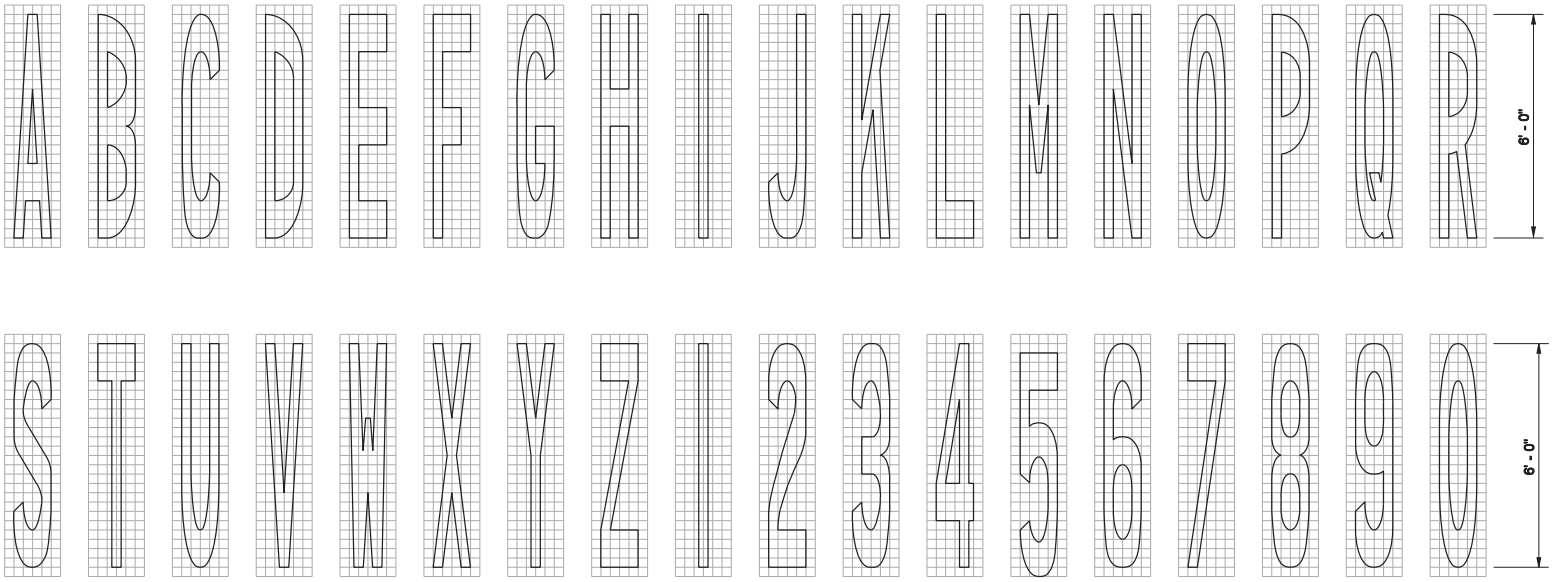
APPROVED FOR PUBLICATION

Pasco Bakotich III — STATE DESIGN ENGINEER

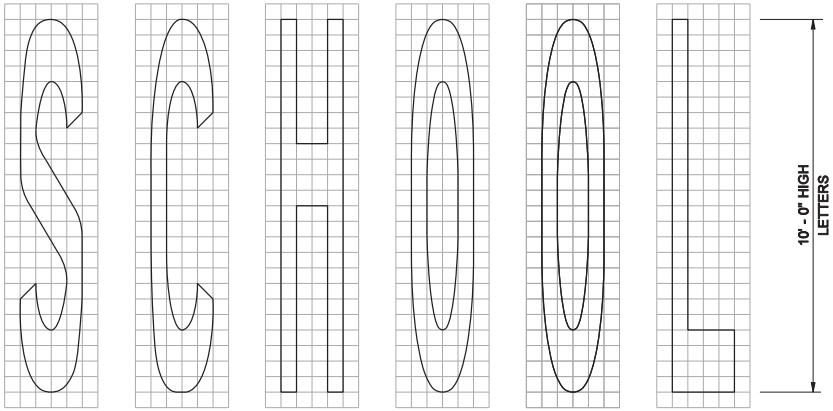
06-03-11 — DATE

Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



SIX FOOT HIGH LETTERS AND NUMERALS SHOWN ON A THREE -INCH SQUARE GRID



TEN FOOT HIGH LETTERS SHOWN ON A FIVE- INCH SQUARE GRID

FOR USE ON ROADWAYS WITH A POSTED SPEED OF 40 MPH OR LESS

THEODORE J. TREPANIER
STATE OF WASHINGTON
25335
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES AUGUST 9, 2009

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.

TRAFFIC LETTERS AND NUMERALS (LOW SPEED ROADWAYS) STANDARD PLAN M-80.30-00

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III — STATE DESIGN ENGINEER

06-10-08 — DATE

Washington State Department of Transportation

APPENDIX F – AGC AGREEMENT

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

Van Collins
Southern District Manager

Washington State Department of Transportation

Linea Laird
State Construction Engineer

APPENDIX G – MONITORING AND INADVERTENT DISCOVERY PLAN

PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

WASHINGTON STREET VISTA DRIVE TO MAIN STREET PROJECT, WHATCOM COUNTY WASHINGTON

1. INTRODUCTION

The City of Ferndale proposes to repair/reconstruct sections of Washington Street between Vista Drive and Main Street and widen to current standards. Bus pullouts will be constructed and ADA compliant sidewalks and ramps will be installed on both sides of the street. Utility poles will be relocated, stormwater will be treated, and the clay sanitary sewer mains will be replaced with PVC sanitary sewer mains. LED lighting will be installed. The following Unanticipated Discovery Plan (UDP) outlines procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

2. RECOGNIZING CULTURAL RESOURCES

A cultural resource discovery could be precontact or historic. Examples include:

- An accumulation of shell, burned rocks, or other food related materials
- Bones or small pieces of bone,
- An area of charcoal or very dark stained soil with artifacts,
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips),
- Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years,
- Buried railroad tracks, decking, or other industrial materials.

When in doubt, assume the material is a cultural resource.

3. ON-SITE RESPONSIBILITIES

STEP 1: STOP WORK. If any employee, contractor or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work in the immediate area of the discovery must stop (typically a 10 foot radius, but depends on site conditions). The discovery location should be secured at all times.

STEP 2: NOTIFY MONITOR. If there is an archaeological monitor for the project, notify that person. If there is a monitoring plan in place, the monitor will follow its provisions.

STEP 3: NOTIFY PROJECT MANAGEMENT. Contact the Project Manager:
Project Manager:
Name: Katy Radder
Number: 360-685-2377
Email: KatyRadder@cityofferndale.org

If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call or speak with the media about the remains specifically.

4. FURTHER CONTACTS AND CONSULTATION

A. Project Manager's Responsibilities:

- Protect Find: The Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.

- Direct Construction Elsewhere On-site: The Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.

- Contact the Department of Archaeology and Historic Preservation (DAHP): If the DAHP has not yet been contacted, the Project Manager will do so.

- Identify Find: The Project Manager will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological. This will either be an archaeological consultant hired by the Project or staff from DAHP.
    - If the discovery is determined not archaeological, work may proceed with no further delay.
    - If the discovery is determined to be archaeological, the Project Manager will continue with notification.
    - If the discovery is human remains or funerary objects, the Project Manager will ensure that the DAHP State Physical Anthropologist examines the find. If the discovery is determined to be human remains, the procedure described in Section 5 will be followed.

- Notify DAHP: The Project Manager will contact the involved federal or permitting agencies (if any) and the Department of Archaeology and Historic Preservation (DAHP).

Department of Archaeology and Historic Preservation:

Dr. Allyson Brooks
State Historic Preservation Officer
360-586-3066 or 360-586-3064

Dr. Rob Whitlam
State Archaeologist
360-586-3080

The Project Manager will contact the interested and affected Tribes.

Tribes consulted on this project are:

Tribe: Nooksack
Name: George Swanaset Jr.
Title: Director/THPO
Number: 360-306-5759
Email: gswanasetjr@nooksack-nsn.gov

Tribe: Lummi Nation
Name: Lena Tso
Title: THPO
Number: 360-312-2257
Email: lenat@lummi-nsn.gov

B. Further Activities

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

5. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL

Any human skeletal remains, regardless of antiquity or ethnic origin, will at all times be treated with dignity and respect.

If the project occurs on federal lands (e.g., national forest or park, military reservation) or Indian lands (e.g., reservations, allotments, communities) the provisions of the Native American Graves Protection and Repatriation Act of 1990 apply, and the responsible federal agency will follow its provisions. Note that state highways that cross federal and Indian lands are on easements and are not owned by the state.

If the project occurs on non-federal lands, it will comply with applicable state laws, and the following procedure:

A. Notify Law Enforcement Agency or Coroner's Office:

In addition to the actions described in Sections 3 and 4, the Project Manager will immediately notify the local law enforcement agency or coroner's office.

The coroner (with assistance of law enforcement personnel) will determine if the remains are human, whether the discovery site constitutes a crime scene, and will notify DAHP.

Agency: City of Ferndale Police Department
Number: 360-384-3390

B. Participate in Consultation:

Per RCW 27.44.055, RCW 68.50, and RCW 68.60, DAHP will have jurisdiction over non-forensic human remains.

Guy Tasa, State Physical Anthropologist,
(360) 586-3535, Cell: (360) 790-1633

C. Further Activities:

- Documentation of human skeletal remains and funerary objects will be agreed upon through the consultation process described in RCW 27.44.055, RCW 68.50, and RCW 68.60.

- When consultation and documentation activities are complete, construction in the discovery area may resume as described in Section 7.

6. DOCUMENTATION OF ARCHAEOLOGICAL MATERIALS

Archaeological deposits discovered during construction will be assumed eligible for inclusion in the National Register of Historic Places under Criterion D per 36CFR800.13(c) until a formal Determination of Eligibility is made. If the project does not have a federal nexus/compliance requirement, contact the Project Manager or DAHP regarding the possible need for an Emergency Excavation Permit per RCW27.53. In general, expect that:

- All precontact and historic cultural material discovered during project construction will be recorded by a professional archaeologist on State of Washington cultural resource site or isolate form using standard techniques. Site overviews, features, and artifacts will be photographed; stratigraphic profiles and soil/sediment descriptions will be prepared for subsurface exposures. Discovery locations will be documented on scaled site plans and site location maps.

- Cultural features, horizons and artifacts detected in buried sediments may require further evaluation using hand-dug test units. Units may be dug in controlled fashion to expose features, collect samples from undisturbed contexts, or interpret complex stratigraphy. A test excavation unit or small trench might also be used to determine if an intact occupation surface is present. Test units will be used only when necessary to gather information on the nature, extent, and integrity of subsurface cultural deposits to evaluate the site's significance. Excavations will be conducted using state-of-the- art techniques for controlling provenience.

- Spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of cultural material, and depth to sterile soil, regolith, or bedrock will be recorded for each probe on a standard form. Test excavation units will be recorded on unit-level forms, which include plan maps for each excavated level, and material type, number, and vertical provenience (depth below surface and stratum association where applicable) for all artifacts recovered from the level. A stratigraphic profile will be drawn for at least one wall of each test excavation unit.

- Sediments excavated for purposes of cultural resources investigation will be screened through 1/8-inch mesh, unless soil conditions warrant ¼-inch mesh.

- All precontact and historic artifacts collected from the surface and from probes and excavation units will be analyzed, catalogued, and temporarily curated. Ultimate disposition of cultural materials will be determined in consultation with the federal agencies (if any), DAHP, and the affected tribes.

If assessment activity exposes human remains (burials, isolated teeth, or bones), the process described in Section 5 above will be followed.

7. PROCEEDING WITH CONSTRUCTION

Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A Cultural Resources Specialist (either from DAHP, a consulting Tribe, or a professional consultant) must determine the boundaries of the discovery location. In consultation with DAHP and affected tribes, the Project Manager will determine the appropriate level of documentation and treatment of the resource. If federal agencies are involved, the agencies will make the final determinations about treatment and documentation.

Construction may continue at the discovery location only after the process outlined in this plan is followed and DAHP (and the federal agencies, if any) determine that compliance with state and federal laws is complete.