# Contract Provisions

For Construction of:

Louis Thompson Road SE Slide Repair and Drainage Improvements Project

May 2018

CITY OF SAMMAMISH PUBLIC WORKS DEPARTMENT 801 228th AVENUE SE SAMMAMISH, WA 98075





# CONTRACT PROVISIONS for Louis Thompson Road SE Slide Repair and Drainage Improvements Project

City of Sammamish King County, Washington Public Works Department 801 228th Avenue SE Sammamish, WA 98075 (425) 295-0500 FAX (425) 295-0600

#### **Approved for Construction:**

Steve Leniszewski, P.E. Public Works Director\*\* Date

Jed Ireland, P.E. Project Manager Date



\*\*Pursuant to Chapter 6, Section 6.2 of the 2016 Public Works Standards, the signature of the Public Works Director on these Contract Provisions shall serve as written approval for all variations to the Public Works Standards contained within this project.

# **TABLE OF CONTENTS**

PART 1	PROPOSAL INTRODUCTION
	NOTICE TO CONTRACTORS1-1
	BIDDER'S CHECKLIST1-3
PART 2	PROPOSAL
	PROPOSAL
	SCHEDULE OF PRICES
	BID SECURITY FORM2-7
	ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA2-8
	BIDDER INFORMATION AND SIGNATURE2-9
	NON-COLLUSION AND DEBARMENT AFFIDAVIT
	MINIMUM WAGE AFFIDAVIT FORM
	STATEMENT OF BIDDER'S QUALIFICATIONS
	RESPONSIBLE BIDDER CRITERIA 2-15
PART 3	CONTRACT DOCUMENT FORMS
	CONTRACT AGREEMENT
	CONTRACTOR'S RETAINAGE AGREEMENT
	LABOR AND MATERIAL PAYMENT BOND
	PERFORMANCE BOND TO THE CITY OF SAMMAMISH
PART 4	AMENDMENTS TO THE STANDARD SPECIFICATIONS
PART 5	SPECIAL PROVISIONS

## APPENDICES

Appendix A:	Prevailing Wage Rates
Appendix B:	Standard Plans and Details
Appendix C:	Geotechnical Memorandum

Appendix D: Puget Sound Clean Air Agency Asbestos Notice of Intent

# PART 1

# **PROPOSAL INTRODUCTION**

# NOTICE TO CONTRACTORS

# CITY OF SAMMAMISH Louis Thompson Road SE Slide Repair and Drainage Improvements Project

Sealed proposals will be received by the City Clerk up to 2:00 p.m. (local time) on June 14<sup>th</sup>, 2018, for furnishing the necessary labor, materials, equipment, tools, and guarantees thereof to construct the *Louis Thompson Road SE Slide Repair and Drainage Improvements Project*. Bids received after the time and date listed above will not be considered.

Sealed proposals should be addressed to the following:

City of Sammamish 801 228th Avenue SE Sammamish, WA 98075 Attn: City Clerk

This Contract provides for the improvement of Louis Thompson Road in the City of Sammamish, King County, from 210th Place SE to 211th Place SE along the east and west sides of the roadway and the construction of soldier pile wall repairs and drainage improvements. The project includes construction of a soldier pile wall, storm drain crossing, notched cement concrete curb and gutter, roadside bioretention, channelization, landscaping, surveying, traffic control and other work noted in these documents.

The work shall be completed within sixty (60) working days after the commencement date stated in the Notice to Proceed. The Notice to Proceed will allow working days to begin August 15th – August 31st, 2018 due to the lead time of steel pile fabrication and lane closure restriction prior to August 31st, 2018. All bidding and construction shall be performed in compliance with the Contract Documents for this project and any addenda issued thereto which are on file at the office of the City Clerk, City Hall, City of Sammamish, Washington.

At the time and date stated above, the proposals will be publicly opened and read aloud. Proposals are to be submitted only on the form provided with the Specifications. All Proposals must be accompanied by a certified check, cashier's check, money order, or bid bond payable to the "City of Sammamish" of value not less than five percent (5%) of the total amount bid.

Plans, Specifications, addenda, Bidders list, and plan holders list for this Project are available through the City of Sammamish's on-line plan room at http://bxwa.com. Click on "Posted Projects"; "Public Works", "City of Sammamish", and "Projects Bidding". Bidders are required to register in order to receive automatic e-mail notification of future addenda and to be placed on the Bidders List. Contact Builders Exchange of Washington at 425-258-1303 should you require assistance.

Funding for this Project will be provided by the City of Sammamish and the King County Wastewater Treatment Division WaterWorks grant program. The City of Sammamish expressly reserves the right to reject any or all bids and to waive minor irregularities or informalities and to further make award of the Project to the lowest responsive, responsible bidder as it best serves the interest of the City.

Melonie Anderson City Clerk

Dates of Publication: Daily Journal of Commerce: May 24, 2018, May 31, 2018 and June 7, 2018

Seattle Times: May 24, 2018, May 31, 2018 and June 7, 2018

# **BIDDER'S CHECKLIST**

## 1. REQUIRED FORMS

The Bidder shall submit the following forms as part of the proposal. The forms must be executed in full and submitted with the Proposal.

- Proposal
- \_\_\_\_\_ Schedule of Prices
- \_\_\_\_\_ Bid Security Form
- \_\_\_\_\_ Acknowledgement of Receipt of Addenda
- Bidder Information and Signature
  - \_\_\_\_ Non-Collusion and Debarment Affidavit
  - \_\_\_\_\_ Minimum Wage Affidavit Form

The two lowest bidders shall submit the following forms within 48 hours after the bid opening. Failure to submit these forms may result in the Contracting Agency refusal to accept the Bid.

\_\_\_\_\_ Statement of Bidder's Qualifications

\_\_\_\_ Responsible Bidder Criteria

# 2. CONTRACT DOCUMENT FORMS

The following forms (a., b., and c.) are to be executed and the following Certificates of Insurance (d. and e.) are to be provided after the Contract is awarded and prior to Notice to Proceed.

- a. Contract Agreement
- b. Performance Bond
- c. Labor and Material Payment Bond
- d. Certificate of Insurance
- e. Certificate of Builder's Risk "All Risk" Insurance

PART 2

PROPOSAL

Print Contractor Name

# **PROPOSAL**

Honorable Mayor and Council City of Sammamish 801 228th Avenue NE Sammamish, WA 98075

This Contract provides for the improvement of Louis Thompson Road in the City of Sammamish, King County, from 210st Place SE to 211th Place SE along the east and west sides of the roadway and the construction of soldier pile wall repairs and drainage improvements. The project includes construction of a soldier pile wall, storm drain crossing, notched cement concrete curb and gutter, roadside bioretention, channelization, landscaping, surveying, traffic control and other work noted in these documents.

All bidding and construction shall be performed in compliance with the Notice to Contractors, Bid Proposal, Plans, Specifications, and Contract for this project and any addenda issued thereto which are on file at the office of the City Clerk, City Hall, City of Sammamish, Washington.

It is understood herein that after the date and hour set for the opening of bids, no Bidder may withdraw its Proposal, unless the award of the Contract is delayed for a period exceeding forty (40) consecutive calendar days.

The undersigned has examined the site(s), local conditions, Addenda, Contract Provisions, Plans, and all applicable laws and ordinances covering the Work contemplated. In accordance with the terms, provisions, and requirements of the foregoing, all of their respective terms and conditions are incorporated herein by this reference and the following unit and lump sum prices are tendered as an offer to perform the Work and furnish the equipment, materials, appurtenances, and guarantees, complete in place, in good working order.

The undersigned freely states that it is familiar with the provisions of the competitive bidding statutes of the State of Washington, and specifically the provisions of RCW Chapter 9.18, and certifies that with respect to this Proposal, there has been no collusion or understanding with any other person, persons, or corporation, to prevent or eliminate full and unrestricted competition among Bidders on this Project.

The undersigned agrees that in the event of contract award, it shall employ only Contractor and Subcontractors duly licensed by the State of Washington.

The undersigned agrees that the Owner reserves the right to reject any or all bids and to waive any minor informalities.

Print Contractor Name

The undersigned hereby agrees that the Owner reserves the right to award the contract to the lowest responsible, responsive bidder whose Proposal is in the best interest of the Owner. The Owner will determine at the time of award of the Project which additives, if any, will be included in the Contract.

The undersigned agrees that the Owner is authorized to obtain reports from all references included herein.

I, the undersigned, hereby certify, under penalty of perjury under the laws of the State of Washington, on behalf of the firm identified below that, to the best of my knowledge and belief, this firm has NOT been determined by a final and binding citation and notice of assessment issued by the Washington State Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of RCW chapters 49.46, 49.48, or 49.52 within three (3) years prior to this project's bid solicitation date.

Very Truly Yours,

Print Company Name

By (Print Name)

By (Signature)

Title

Date

# SCHEDULE OF PRICES

## NOTE:

- Unit prices for all items, all extensions, and the total amount bid must be shown.
- The project must be in its entirety, including all bid items and any bid additive bid items as specifically listed in the Proposal, in order to be considered a responsive bid.
- Where conflict occurs between the unit price and the total amount named for any item the unit price shall prevail, and totals shall be corrected to conform thereto.
- All entries must be typed or printed and entered in ink. Award of the Contract shall be based on the lowest, responsive bid.

(Standard Specifications and Special Provision references shown are provided for information only to assist bidders in the preparation of their proposal. Bidders shall not rely on this information and must thoroughly examine the contract requirements during the preparation of their proposal.)

Item		Section		Approx.		
No.	Item With Unit Priced Bid	Reference	Unit	Quantity	Unit Price	Amount
1.	UNEXPECTED SITE CHANGES	1-04 SS	FA	1	\$20,000	\$20,000
2.	RECORD DRAWINGS	1-05 SP	LS	1		
3.	STRUCTURE SURVEYING	1-05 SP	LS	1		
4.	ROADWAY SURVEYING	1-05 SP	LS	1		
5.	LOCATE EXISTING UTILITIES	1-07 SP	LS	1		
6.	MOBILIZATION	1-09 SS	LS	1		
7.	PROJECT TEMPORARY TRAFFIC CONTROL	1-10 SS	LS	1		
8.	FLAGGERS AND SPOTTERS	1-10 SS	HR	1440		
9.	TRAFFIC CONTROL SUPERVISOR	1-10 SS	LS	1		
10.	CLEARING AND GRUBBING	2-01 SP	AC	0.5		

Print Contractor Name

ltem No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
11.	REMOVING ASPHALT CONC. PAVEMENT	2-02 SP	SY	195		
12.	ASBESTOS-CEMENT PIPE REMOVAL, HANDLING, HAUL, DISPOSAL	2-02 SP	LF	30		
13.	ROADWAY EXCAVATION INCL. HAUL	2-03 SP	CY	180		
14.	GRAVEL BORROW INCL. HAUL	2-03 SP	CY	100		
15.	SHORING OR EXTRA EXCAVATION CLASS B INCL. HAUL	2-09 SS	SF	1,300		
16.	CRUSHED SURFACE BASE COURSE	4-04 SS	TN	115		
17.	HMA CL. 1/2 IN. PG 64-22	5-04 SS	TN	180		
18.	PLANING BITUMINOUS PAVEMENT	5-04 SS	SY	535		
19.	SOLDIER PILE RETAINING WALL	6-16 SP	SF	3,480		
20.	GRAVEL BACKFILL FOR DRAIN	7-01 SS	CY	5		
21.	POLYPROPYLENE STORM SEWER PIPE 18 IN. DIAM.	7-04 SS	LF	230		
22.	CATCH BASIN TYPE 1L W/ BEEHIVE GRATE	7-05 SP	EA	1		
23.	CATCH BASIN TYPE 2, 48- INCH DIAM.	7-05 SS	EA	1		
24.	CATCH BASIN TYPE 2, 48- INCH DIAM. W/ DEBRIS CAGE	7-05 SP	EA	1		
25.	CATCH BASIN TYPE 2, 48- INCH DIAM. W/ BEEHIVE GRATE	7-05 SP	EA	1		
26.	CATCH BASIN TYPE 2, 48- INCH DIAM. W/ SPILL CONTROL	7-05 SS	EA	1		
27.	PLUGGING EXISTING PIPE	7-08 SS	EA	1		
28.	UTILITY CONFLICT RESOLUTION	7-13 SP	FA	1	\$5,000	\$5,000
29.	EROSION/WATER POLLUTION CONTROL	8-01 SP	LS	1		
30.	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	8-01 SP	LS	1		

Print Contractor Name

ltem No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
31.	STREET CLEANING	8-01 SP	LS	1		
32.	INLET PROTECTION	8-01 SS	EA	8		
33.	HIGH VISIBILITY SILT FENCE	8-01 SS	LF	435		
34.	CHECK DAM	8-01 SS	LF	35		
35.	SEEDING, FERTILIZING AND MULCHING	8-01 SP	LS	1		
36.	BIODEGRADABLE EROSION CONTROL BLANKET	8-01 SS	SY	235		
37.	<b>BIORETENTION SOIL</b>	8-02 SP	CY	80		
38.	PSIPE BALD-HIP ROSE (1 GAL.)	8-02 SS	EA	41		
39.	PSIPE KINNIKINNICK (4")	8-02 SS	EA	453		
40.	PSIPE SWORD FERN (1 GAL.)	8-02 SS	EA	41		
41.	PSIPE SLOUGH SEDGE (ROOT STOCK)	8-02 SS	EA	240		
42.	PSIPE SMALL-FRUITED BULRUSH (ROOT STOCK)	8-02 SS	EA	359		
43.	PSIPE SNOWBERRY (1 GAL.)	8-02 SS	EA	62		
44.	PSIPE SITKA WILLOW (1 GAL.)	8-02 SS	EA	15		
45.	PSIPE SITKA WILLOW (POLE)	8-02 SS	EA	8		
46.	PSIPE THIMBLEBERRY (1 GAL.)	8-02 SS	EA	41		
47.	PSIPE VINE MAPLE, (2 GAL.)	8-02 SS	EA	10		
48.	RESTORATION AND ROADSIDE CLEANUP	8-02 SP	FA	1	\$3,000	\$3,000
49.	BARK OR WOOD CHIP MULCH	8-02 SP	CY	5		
50.	STREAMBED COBBLES 12 IN.	8-02 SP	TN	2		
51.	FINE COMPOST	8-02 SP	CY	12		

Print Contractor Name

ltem No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
52.	NOTCHED CEMENT CONCRETE TRAFFIC CURB AND GUTTER	8-04 SP	LF	389		
53.	CEMENT CONCRETE TRAFFIC CURB AND GUTTER	8-04 SS	LF	41		
54.	EXTRUDED CURB	8-04 SP	LF	375		
55.	RAISED PAVEMENT MARKER TYPE 2	8-09 SS	HUND	8		
56.	REMOVING GUARDRAIL	8-11 SS	LF	305		
57.	BEAM GUARDRAIL TYPE 31	8-11 SS	LF	305		
58.	REMOVING AND RESETTING BEAM GUARDRAIL	8-11 SS	LF	70		
59.	COATED CHAIN LINK FENCE, 4-FT FABRIC HEIGHT	8-12 SP	LF	226		
60.	QUARRY SPALLS	8-15 SS	TON	3		
61.	PERMANENT SIGNING	8-21 SP	LS	1		
62.	PROJECT SIGN	8-21 SP	EA	2		
63.	8" WHITE PAINTED LINE	8-22 SP	LF	1514		
64.	4" DOUBLE YELLOW PAINTED CENTERLINE	8-22 SP	LF	725		
65.	REMOVING PAINT LINE	8-22 SP	LF	1507		

TOTAL CONSTRUCTION COST ......\$\_

\*Note: Contractor is advised to be familiar with Washington State Revenue Rule 171 as no separate, distinct sales tax monies will be reimbursed to the Contractor. See Special Provisions 1-07.2(1).

# **BID SECURITY FORM**

Herewith find deposit in the form of a certified check, cashier's check, cash, or bid bond in the amount of \$\_\_\_\_\_\_ which amount is not less than five percent of the total bid.

Sign here \_\_\_\_\_

Know All Men by These Presents:

 That we, \_\_\_\_\_\_\_, as Principal, and \_\_\_\_\_\_

\_\_\_\_\_\_\_as Surety, are held and firmly bound unto

the City of Sammamish, as Obligee, in the penal sum of \_\_\_\_\_

\_\_\_\_\_ Dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for \_\_\_\_\_\_\_ according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for the faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

Principal

Surety

Received return of deposit in the sum of \$\_\_\_\_\_

# ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

By signing below, Bidder acknowledges receipt and understanding of the following Addenda to the Contract Documents:

Addendum No.	Date of Receipt	Signature
1		
2		
3		
4		
5		
6		

NOTE:

Failure to acknowledge receipt of Addenda may be considered as an irregularity in the Bid Proposal and the City reserves the right to determine whether the Bid will be disqualified.

# **BIDDER INFORMATION AND SIGNATURE**

The Bidder proposes to accept as full payment for the Work proposed herein, the amount computed under the provisions of the Contract Provisions. The undersigned Bids for the following described Project:

#### LOUIS THOMPSON ROAD SE SLIDE REPAIR AND DRAINAGE IMPROVEMENTS PROJECT

The party by whom this Bid is submitted and by whom the Contract will be entered into, in the event the award is made to this party, is:

Contractor (Firm Name)	Signature
Address	Name (Print) & Title
Phone Number	Date of Signing
Contractor's Washington State License Number	(Indicate whether contractor is partnership, joint venture, corporation, or sole proprietorship)*

\*If Bidder is a corporation, write State of Incorporation under signature. If partnership, give full names of all partners.

The name of the President, Treasurer, and/or Manager of the Bidding corporation, or the names of all persons and parties interested in this Bid as partners or principals, are as follows:

Name	Address

Print Contractor Name

IF SOLE PROPRIETOR OR PARTNERSHIP	5	
IN WITNESS hereto, the undersigned has se 20	t his (its) hand this day of	,
	Signature of Bidder	
	Title	
IF CORPORATION		
IN WITNESS WHEREOF, the undersigned executed by its duly authorized officers th 20	l corporation has caused this instrument to be	Э ,
Attest:	Name of Corporation	
Secretary	Dy	
	Title	
Sworn to me before me this day c	of 	
Washington Residing at	_	

NOTES:

If the Bidder is a co-partnership, give firm name under which business is transacted; Proposal must be executed by a partner. If the Bidder is 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).

## **Print Contractor Name** NON-COLLUSION AND DEBARMENT AFFIDAVIT

*	STATE OF WASHINGTON		)
**		`	)
ጥኅ	COUNTY OF	)	

I, the undersigned, an authorized representative of \*\*\* , being first duly sworn on oath do hereby certify that said 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.

I further certify that, except as noted below, the firm, association or corporation or any person in a controlling capacity associated therewith or any position involving the administration of federal funds; is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against said person, firm, association or corporation by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

I further acknowledge that by signing the signature page of the proposal, I am deemed to have signed and have agreed to the provisions of this affidavit.

	Name of Decised					
	Name o	of Project				
	Name of Bidder's Firm					
	Signature of Authorized	Representative of Bidder				
	Printed Name of Authorize	ed Representative of Bidder				
		ate				
	D	ale				
I certify t	that I know or have satisfactory evidence that	is the person who appeared before me.				
and said r	person acknowledged that (he/she) signed this in	strument and acknowledged it to be (his/her) free and voluntary				
act for th	ie uses and purposes mentioned in the instrumer	it.				
Dated						
Duiteu	N	otary Public in and for the State				
	of	Washington residing at				
	No	otary (print):				
	М	y appointment expires:				
NOTE: Ex- indicate ab	cceptions will not necessarily result in denial of award, but w bove to whom it applies, initiating agency, and dates of	ill be considered in determining bidder responsibility. For any exception noted, action. Providing false information may result in criminal prosecution or				
administrat	tive sanctions.					
*	A suspending or debarring official may grant an exception particular transaction upon a written determination by su established by Executive order 12549" (49 CFR Part 2	on permitting a debarred, suspended, or excluded person to participate in a ich official stating the reason(s) for deviating form the Presidential policy 9 Section 29.215).				

If notarization of proposal takes place outside of Washington State, DELETE WASHINGTON, and enter appropriate State.

Fill in county where notarization of proposal takes place.

NO

# MINIMUM WAGE AFFIDAVIT FORM

STATE OF WASHINGTON

COUNTY OF KING

SS

)

)

)

I, the undersigned, having been duly sworn, deposed, say and certify that in connection with the performance of the work of this project, I will pay each classification of laborer, workman, or mechanic employed in the performance of such work; not less than the prevailing rate of wage or not less than the minimum rate of wages as specified in the principal contract; that I have read the above and foregoing statement and certificate, know the contents thereof and the substance as set forth therein is true to my knowledge and belief.

Name of Project

Name of Bidder's Firm

Signature of Authorized Representative of Bidder

Printed Name of Authorized Representative of Bidder

Date

I certify that I know or have satisfactory evidence that \_\_\_\_\_\_\_ is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in the instrument.

Dated \_\_\_\_\_

Notary Public in and for the State of Washington residing

at

Notary

(print):

My appointment expires:

# **STATEMENT OF BIDDER'S QUALIFICATIONS**

Name of Firm:				
Address:				
Telephone No.				
Contact Person f	or this Project:			
Number of years the present firm r	the Contractor haname, as indicate	as been engaged d above:	in the constructio	n business under
Gross dollar amo	ount of work curre	ntly under contra	act:	
Gross dollar amo	ount of contracts of	currently not com	pleted:	
General characte	er of work perform	ned by the firm: _		
List all of the proj been completed amount of each p Engineer's name	ects over one-ha by the Contracto project, together v	If million dollars t r within the last t with the Owner's	otal of a similar n five (5) years and name and phone	ature which have d the gross dollar number, and the
Project Name	Amount	Owner	Phone	Engineer's Name

List five major pieces of equipment which are anticipated to be used on this project by the Contractor and note which items are owned by the Contractor and which are to be leased or rented from others:

1.	
2.	
3.	
4.	
5.	

Bank Reference: \_\_\_\_\_

How many general superintendents or other responsible employees in a supervisory position do you have at this time, and how long have they been with the firm?

Identify who will be the general superintendent or project superintendent on this Project and list the number of years with the firm.

Have you changed bonding company within the last three (3) years?

If so, why?

Have you ever been sued or engaged in arbitration by the Owner or have you ever sued or demanded arbitration from an Owner on any public works contract for a special utility district, private utility company, municipality, county or state

government? \_\_\_\_\_ For what reason?\_\_\_\_\_

Disposition of case, if settled:

Do you have any outstanding payments due to the Department of Revenue?

If yes, explain: \_\_\_\_\_

Bidder agrees that the Owner shall retain the right to obtain any and all credit reports.

Yes: \_\_\_\_ No \_\_\_\_

# **RESPONSIBLE BIDDER CRITERIA**

In accordance with RCW 39.04, before award of a Public Works Contract, a Bidder must meet the following responsibility criteria to be considered a responsible Bidder and qualified to be awarded a Public Works Project. The Bidder must:

- 1. At the time of Bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW
- 2. Have a current state unified business identifier (UBI) number
- 3. If applicable, have industrial insurance coverage for the Bidder's employees working Washington as required in Title 51 RCW
- 4. If applicable, have an employment security department number as required in Title 50 RCW
- 5. If applicable, have a state excise tax registration number as required in Title 82 RCW
- 6. Not be disqualified from Bidding on any Public Works Contract under RCW 39.06.010 or 39.12.065(3)

In accordance with RCW 39.06, a Public Works Contractor must verify responsibility criteria for each first tier Subcontractor, and a Subcontractor of any tier that hires other Subcontractors must verify responsibility criteria for each of its Subcontractors, Verification shall include that each Subcontractor, at the time of Subcontract execution, meets the responsibility criteria and possesses an electrical contractor license, if required by RCW 19.28, or an elevator contractor license, if required by RCW 70.87. This verification requirement, as well as the responsibility criteria, must include every Public Works Contract and subcontract of every tier.

Providing the following information is **MANDATORY** in order to meet "Responsible Bidder" requirements. Failure to provide this information may disqualify your Bid as being "Non-Responsive". If your business is not required to have one of the following numbers, provide an explanation.

- 1. State of Washington Contractor Registration No.
- 2. State of Washington Unified Business Identifier No.
- 3. Employment Security Department No.
- 4. State Excise Tax Registration No.
- 5. Is the payment of Worker's Compensation (Industrial Insurance) Premiums current? If your business does not have a Worker's Comp account with the WA State Dept. of Labor & Industry please explain why.
  - [] Yes
  - [] No (If No, you are not eligible to bid on this project
  - [] No Account Explain why:
- 6. Are you disqualified from Bidding on Public Works Projects in the State of Washington?
  - [] Yes (If Yes, you are not eligible to Bid on this Project)
  - [] No

PART 3

# CONTRACT DOCUMENT FORMS

# CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this \_\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. by and between THE CITY OF SAMMAMISH, Washington, a municipal corporation of the State of Washington, hereinafter referred to as "CITY" and , hereinafter referred to as "CONTRACTOR."

#### WITNESSETH:

1) The Contractor shall within the time stipulated, (to-wit: within <u>60</u> working days from date of commencement hereof as required by the Contract, of which this agreement is a component part) perform all the work and services required to be performed, and provide and furnish all of the labor, materials, appliances, machines, tools, equipment, utility and transportation services necessary to perform the Contract, and shall complete the construction and installation work in a workmanlike manner, in connection with the City's Project:

#### LOUIS THOMPSON ROAD SE SLIDE REPAIR AND DRAINAGE IMPROVEMENTS PROJECT

This Contract provides for the improvement of Louis Thompson Road SE in the City of Sammamish, King County, from 210th Place SE to 211th Place SE. The project includes construction of a soldier pile wall, storm drain crossing, notched cement concrete curb and gutter, roadside bioretention, channelization, landscaping, surveying, traffic control and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

2) All the foregoing shall be timely performed, furnished, constructed, installed and completed in strict conformity with the plans and specifications, including any and all addenda issued by the City and all other documents hereinafter enumerated, and in full compliance with all applicable codes, ordinances and regulations of the City of Sammamish and any other governmental authority having jurisdiction there over. It is further agreed and stipulated that all of said labor, materials, appliances, machines, tools, equipment and services shall be furnished and the construction installation performed and completed to the satisfaction and the approval of the City's Public Works Director as being in such conformity with the plans, specifications and all requirements of or arising under the Contract.

The aforesaid Contract, entered into by the acceptance of the Contractor's bid and signing of this agreement, consists of the following documents, all of which are component parts of said Contract and as fully a part thereof as if herein set out in full, and if not attached, as if hereto attached.

- a) This Agreement
- b) Instruction to Bidders
- c) Project Proposal
- d) Specifications
- e) Maps and Plans
- f) Bid
- g) Advertisement for Bids

- h) Special Provisions, if any
- i) Addenda, if any

and all modifications or changes issued pursuant to the Contract Documents.

- 3) If the Contractor refuses or fails to prosecute the work or any part thereof, with such diligence as will insure its completion within the time specified in this Contract, or any extension in writing thereof, or fails to complete said work with such time, or if the Contractor shall be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver shall be appointed on account of the Contractor's insolvency, or if he or any of his subcontractors should violate any of the provisions of this Contract, the City may then serve written notice upon him and his surety of its intention to terminate the Contract, and unless within ten (10) days after the serving of such violation or non-compliance of any provision of the Contract shall cease and satisfactory arrangement for the correction thereof be made, this Contract, shall, upon the expiration of said ten (10) day period, cease and terminate in every respect. In the event of any such termination, the City shall immediately serve written notice thereof upon the surety and the Contractor and the surety shall have the right to take over and perform the Contract. provided, however, that if the surety within fifteen (15) days after the serving upon it of such notice of termination does not perform the Contract or does not commence performance thereof within thirty (30) days from the date of serving such notice, the City itself may take over the work under the Contract and prosecute the same to completion by Contract or by any other method it may deem advisable, for the account and at the expense of the Contractor, and his surety shall be liable to the City for any excess cost or other damages occasioned the City thereby. In such event, the City, if it so elects, may, without liability for so doing, take possession of and utilize in completing said Contract such materials, machinery, appliances, equipment, plants and other properties belonging to the Contractor as may be on site of the project and useful therein.
- 4) The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the City.
- 5) Contractor agrees and covenants to hold and save the City, its officers, agents, representatives and employees harmless and to promptly indemnify same from and against any and all claims, actions, damages, liability of every type and nature including all costs and legal expenses incurred by reason of any work arising under or in connection with the Contract to be performed hereunder, including loss of life, personal injury and/or damage to property arising from or out of any occurrence, omission or activity upon, on or about the premises worked upon or in any way relating to this Contract. This hold harmless and indemnification provision shall likewise apply for or on account of any patented or unpatented invention, process, article or appliance manufactured for use in the performance of the Contract, including its use by the City, unless otherwise specifically provided for in this Contract.

In the event the City shall, without fault on its part, be made a party to any litigation commenced by or against Contractor, then Contractor shall proceed and hold the City harmless and he shall pay all costs, expenses and reasonable attorney's fees incurred or paid by the City in connection with such litigation. Furthermore, Contractor agrees to pay all costs, expenses and reasonable attorney's fees that may be incurred or paid by City in the enforcement of any of the covenants, provisions and agreements hereunder.

## CONTRACT DOCUMENT FORMS – Continued

- 6) Any notice from one party to the other party under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by its duly authorized representative of such party. Any such notice as heretofore specified shall be given by personal delivery thereof or by depositing same in the United States mail, postage prepaid, certified or registered mail.
- 7) The Contractor shall commence performance of the Contract no later than 10 calendar days after Contract final execution, and shall complete the full performance of the Contract not later than 60 working days from the date of commencement. For each and every working day of delay after the established day of completion, it is hereby stipulated and agreed that the damages to the City occasioned by said delay shall be a sum calculated and imposed in compliance with 2012 WSDOT Standard Specifications, Section 1-08.9, Liquidated Damages (and not as a penalty) for each such day, which shall be paid by the Contractor to the City.
- 8) Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of any installation provided for by this Contract shall relieve the Contractor of liability in respect to any warranties or responsibility for faulty materials or workmanship. The Contractor shall be under the duty to remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within the period of one (1) year from the date of final acceptance only that work listed in Group(s) none of the Summary of quantities in the Contract Plans, i.e. the "Federal Non-participating Items," unless a longer period is specified. However, all manufacturer's warranties or guarantees on electrical and mechanical equipment, consistent with those provided as customary trade practice, shall be assigned to the City at the time of project acceptance. The Contractor shall further be required to supply warranties or guarantees providing for satisfactory in-service operation of any mechanical and electrical equipment and related components involved in Group(s) none of the Summary of Quantities in the Contract Plans, i.e. "Federal Participating Items" for a period not to exceed 6 months following project acceptance. The City will give notice of observed defects as heretofore specified with reasonable promptness after discovery thereof, and Contractor shall be obligated to take immediate steps to correct and remedy any such defect, fault or breach at the sole cost and expense of Contractor.
- 9) The Contractor and each subcontractor, if any, shall submit to the City such schedules of quantities and costs, progress schedules, payrolls, reports, estimates, records and miscellaneous data pertaining to the Contract as may be requested by the City from time to time.
- 10) The Contractor shall furnish a surety bond or bonds as security for the faithful performance of the Contract, including the payment of all persons and firms performing labor on the construction project under this Contract or furnishing materials in connection with this Contract; said bond to be in the full amount of the Contract price as specified in Paragraph 11. The surety or sureties on such bond or bonds must be duly licensed as a surety in the State of Washington.

11) The total amount of this contract is	the sum of	
,		numbers
writte	en words	
LOUIS THOMPSON ROAD SE SLIDE REPAIR	PART 3	
CITY OF SAMMAMISH	3-3	CONTRACT DOCUMENT FORMS

## CONTRACT DOCUMENT FORMS – Continued

which includes any required Washington State Sales Tax. Payments will be made to Contractor as specified in the "Standard Specifications" of this Contract.

IN WITNESS WHEREOF, the City has caused these presents to be signed by its City Manager and attested by its City Attorney and the Contractor has hereunto set his hand and seal the day and year first above-written.

CONTRACTOR			CITY OF SAMMAMISH		
President/Partr	ner/Owner		City Manager		
			ATTEST		
0			O'ha Athannan		
Secretary			City Attorney		
dba					
	Fi	rm Name			
check one					
Individual	Partnership	Corporation	n Incorporated in		

Attention:

If business is a CORPORATION, name of the corporation should be listed in full and both President and Secretary must sign the contract, OR if one signature is permitted by corporation by-laws, a copy of the by-laws shall be furnished to the City and made a part of the contract document.

If business is a PARTNERSHIP, full name of each partner should be listed followed by d/b/a (doing business as) and firm or trade name; any one partner may sign the contract.

If business is an INDIVIDUAL PROPRIETORSHIP, the name of the owner should appear followed by d/b/a and name of the company.

# **CONTRACTOR'S RETAINAGE AGREEMENT**

#### **IDENTIFICATION AND DESCRIPTION**

Project Title: LOUIS THOMPSON ROAD SE SLIDE REPAIR AND DRAINAGE IMPROVEMENTS PROJECT

Contractor:

Representative:\_\_\_\_\_

Bid Date:\_\_\_\_\_ City Clerk:\_\_\_\_\_

City Council Award Date:

#### **CONTRACTOR'S INSTRUCTIONS**

Pursuant to R.C.W. 60.28.01 0 I hereby notify the City of Sammamish of my instructions to  $\Box$  invest  $\Box$  not to invest the retainage withheld under the terms of this contract.

Type of Investment:

#### **RETAINAGE FORMULA**

In accordance with applicable State Statutes, the following provisions will be made for the disposition of the retainage held for investment:

1. All investments selected are subject to City approval.

2. Retainage under this agreement will be held in escrow by the \_\_\_\_\_\_, the terms of which are specified by separate escrow agreement. The cost of the investment program is to be borne entirely by the contractor.

3. The final disposition of the contract retainage will be made in accordance with applicable statutes.

Contractor:			Date:
	Firm Name		
Ву:	Signature		Title
Address:			
Phone:		_ Federal ID # _	
Estimated Com	pletion Date:		
DAD SE SLIDE REPAIR	PART 3		

## **CONTRACT DOCUMENT FORMS – Continued**

#### CITY APPROVAL

Approval of Investment Program and Retainage Agreement

Finance Department

Date

# LABOR AND MATERIAL PAYMENT BOND

We \_\_\_\_\_as Principal, and

as Surety, jointly and

severally bind ourselves, our heirs, successors and assigns as set forth herein to CITY OF SAMMAMISH (hereinafter called the Owner) for payment of the penal sum of

\_\_\_\_\_Dollars (\$\_\_\_\_\_), lawful money of the United States in connection with the owner's award to the Contractor of the contract for construction ("Contract") of the following project:

#### LOUIS THOMPSON ROAD SE SLIDE REPAIR AND DRAINAGE IMPROVEMENTS PROJECT

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Contractor shall in all respects faithfully perform all obligations and provisions in the said Contract, and pay all laborers, mechanics, and subcontractors and material men, taxing authorizes and all persons who supply such person or persons or subcontractors with material, equipment and supplies for the carrying on of such work, this obligation shall become null and void; otherwise, it shall remain in full force and effect, and Surety shall defend and indemnify Owner against any loss or damage due to the failure of the Principal to strictly perform all obligations of the Contract.

This bond shall be in force until completion of the Project and acceptance by the Owner, and also for such period thereafter during which the law allows claims to be filed and sued upon.

This bond is provided pursuant to and in compliance with R.C.W. Chapter 39.08, the terms and requirements of which statute are incorporated herein as though fully set forth herein.

Surety agrees that no change, extension of time, modifications or addition to the terms of the Contract, or the work to be performed thereunder, or to the specifications shall in any way affect its obligation on this bond, and it hereby waives notice thereof.

The Contractor and Surety agree that if the Owner is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay the Owner reasonable attorney's fees incurred, with or without suit, in addition to the penal sum.

Surety certifies that it is an authorized surety bond issuer, properly authorized to transact surety business in Washington. Surety agrees to be bound by the laws of the State of Washington and subject itself to the jurisdiction of the courts of the State of Washington.

## **CONTRACT DOCUMENT FORMS – Continued**

Executed in four original counterparts on _	, 20
	CONTRACTOR
	Ву
	(Title)
(Attach acknowledgment of authorized rep	resentative of Contractor).
(Nan	ne and Address of Surety)
(Na pro	me and Address of Surety's agent for service of cess in Washington if different from above)
(Te	ephone No. of Surety's Washington agent)
(Attach acknowledgment)	Surety
	ву Its Attorney-in-fact

Notice: Sureties must be authorized to conduct surety business in Washington and have an agent for service of process in Washington. Certified copy of Power of Attorney must be attached.

## **CONTRACT DOCUMENT FORMS – Continued**

# PERFORMANCE BOND TO THE CITY OF SAMMAMISH

We, the undersigned		as
principal, and	corporation organiz	ed and
existing under the laws of the State of and qualified under the laws of the State of Washi contractors with municipal corporations, as surety ar	as a surety ngton to become surety up e jointly and severally held a	corporation, on bonds of nd
irmly bound to the City of Sammamish in the per payment of which sum on demand we bind of administrators or person representatives, as the case This obligation is entered into in pursuance of the s Ordinance of the City of Sammamish.	nal sum of \$ ourselves and our succes e may be. statutes of the State of Was	for the sors, heirs, hington, the
Dated at, Washington, this	day of	, 20
Nevertheless, the conditions of the above obligation	are such that:	
WHEREAS, under and pursuant to Public Work	s Construction Contract	
providing for construction of LOUIS THOMPSON RC	DAD SE SLIDE REPAIR AND	DRAINAGE
MPROVEMENTS PROJECT the principal is requir	red to furnish a bond for	the faithful
performance of the contract; and WHEREAS, the principal has accepted, or is about t perform the work therein provided for in the manner	to accept, the contract, and u and within the time set forth;	undertake to
therein set forth, or within such extensions of said constraints and the provisions of said constraints of the set shall pay all laborers, mechanics, subcontractors and supply said principal or subcontractors with provision work, and shall hold said City of Sammamish harmles to any person or property by reason of any careles principal, or any subcontractor in the performance of the City of Sammamish harmless from any dama performance as specified in said contract or from poperation of any mechanical or electrical equipment such contract within a period of (2) two years a aft Sammamish, then his obligation shall become null a full force. Customary trade warranties or gua	may be granted under said of a material-men, and all perso as and supplies for the carryir ess from any loss or damage seness or negligence on the f said work, and shall indemr age or expense by reason defects appearing or develo and related components pro- ter its acceptance thereof by nd void, otherwise it shall be arantees on electrical and ish.	contract, and ns who shall occasioned part of said of failure of oping in the ovided under / the City of and remain mechanical
Principal	Surety	
Signature	Signature	
Title	Title	

CITY OF SAMMAMISH
## PART 4

# AMENDMENTS TO THE STANDARD SPECIFICATIONS

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### 1 INTRO.AP1

### 2 INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2018
 Standard Specifications for Road, Bridge, and Municipal Construction.

5 6

7

### AMENDMENTS TO THE STANDARD SPECIFICATIONS

8 The following Amendments to the Standard Specifications are made a part of this contract 9 and supersede any conflicting provisions of the Standard Specifications. For informational 10 purposes, the date following each Amendment title indicates the implementation date of the 11 Amendment or the latest date of revision.

12

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

- 15
- 16 1-02.AP1

### 17 Section 1-02, Bid Procedures and Conditions

18 January 2, 2018

### 19 **1-02.4(1) General**

- 20 This section is supplemented with the following:
- 21

22 Prospective Bidders are advised that the Contracting Agency may include a partially 23 completed Washington State Department of Ecology (Ecology) Transfer of Coverage 24 (Ecology Form ECY 020-87a) for the Construction Stormwater General Permit (CSWGP) 25 as part of the Bid Documents. When the Contracting Agency requires the transfer of 26 coverage of the CSWGP to the Contractor, an informational copy of the Transfer of 27 Coverage and the associated CSWGP will be included in the appendices. As a condition 28 of Section 1-03.3, the Contractor is required to complete sections I, III, and VIII of the 29 Transfer of Coverage and return the form to the Contracting Agency.

30

The Contracting Agency is responsible for compliance with the CSWGP until the end of day that the Contract is executed. Beginning on the day after the Contract is executed, the Contractor shall assume complete legal responsibility for compliance with the CSWGP and full implementation of all conditions of the CSWGP as they apply to the Contract Work.

37 **1-02.6 Preparation of Proposal** 

38 Item number 1 of the second paragraph is revised to read:

39

42

- 40 1. A unit price for each item (omitting digits more than two places to the right of the decimal point),
- 43 The following new paragraph is inserted before the last paragraph:44

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form (WSDOT Form 272-009). Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

- 1 1-03.AP1
- 2 Section 1-03, Award and Execution of Contract
- 3 January 2, 2018

### 4 **1-03.3 Execution of Contract**

- 5 The first paragraph is revised to read:
- 6

Within 20 calendar days after the Award date, the successful Bidder shall return the
signed Contracting Agency-prepared Contract, an insurance certification as required by
Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer
of Coverage form for the Construction Stormwater General Permit with sections I, III, and
VIII completed when provided, and shall be registered as a contractor in the state of
Washington.

13

### 14 **1-03.5 Failure to Execute Contract**

- 15 The first sentence is revised to read:
- 16

Failure to return the insurance certification and bond with the signed Contract as required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's Business Enterprise information if required in the Contract, or failure or refusal to sign the Contract, or failure to register as a contractor in the state of Washington, or failure to return the completed Transfer of Coverage for the Construction Stormwater General Permit to the Contracting Agency when provided shall result in forfeiture of the proposal bond or deposit of this Bidder.

- 24
- 25 1-06.AP1
- 26 Section 1-06, Control of Material
- 27 January 2, 2018

### 28 1-06.1(3) Aggregate Source Approval (ASA) Database

- 29 This section is supplemented with the following:
- 30

Regardless of status of the source, whether listed or not listed in the ASA database the
 source owner may be asked to provide testing results for toxicity in accordance with
 Section 9-03.21(1).

### 35 1-06.2(2)D Quality Level Analysis

36 This section is supplemented with the following new subsection:

37 38

### 1-06.2(2)D5 Quality Level Calculation – HMA Compaction

The procedures for determining the quality level and pay factor for HMA compaction are as follows:

40 41 42

43

39

- 1. Determine the arithmetic mean,  $X_m$ , for compaction of the lot:
  - $X_m = \frac{\sum x}{n}$
- 44

45		
46	Where:	
47	x =	individual compaction test values for each sublot in the lot.
48	∑x =	summation of individual compaction test values

1 n = total number test values 2 3 2. Compute the sample standard deviation, "S", for each constituent:  $S = \left[ \frac{n \sum x^{2} - (\sum x)^{2}}{n(n-1)} \right]^{\frac{1}{2}}$ 4 5 6 7 Where:  $\Sigma x^2 =$ 8 summation of the squares of individual compaction test values 9  $(\sum x)^2$  = summation of the individual compaction test values squared 10 11 3. Compute the lower quality index (Q<sub>L</sub>): 12  $Q_L = \frac{X_m - LSL}{S}$ 13 14 15 Where: 16 LSL = 91.5 17 18 Determine P<sub>L</sub> (the percent within the lower Specification limit which corresponds 4. to a given  $Q_L$ ) from Table 1. For negative values of  $Q_L$ ,  $P_L$  is equal to 100 minus 19 20 the table  $P_L$ . If the value of  $Q_L$  does not correspond exactly to a figure in the 21 table, use the next higher value. 22 23 5. Determine the quality level (the total percent within Specification limits): 24 25 Quality Level =  $P_L$ 26 27 Using the quality level from step 5, determine the composite pay factor (CPF) 6. 28 from Table 2. 29 30 7. If the CPF determined from step 6 is 1.00 or greater: use that CPF for the 31 compaction lot; however, the maximum HMA compaction CPF using an LSL = 32 91.5 shall be 1.05. 33 34 If the CPF from step 6 is not 1.00 or greater: repeat steps 3 through 6 using an 8. 35 LSL = 91.0. The value thus determined shall be the HMA compaction CPF for 36 that lot; however, the maximum HMA compaction CPF using an LSL = 91.00 37 shall be 1.00. 38 39 1-06.2(2)D4 Quality Level Calculation 40 The first paragraph (excluding the numbered list) is revised to read: 41 42 The procedures for determining the quality level and pay factors for a material, other than 43 HMA compaction, are as follows: 44

- 1 1-07.AP1
- 2 Section 1-07, Legal Relations and Responsibilities to the Public

3 January 2, 2018

4 **1-07.5(3)** State Department of Ecology

5 This section is supplemented with the following:

6 7 9. When a violation of the CSWGP occurs, immediately notify the Engineer and fill out 8 WSDOT Form 422-011, Contractor ECAP Report, and submit the form to the 9 Engineer within 48 hours of the violation. 10 11 10. Once Physical Completion has been given, prepare a Notice of Termination (Ecology 12 Form ECY 020-87) and submit the Notice of Termination electronically to the Engineer in a PDF format a minimum of 7 calendar days prior to submitting the 13 14 Notice of Termination to Ecology. 15 11. Transfer the CSWGP coverage to the Contracting Agency when Physical Completion 16 17 has been given and the Engineer has determined that the project site is not stabilized 18 from erosion. 19 20 12. Submit copies of all correspondence with Ecology electronically to the Engineer in a 21 PDF format within four calendar days. 22 23 1-07.7(1) General 24 The first sentence of the third paragraph is revised to read: 25 26 When the Contractor moves equipment or materials on or over Structures, culverts or 27 pipes, the Contractor may operate equipment with only the load-limit restrictions in 28 Section 1-07.7(2). 29 30 The first sentence of the last paragraph is revised to read: 31 32 Unit prices shall cover all costs for operating over Structures, culverts and pipes. 33 1-07.9(2) Posting Notices 34 35 The second sentence of the first paragraph (up until the colon) is revised to read: 36 37 The Contractor shall ensure the most current edition of the following are posted: 38 39 In items 1 through 10, the revision dates are deleted. 40 41 1-07.11(2) Contractual Requirements 42 In this section, "creed" is revised to read "religion". 43 44 Item numbers 1 through 9 are revised to read 2 through 10, respectively. 45 46 After the preceding Amendment is applied, the following new item number 1 is inserted: 47 48 1. The Contractor shall maintain a Work site that is free of harassment, humiliation, 49 fear, hostility and intimidation at all times. Behaviors that violate this requirement 50 include but are not limited to: 51

1		a.	Persistent conduct that is offensive and unwelcome.
2 3 1		b.	Conduct that is considered to be hazing.
4 5 6		C.	Jokes about race, gender, or sexuality that are offensive.
0 7 8 9		d.	Unwelcome, unwanted, rude or offensive conduct or advances of a sexual nature which interferes with a person's ability to perform their job or creates an intimidating, hostile, or offensive work environment.
10 11 12		e.	Language or conduct that is offensive, threatening, intimidating or hostile based on race, gender, or sexual orientation.
13 14 15		f.	Repeating rumors about individuals in the Work Site that are considered to be harassing or harmful to the individual's reputation.
10	1 07 11	(E)	Sanationa
17 10		(J)	Sanctions
10	THIS SEC	lion	is supplemented with the following.
20 21 22	lmm any intin	nedia em nidat	ately upon the Engineer's request, the Contractor shall remove from the Work site ployee engaging in behaviors that promote harassment, humiliation, fear or tion including but not limited to those described in these specifications.
23	4 07 44	( <b>a</b> )	
24 25	1-07.11 The first	(6) sent	tence is revised to read:
26	The	. Co	optractor shall include the provisions of Section 1.07.11(2) Contractual
28 29	Rec	uirei udiną	ments (1) through (5) and the Section 1-07.11(5) Sanctions in every subcontract g procurement of materials and leases of equipment.
30		_	
31 32	1-07.18 Item nur	<b>Pu</b> nber	blic Liability and Property Damage Insurance 1 is supplemented with the following new sentence:
33 34 35 36	This Con	s poli nplet	cy shall be kept in force from the execution date of the Contract until the Physical tion Date.
37	1-08 AP	1	
38	Section	1-0	8. Prosecution and Progress
39	Januar	y 2,	2018
40	1-08 5	Tim	e for Completion
41	Item nur	nber	2 of the sixth paragraph is supplemented with the following:
42			
43	f.	Ac	opy of the Notice of Termination sent to the Washington State Department of
44 45		Eco Not	logy (Ecology); the elapse of 30 calendar days from the date of receipt of the ice of Termination by Ecology; and no rejection of the Notice of Termination by

46

49

### 50 **1-08.7 Maintenance During Suspension**

51 The fifth paragraph is revised to read:

01.3(16).

Ecology. This requirement will not apply if the Construction Stormwater General

Permit is transferred back to the Contracting Agency in accordance with Section 8-

- The Contractor shall protect and maintain all other Work in areas not used by traffic. All
   costs associated with protecting and maintaining such Work shall be the responsibility of
- 4 the Contractor.
- 5
- 6 2-09.AP2

### 7 Section 2-09, Structure Excavation

8 January 2, 2018

### 9 2-09.3(3)D Shoring and Cofferdams

- 10 The first sentence of the sixth paragraph is revised to read:
- 11
- Structural shoring and cofferdams shall be designed for conditions stated in this Section
   using methods shown in Division I Section 5 of the AASHTO Standard Specifications for
   *Highway Bridges* Seventeenth Edition 2002 for allowable stress design, or the AASHTO
   *LRFD Bridge Design Specifications* for load and resistance factor design.
- 16
- 17 5-04.AP5

### 18 Section 5-04, Hot Mix Asphalt

19 January 2, 2018

### 20 **5-04.1 Description**

- The last sentence of the first paragraph is revised to read:
- The manufacture of HMA may include additives or processes that reduce the optimum mixing temperature (Warm Mix Asphalt) or serve as a compaction aid in accordance with these Specifications.

### 27 5-04.2 Materials

The reference to "Warm Mix Asphalt Additive" is revised to read "HMA Additive". 29

### 30 **5-04.2(1)** How to Get an HMA Mix Design on the QPL

- 31 The last bullet in the first paragraph is revised to read:
- 32 33

34

35

36

37

- Do not include HMA additives that reduce the optimum mixing temperature or serve as a compaction aid when developing a mix design or submitting a mix design for QPL evaluation. The use of HMA additives is not part of the process for obtaining approval for listing a mix design on the QPL. Refer to Section 5-04.2(2)B.
- In the table, "WSDOT Standard Practice QC-8" is revised to read "WSDOT Standard Practice
   QC-8 located in the WSDOT Materials Manual M 46-01".
- 40

## 41 **5-04.2(1)**C Mix Design Resubmittal for QPL Approval

- 42 Item number 3 of the first paragraph is revised to read:43
  - 3. Changes in modifiers used in the asphalt binder.
- 44 45

### 46 **5-04.2(2)B** Using Warm Mix Asphalt Processes

- 47 This section, including title, is revised to read:
- 48

2	The Contractor may, at the Contractor's discretion, elect to use additives that reduce the
3 1	include, ergenia, additives, chemical additives, and feaming processes. The use of
4	Additives is subject to the following:
5	Additives is subject to the following:
6	
1	• Do not use additives that reduce the mixing temperature in accordance with
8	Section 5-04.3(6) in the production of High RAP/Any RAS mixtures.
9	
10	<ul> <li>Before using additives, obtain the Engineer's approval using WSDOT Form 350-</li> </ul>
11	076 to describe the proposed additive and process.
12	
13	5-04.3(3)A Mixing Plant
14	In item number 5 of the first paragraph, "WSDOT T 168" is revised to read "FOP for AASHTO
15	Т 168".
16	
17	5-04 3(4) Prenaration of Existing Paved Surfaces
18	The first sentence of the fourth paragraph is revised to read:
10	The first sentence of the fourth paragraph is revised to read.
20	Unloss otherwise approved by the Engineer use estimple emulcified asphalt CSS 1. CSS
20	The or Defermence Creded (DC) conheit for took cost
21	III, OF FEHOIMANCE GRAUEU (FG) asphalt for tack coat.
22	
23	5-04.3(6) MIXING
24	The first paragraph is revised to read:
25	
26	The asphalt supplier shall introduce recycling agent and anti-stripping additive, in the
27	amount designated on the QPL for the mix design, into the asphalt binder prior to
28	shipment to the asphalt mixing plant.
29	
30	The seventh paragraph is revised to read:
31	
32	Upon discharge from the mixer, ensure that the temperature of the HMA does not exceed
33	the optimum mixing temperature shown on the approved Mix Design Report by more than
34	25°F, or as approved by the Engineer. When an additive is included in the manufacture
35	of HMA, do not heat the additive (at any stage of production including in binder storage
36	tanks) to a temperature higher than the maximum recommended by the manufacturer of
37	the additive.
38	
39	5-04 3(8) Aggregate Acceptance Prior to Incorporation in HMA
40	The following new paragraph is inserted after the first paragraph:
-0 /1	The following new paragraph is inserted after the first paragraph.
41 12	The Contracting Agency's combined aggregate bulk specific gravity (Csb) blend as
42	shown on the HMA Mix Design will be used for VMA selections until the Contractor
43	shown on the Third Wild Design will be used for Vivia calculations until the Contractor
44	for LIMA from the date the Engineer receives the written request for a Cab retest. The
40	IOI TIVIA ITOTI THE date the Engineer receives the written request for a GSD retest. The
40	Contractor may request aggregate specific gravity (GSD) testing be performed by the
4/	Contracting Agency twice per project. The GSD blend of the combined stockpiles will be
48	used to calculate volds in mineral aggregate (VMA) of any HMA produced after the new
49	GSD is determined.
50	

51 **5-04.3(9)A1 Test Section – When Required, When to Stop** 52 The following new row is inserted after the second row in Table 9:

5-04.2(2)B Using HMA Additives

1

VMA	Minimum PF <sub>i</sub> of 0.95	None <sup>4</sup>
	based on the criteria in Section 5-04.3(9)B4 <sup>2</sup>	

1

### 5-04.3(9)A2 Test Section – Evaluating the HMA Mixture in a Test Section

4 In Table 9a, the test property "Gradation, Asphalt Binder, and  $V_a$ " is revised to read "Gradation,

5 Asphalt Binder, VMA, and V<sub>a</sub>" 6

### 7 5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing

In Table 11, "V<sub>a</sub>" is revised to read "VMA and V<sub>a</sub>" 8

### 10 5-04.3(9)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)

11 The following new row is inserted above the last row in Table 12:

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Voids in Mineral Aggregate	2
(VMA)	

### 14 5-04.3(9)B7 Mixture Statistical Evaluation – Retests

15 The second to last sentence is revised to read: 16

The sample will be tested for a complete gradation analysis, asphalt binder content, VMA and Va, and the results of the retest will be used for the acceptance of the HMA mixture in place of the original mixture sublot sample test results.

### 21 5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots 22

The bulleted item in the fourth paragraph is revised to read:

• For a compaction lot in progress with a compaction CPF less than 0.75 using an LSL = 91.0, a new compaction lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

#### 29 5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing

30 In the table, "WSDOT FOP for AASHTO T 355" is revised to read "FOP for AASHTO T 355". 31

#### 32 5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments

33 In the first paragraph, "WSDOT FOP for AASHTO T 355" is revised to read "FOP for AASHTO 34 T 355". 35

### 5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments 36

- 37 The first sentence in the second paragraph is revised to read:
- 38 39 For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not 40 meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in 41 accordance with Section 1-06.2(2)D5 to determine the appropriate Composite Pay Factor 42 (CPF).
- 43

44 The last two paragraphs are revised to read:

45

Determine the Compaction Price Adjustment (CPA) from the table below, selecting the 46 47 equation for CPA that corresponds to the value of CPF determined above.

Calculating HMA Compaction Price Adjustment (CPA)				
Value of CPF	Equation for Calculating CPA			
When CPF > 1.00	CPA = [0.80 x (CPF – 1.00)] x Q x UP			
When CPF = 1.00	CPA = \$0			
When CPF < 1.0	CPA = [0.40 x (CPF – 1.00)] x Q x UP			

- 2
- 3 Where
- 4 CPA = Compaction Price Adjustment for the compaction lot (\$)
- 5 CPF = Composite Pay Factor for the compaction lot (maximum is 1.05)
- 6 Q = Quantity in the compaction lot (tons)
- 7 UP = Unit price of the HMA in the compaction lot (\$/ton)
- 8
- 9 6-01.AP6

### 10 Section 6-01, General Requirements for Structures

11 January 2, 2018

### 12 **6-01.10** Utilities Supported by or Attached to Bridges

13 In the third paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

### 15 6-01.12 Final Cleanup

- 16 The second paragraph is deleted.
- 17
- 18 6-02.AP6
- 19 Section 6-02, Concrete Structures
- 20 January 2, 2018

### 21 6-02.3(2)A Contractor Mix Design

- 22 The last sentence of the last paragraph is revised to read:
- 23
- For all other concrete, air content shall be a minimum of 4.5 percent and a maximum of 5 7.5 percent for all concrete placed above the finished ground line unless noted otherwise.
- 26

## 27 6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D

- 28 Item number 5 of the first paragraph is deleted.29
- Item number 6 of the first paragraph (after the preceding Amendment is applied) is
   renumbered to 5.

### 33 6-02.3(4)D Temperature and Time For Placement

- 34 The following is inserted after the first sentence of the first paragraph:
- 35 36
- The upper temperature limit for placement for Class 4000D concrete may be increased
   to a maximum of 80°F if allowed by the Engineer.

### 39 6-02.3(6)A1 Hot Weather Protection

- 40 The first paragraph is revised to read:
- 41

The Contractor shall provide concrete within the specified temperature limits. Cooling of the coarse aggregate piles by sprinkling with water is permitted provided the moisture content is monitored, the mixing water is adjusted for the free water in the aggregate and the coarse aggregate is removed from at least 1 foot above the bottom of the pile. Sprinkling of fine aggregate piles with water is not allowed. Refrigerating mixing water or replacing all or part of the mixing water with crushed ice is permitted, provided the ice is completely melted by placing time.

- 9 The second sentence of the second paragraph is revised to read:
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These surfaces include forms, reinforcing steel, steel beam flanges, and any others that touch the concrete.

### 14 6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing

- 15 In the third subparagraph of the first paragraph, the last sentence is revised to read: 16
- 17 The Contractor shall texture the bridge deck surface to within 3-inches minimum and 24-18 inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and 19 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of 20 the perimeter of bridge drain assemblies.

### 22 6-02.3(13)A Strip Seal Expansion Joint System

In item number 3 of the third paragraph, "Federal Standard 595" is revised to read "SAE AMS
 Standard 595".

### 26 6-02.3(24)C Placing and Fastening

- 27 The fourth sentence of the second paragraph is revised to read:
- 28 29

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All epoxy-coated bars in the top mat of the bridge deck shall be tied at all intersections, however they may be tied at alternate intersections when spacing is less than 1 foot in each direction and they are supported by continuous supports meeting all other requirements of supports for epoxy-coated bars.

- The sixth paragraph (excluding the numbered list) is revised to read:
  - Precast concrete supports (or other accepted devices) shall be used to maintain the concrete coverage required by the Plans. The precast concrete supports shall:
- 39 Item number 2 of the sixth paragraph is revised to read:
  - 2. Have a compressive strength equal to or greater than that of the concrete in which they are embedded.
- 44 The first sentence of the seventh paragraph is revised to read:45
- In slabs, each precast concrete support shall have either: (1) a grooved top that will hold
  the reinforcing bar in place, or (2) an embedded wire that protrudes and is tied to the
  reinforcing steel.
- 49
- 50 The eighth paragraph is revised to read:
- 51

- 1 Precast concrete supports may be accepted based on a Manufacturer's Certificate of 2 Compliance. 3 4 The ninth paragraph (excluding the numbered list) is revised to read: 5 6 In lieu of precast concrete supports, the Contractor may use metal or all-plastic supports 7 to hold uncoated bars. Any surface of a metal support that will not be covered by at least 8  $\frac{1}{2}$  inch of concrete shall be one of the following: 9 10 The tenth paragraph is revised to read: 11 12 In lieu of precast concrete supports, epoxy-coated reinforcing bars may be supported by 13 one of the following: 14 15 Metal supports coated entirely with a dielectric material such as epoxy or plastic, 1. 16 17 2. Other epoxy-coated reinforcing bars, or 18 19 3. All-plastic supports. 20 21 The following new paragraph is inserted after the tenth paragraph: 22 23 Damaged coatings on metal bar supports shall be repaired prior to placing concrete. 24 25 The twelfth paragraph (after the preceding Amendment is applied) is revised to read: 26 27 All-plastic supports shall be lightweight, non-porous, and chemically inert in concrete. All-28 plastic supports shall have rounded seatings, shall not deform under load during normal 29 temperatures, and shall not shatter or crack under impact loading in cold weather. All-30 plastic supports shall be placed at spacings greater than 1 foot along the bar and shall 31 have at least 25 percent of their gross place area perforated to compensate for the 32 difference in the coefficient of thermal expansion between plastic and concrete. The 33 shape and configuration of all-plastic supports shall permit complete concrete 34 consolidation in and around the support. 35 36 The thirteenth paragraph (after the preceding Amendment is applied) is revised to read: 37 38 A "mat" is two adjacent and perpendicular layers of reinforcing steel. In bridge decks, top 39 and bottom mats shall be supported adequately enough to hold both in their proper 40 positions. If bar supports directly support, or are directly supported on No. 4 bars, they 41 shall be spaced at not more than 3-foot intervals (or not more than 4-foot intervals for 42 bars No. 5 and larger). Wire ties to girder stirrups shall not be considered as supports. To 43 provide a rigid mat, the Contractor shall add other supports and tie wires to the top mat 44 as needed. 45 46 47 6-02.3(28)D Contractors Control Strength 48 In the first paragraph, "WSDOT FOP for AASHTO T 23" is revised to read "FOP for AASHTO 49 T 23".
- 50

1 6-05.AP6

### 2 Section 6-05, Piling

3 January 2, 2018

## 6-05.3(9)A Pile Driving Equipment Approval The fourth sentence of the second paragraph is revised to read:

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- For prestressed concrete piles, the allowable driving stress in kips per square inch shall
- 8 be  $0.095 \cdot \sqrt{f'_c}$  plus prestress in tension, and  $0.85f'_c$  minus prestress in compression, 9 where  $f'_c$  is the concrete compressive strength in kips per square inch.
- 10
- 11 6-07.AP6
- 12 Section 6-07, Painting
- 13 January 2, 2018

### 14 6-07.3(6)A Paint Containers

- 15 In item number 2 of the first paragraph, "Federal Standard 595" is revised to read "SAE AMS
- 16 Standard 595".
- 17
- 18 6-08.AP6

### 19 Section 6-08, Bituminous Surfacing on Structure Decks

20 January 2, 2018

### 21 6-08.3(7)A Concrete Deck Preparation

- 22 The first sentence of the first paragraph is revised to read:
- The Contractor, with the Engineer, shall inspect the exposed concrete deck to establish
  the extent of bridge deck repair in accordance with Section 6-09.3(6).
- 26
- 27 6-09.AP6

### 28 Section 6-09, Modified Concrete Overlays

29 January 2, 2018

### 30 6-09.3 Construction Requirements

- 31 This section is supplemented with the following new subsection:
- 32 33

## 6-09.3(15) Sealing and Texturing Concrete Overlay

- After the requirements for checking for bond have been met, all joints and visible cracks shall be filled and sealed with a high molecular weight methacrylate resin (HMWM). The Contractor may use compressed air to accelerate drying of the deck surface for crack identification and sealing. Cracks 1/16 inch and greater in width shall receive two applications of HMWM. Immediately following the application of HMWM, the wetted surface shall be coated with sand for abrasive finish.
- 40
- After all cracks have been filled and sealed and the HMWM resin has cured, the concrete
  overlay surface shall receive a longitudinally sawn texture in accordance with Section 602.3(10)D5.
- Traffic shall not be permitted on the finished concrete until it has reached a minimum compressive strength of 3,000 psi as verified by rebound number determined in accordance with ASTM C805 and the longitudinally sawn texture is completed.

### 2 6-09.3(1)B Rotary Milling Machines

3 This section is revised to read:

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Rotary milling machines used to remove an upper layer of existing concrete overlay, when present, shall have a maximum operating weight of 50,000 pounds and conform to Section 6-08.3(5)B.

### 9 6-09.3(1)C Hydro-Demolition Machines

10 The first sentence of this section is revised to read:

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Hydro-demolition machines shall consist of filtering and pumping units operating in conjunction with a remote-controlled robotic device, using high-velocity water jets to remove sound concrete to the nominal scarification depth shown in the Plans with a single pass of the machine, and with the simultaneous removal of deteriorated concrete.

### 17 6-09.3(1)D Shot Blasting Machines

18 This section, including title, is revised to read: 19

### 6-09.3(1)D Vacant

### 22 6-09.3(2) Submittals

Item number 1 and 2 are revised to read:

- 1. A Type 1 Working Drawing consisting of catalog cuts and operating parameters of the hydro-demolition machine selected by the Contractor for use in this project to scarify concrete surfaces.
- 2. A Type 1 Working Drawing consisting of catalog cuts, operating parameters, axle loads, and axle spacing of the rotary milling machine (if used to remove an upper layer of existing concrete overlay when present).
- The first sentence of item number 3 is revised to read:
  - A Type 2 Working Drawing of the Runoff Water Disposal Plan.

## 37 6-09.3(5)A General

38 The first sentence of the fourth paragraph is revised to read: 39

- All areas of the deck that are inaccessible to the selected scarifying machine shall be scarified to remove the concrete surface matrix to a maximum nominal scarification depth shown in the Plans by a method acceptable to the Engineer.
- 43 44
  - This section is supplemented with the following:
- 45
  46 Concrete process water generated by scarifying concrete surface and removing existing
  47 concrete overlay operations shall be contained, collected, and disposed of in accordance
  48 with Section 5-01.3(11) and Section 6-09.3(5)C, and the Section 6-09.3(2) Runoff Water
  49 Disposal Plan.
- 50

### 51 6-09.3(5)B Testing of Hydro-Demolition and Shot Blasting Machines

52 This section's title is revised to read:

1	
2 3	Testing of Hydro-Demolition Machines
4 5	The second paragraph is revised to read:
6 7 8	In the "sound" area of concrete, the equipment shall be programmed to remove concrete to the nominal scarification depth shown in the Plans with a single pass of the machine.
ğ	6-09 3(5)D Shot Blasting
10 11	This section, including title, is revised to read:
12	6-09.3(5)D Vacant
13	6 00 2/5)E. Botomilling
14 15 16	This section, including title, is revised to read:
17 18 19 20 21 22 23 24	<b>6-09.3(5)E Removing Existing Concrete Overlay Layer by Rotomilling</b> When the Contractor elects to remove the upper layer of existing concrete overlay, when present, by rotomilling prior to final scarifying, the entire concrete surface of the bridge deck shall be milled to remove the surface matrix to the depth specified in the Plans with a tolerance as specified in Section 6-08.3(5)B. The operating parameters of the rotary milling machine shall be monitored in order to prevent the unnecessary removal of concrete below the specified removal depth.
24 25	6-09.3(6) Further Deck Preparation
26 27	The first paragraph is revised to read::
28 29 30 31	Once the lane or strip being overlaid has been cleaned of debris from scarifying, the Contractor, with the Engineer, shall perform a visual inspection of the scarified surface. The Contractor shall mark those areas of the existing bridge deck that are authorized by the Engineer for further deck preparation by the Contractor.
32 33	Item number 4 of the second paragraph is deleted.
34 35 36	The first sentence of the third paragraph is deleted.
37 38 39	<b>6-09.3(6)A Equipment for Further Deck Preparation</b> This section is revised to read:
40 41 42	Further deck preparation shall be performed using either power driven hand tools conforming to Section 6-09.3(1)A, or hydro-demolition machines conforming to Section 6-09.3(1)C.
43 44 45	<b>6-09.3(6)B Deck Repair Preparation</b> The second paragraph is deleted.
40 47 48 40	The last sentence of the second paragraph (after the preceding Amendment is applied) is revised to read:
49 50 51 52	In no case shall the depth of a sawn vertical cut exceed ¾ inch or to the top of the top steel reinforcing bars, whichever is less.

- 1 The first sentence of the third to last paragraph is revised to read:
- Where existing steel reinforcing bars inside deck repair areas show deterioration greater
  than 20-percent section loss, the Contractor shall furnish and place steel reinforcing bars
  alongside the deteriorated bars in accordance with the details shown in the Standard
  Plans.
- 8 The last paragraph is deleted.

### 10 6-09.3(7) Surface Preparation for Concrete Overlay

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The first seven paragraphs are deleted and replaced with the following:

- Following the completion of any required further deck preparation the entire lane or strip being overlaid shall be cleaned to be free from oil and grease, rust and other foreign material that may still be present. These materials shall be removed by detergentcleaning or other method accepted by the Engineer followed by sandblasting.
- After detergent cleaning and sandblasting is completed, the entire lane or strip being
  overlaid shall be swept clean in final preparation for placing concrete using either
  compressed air or vacuum machines.
- Hand tool chipping, sandblasting and cleaning in areas adjacent to a lane or strip being
  cleaned in final preparation for placing concrete shall be discontinued when final
  preparation is begun. Scarifying and hand tool chipping shall remain suspended until the
  concrete has been placed and the requirement for curing time has been satisfied.
  Sandblasting and cleaning shall remain suspended for the first 24 hours of curing time
  after the completion of concrete placing.
- 28
- 29 Scarification, and removal of the upper layer of concrete overlay when present, may 30 proceed during the final cleaning and overlay placement phases of the Work on adjacent 31 portions of the Structure so long as the scarification and concrete overlay removal 32 operations are confined to areas which are a minimum of 100 feet away from the defined 33 limits of the final cleaning or overlay placement in progress. If the scarification and 34 concrete overlay removal impedes or interferes in any way with the final cleaning or 35 overlay placement as determined by the Engineer, the scarification and concrete overlay 36 removal Work shall be terminated immediately and the scarification and concrete overlay 37 removal equipment removed sufficiently away from the area being prepared or overlaid 38 to eliminate the conflict. If the grade is such that water and contaminants from the 39 scarification and concrete overlay removal operation will flow into the area being prepared 40 or overlaid, the scarification and concrete overlay removal operation shall be terminated 41 and shall remain suspended for the first 24 hours of curing time after the completion of 42 concrete placement.
- 43

## 44 6-09.3(12) Finishing Concrete Overlay

- 45 The third paragraph is deleted.
- 46
- 47 The last paragraph is deleted.
- 48 49 **6-09.3(13) Curing Concrete Overlay**
- 50 The first sentence of the first paragraph is revised to read:
- 51

- 1 As the finishing operation progresses, the concrete shall be immediately covered with a 2 single layer of clean, new or used, wet burlap.
- 34 The last sentence of the second paragraph is deleted.
- 56 The following two new paragraphs are inserted after the second paragraph:7

As an alternative to the application of burlap and fog spraying described above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. The Contractor shall submit a Type 2 Working Drawing consisting of details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained.

- The wet curing regimen as described shall remain in place for a minimum of 42-hours.
- 16 The last paragraph is deleted.

### 18 **6-09.3(14)** Checking for Bond

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

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After the requirements for curing have been met, the entire overlaid surface shall be sounded by the Contractor, in a manner accepted by and in the presence of the Engineer, to ensure total bond of the concrete to the bridge deck.

- 25 The last sentence of the first paragraph is deleted.
- 2627 The second paragraph is deleted.
- 28
- 29 6-18.AP6
- 30 Section 6-18, Shotcrete Facing
- 31 January 2, 2018

### 32 6-18.3(3) Testing

In the last sentence of the first paragraph, "AASHTO T 24" is revised to read "ASTM C1604".

### 35 6-18.3(3)B Production Testing

36 In the last sentence, "AASHTO T 24" is revised to read "ASTM C1604".

## 3738 6-18.3(4) Qualifications of Contractor's Personnel

- In the last sentence of the second paragraph, "AASHTO T 24" is revised to read "ASTM C1604".
- 41
- 42 6-19.AP6
- 43 Section 6-19, Shafts
- 44 January 2, 2018

## 45 6-19.3(3)C Conduct of Shaft Casing Installation and Removal and Shaft

### 46 **Excavation Operations**

- 47 The first paragraph is supplemented with the following:
- 48
- 49 In no case shall shaft excavation and casing placement extend below the bottom of shaft

## 2 6-19.3(6)E Thermal Wire and Thermal Access Point (TAPS)

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

- The thermal wire shall extend from the bottom of the reinforcement cage to the top of the shaft, with a minimum of 5-feet of slack wire provided above the top of shaft.
- The following new sentence is inserted after the third sentence of the third paragraph:
  - All thermal wires in a shaft shall be equal lengths.
- 11 12 7-02.AP7

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### 13 Section 7-02, Culverts

14 January 2, 2018

### 15 **7-02.3(6)A4 Excavation and Bedding Preparation**

- 16 The first sentence of the third paragraph is revised to read:
- 18 The bedding course shall be a 6-inch minimum thickness layer of culvert bedding 19 material, defined as granular material either conforming to Section 9-03.12(3) or to 20 AASHTO Grading No. 57 as specified in Section 9-03.1(4)C.
- 21 22 8-01.AP8

## 23 Section 8-01, Erosion Control and Water Pollution Control

- 24 January 11, 2018
- 25 8-01.1 Description
- 26 This section is revised to read:
- 27

This Work consists of furnishing, installing, maintaining, removing and disposing of best
 management practices (BMPs), as defined in the Washington Administrative Code (WAC)
 173-201A, to manage erosion and water quality in accordance with these Specifications
 and as shown in the Plans or as designated by the Engineer.

32

33 The Contracting Agency may have a National Pollution Discharge Elimination System 34 Construction Stormwater General Permit (CSWGP) as identified in the Contract Special 35 Provisions. The Contracting Agency may or may not transfer coverage of the CSWGP to 36 the Contractor when a CSWGP has been obtained. The Contracting Agency may not 37 have a CSWGP for the project but may have another water quality related permit as 38 identified in the Contract Special Provisions or the Contracting Agency may not have water quality related permits but the project is subject to applicable laws for the Work. 39 40 Section 8-01 covers all of these conditions. 41

### 42 8-01.2 Materials

- 43 The first paragraph is revised to read:
- 44 45

46

Materials shall meet the requirements of the following sections:

10			
47	Corrugated Polyethylene Drain Pipe	9.05.1(6)	
48	Quarry Spalls	9-13	
49	Erosion Control and Roadside Planting	9-14	
50	Construction Geotextile	9-33	

### 2 8-01.3(1) General

- 3 This section is revised to read:
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5 Adaptive management shall be employed throughout the duration of the project for the 6 implementation of erosion and water pollution control permit requirements for the current 7 condition of the project site. The adaptive management includes the selection and 8 utilization of BMPs, scheduling of activities, prohibiting unacceptable practices, 9 implementing maintenance procedures, and other managerial practices that when used 10 singularly or in combination, prevent or reduce the release of pollutants to waters of the 11 State. The adaptive management shall use the means and methods identified in this 12 section and means and methods identified in the Washington State Department of 13 Transportation's Temporary Erosion and Sediment Control Manual or the Washington 14 State Department of Ecology's Stormwater Management Manuals for construction 15 stormwater. 16

- The Contractor shall install a high visibility fence along the site preservation lines shownin the Plans or as instructed by the Engineer.
- Throughout the life of the project, the Contractor shall preserve and protect the delineated preservation area, acting immediately to repair or restore any fencing damaged or removed.
- All discharges to surface waters shall comply with surface water quality standards as defined in Washington Administrative Code (WAC) Chapter 173-201A. All discharges to the ground shall comply with groundwater quality standards WAC Chapter 173-200.
  - The Contractor shall comply with the CSWGP when the project is covered by the CSWGP. Temporary Work, at a minimum, shall include the implementation of:
    - 1. Sediment control measures prior to ground disturbing activities to ensure all discharges from construction areas receive treatment prior to discharging from the site.
      - 2. Flow control measures to prevent erosive flows from developing.
    - 3. Water management strategies and pollution prevention measures to prevent contamination of waters that will be discharged to surface waters or the ground.
    - 4. Erosion control measures to stabilize erodible earth not being worked.
- 42 5. Maintenance of BMPs to ensure continued compliant performance.
  - Immediate corrective action if evidence suggests construction activity is not in compliance. Evidence includes sampling data, olfactory or visual evidence such as the presence of suspended sediment, turbidity, discoloration, or oil sheen in discharges.
- To the degree possible, the Contractor shall coordinate this temporary Work with permanent drainage and erosion control Work the Contract requires.
- 51

1 Clearing, grubbing, excavation, borrow, or fill within the Right of Way shall never expose more erodible earth than as listed below:

2 3

Western Washington (West of the Cascade Mountain Crest)			Eastern Wa (East of the Mountain	shington Cascade Crest)
May 1 through September 30	17 Acres		April 1 through October 31	17 Acres
October 1 through April 30	5 Acres		November 1 through March 31	5 Acres

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The Engineer may increase or decrease the limits based on project conditions.

Erodible earth is defined as any surface where soils, grindings, or other materials may be capable of being displaced and transported by rain, wind, or surface water runoff.

10 Erodible earth not being worked, whether at final grade or not, shall be covered within 11 the specified time period (see the table below), using BMPs for erosion control.

12

Western Washington (West of the Cascade Mountain Crest)			Eastern Wa (East of the Mountain	shington Cascade Crest)
October 1 through April 30	2 days maximum		October 1 through June 30	5 days maximum
May 1 to September 30	7 days maximum		November 1 through March 31	10 days maximum

13

14 When applicable, the Contractor shall be responsible for all Work required for compliance 15 with the CSWGP including annual permit fees.

16

17 If the Engineer, under Section 1-08.6, orders the Work suspended, the Contractor shall 18 continue to comply with this division during the suspension. 19

20 Nothing in this Section shall relieve the Contractor from complying with other Contract 21 requirements. 22

### 23 8-01.3(1)A Submittals

24 This section's content is deleted.

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26 This section is supplemented with the following new subsection: 27

## 8-01.3(1)A1 Temporary Erosion and Sediment Control

29 A Temporary Erosion and Sediment Control (TESC) plan consists of a narrative section 30 and plan sheets that meets the Washington State Department of Ecology's Stormwater 31 Pollution Prevention Plan (SWPPP) requirement in the CSWGP. Abbreviated TESC plans 32 are used on small projects that disturb soil and have the potential to discharge but are 33 not covered by the CSWGP. The contract uses the term "TESC plan" to describe both 34 TESC plans and abbreviated TESC plans. When the Contracting Agency has developed 35 a TESC plan for a Contract, the narrative is included in the appendix to the Special Provisions and the TESC plan sheets are included in the Contract Plans. The Contracting
 Agency TESC plan will not include off-site areas used to directly support construction
 activity.

4

5 The Contractor shall either adopt the TESC Plan in the Contract or develop a new TESC 6 Plan. If the Contractor adopts the Contracting Agency TESC Plan, the Contractor shall 7 modify the TESC Plan to meet the Contractor's schedule, method of construction, and to 8 include off-site areas that will be used to directly support construction activity such as 9 equipment staging yards, material storage areas, or borrow areas. Contractor TESC 10 Plans shall include all high visibility fence delineation shown on the Contracting Agency 11 Contract Plans. All TESC Plans shall meet the requirements of the current edition of the 12 WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adaptively 13 managed as needed throughout construction based on site inspections and discharge 14 samples to maintain compliance with the CSWGP. The Contractor shall develop a 15 schedule for implementation of the TESC work and incorporate it into the Contractor's 16 progress schedule.

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The Contractor shall submit their TESC Plan (either the adopted plan or new plan) and implementation schedule as Type 2 Working Drawings. At the request of the Engineer, updated TESC Plans shall be submitted as Type 1 Working Drawings.

### 22 8-01.3(1)B Erosion and Sediment Control (ESC) Lead

This section is revised to read:

The Contractor shall identify the ESC Lead at the preconstruction discussions and in the TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate of Training in Construction Site Erosion and Sediment Control from a course approved by the Washington State Department of Ecology. The ESC Lead must be onsite or on call at all times throughout construction. The ESC Lead shall be listed on the Emergency Contact List required under Section 1-05.13(1).

The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not limited to:

- 1. Installing, adaptively managing, and maintaining temporary erosion and sediment control BMPs to assure continued performance of their intended function. Damaged or inadequate BMPs shall be corrected immediately.
- 2. Updating the TESC Plan to reflect current field conditions.
- 3. Discharge sampling and submitting Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology in accordance with the CSWGP.
- 44 Develop and maintain the Site Log Book as defined in the CSWGP. When the 4. 45 Site Log Book or portion thereof is electronically developed, the electronic 46 documentation must be accessible onsite. As a part of the Site Log Book, the 47 Contractor shall develop and maintain a tracking table to show that identified 48 TESC compliance issues are fully resolved within 10 calendar days. The table 49 shall include the date an issue was identified, a description of how it was 50 resolved, and the date the issue was fully resolved. 51

1 The ESC Lead shall also inspect all areas disturbed by construction activities, all on-site 2 erosion and sediment control BMPs, and all stormwater discharge points at least once 3 every calendar week and within 24-hours of runoff events in which stormwater discharges 4 from the site. Inspections of temporarily stabilized, inactive sites may be reduced to once 5 every calendar month. The Washington State Department of Ecology's Erosion and 6 Sediment Control Site Inspection Form. located at 7 http://www.ecy.wa.gov/programs/wq/stormwater/construction/InspectionForm.docx.shall 8 be completed for each inspection and a copy shall be submitted to the Engineer no later 9 than the end of the next working day following the inspection.

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### 11 8-01.3(1)C Water Management

12 This section is supplemented with the following new subsections: 13

8-01.3(1)C5 Water Management for In-Water Work Below Ordinary High
 Water Mark (OHWM)

Work over surface waters of the state (defined in WAC 173-201A-010) or below the
 OHWM (defined in RCW 90.58.030) must comply with water quality standards for surface
 waters of the state of Washington.

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### 8-01.3(1)C6 Environmentally Acceptable Hydraulic Fluid

All equipment containing hydraulic fluid that operates over surface waters of the state or below the OHWM, shall be equipped with an environmentally acceptable hydraulic fluid. The fluid shall meet specific requirements for biodegradability, aquatic toxicity, and bioaccumulation in accordance with the United States Environmental Protection Agency (EPA) publication EPA800-R-11-002. Acceptance shall be in accordance with Section 1-06.3, Manufacturer's Certification of Compliance.

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The designation of environmentally acceptable hydraulic fluid does not mean fluid spills
 are acceptable. The Contractor shall respond to spills to land or water in accordance with
 the Contract.

### 32 8-01.3(1)C7 Turbidity Curtain

All Work for the turbidity curtain shall be in accordance with the manufacturer's recommendations for the site conditions. Removal procedures shall be developed and used to minimize silt release and disturbance of silt. The Contractor shall submit a Type Working Drawing, detailing product information, installation and removal procedures, equipment and workforce needs, maintenance plans, and emergency repair/replacement plans.

- 40 Turbidity curtain materials, installation, and maintenance shall be sufficient to comply with 41 water quality standards.
- 42 43

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- The Contractor shall notify the Engineer 10 days in advance of removing the turbidity curtain. All components of the turbidity curtain shall be removed from the project.
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### 46 **8-01.3(1)C1 Disposal of Dewatering Water**

47 This section is revised to read:

When uncontaminated groundwater is encountered in an excavation on a project it may be infiltrated within vegetated areas of the right of way not designated as Sensitive Areas or incorporated into an existing stormwater conveyance system at a rate that will not

- Alternatively, the Contractor may pursue independent disposal and treatment alternatives
   that do not use the stormwater conveyance system provided it is in compliance with the
   applicable WACs and permits.
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### 6 8-01.3(1)C2 Process Wastewater

This section is revised to read:

Wastewater generated on-site as a byproduct of a construction process shall not be discharged to surface waters of the State. Some sources of process wastewater may be infiltrated in accordance with the CSWGP with concurrence from the Engineer. Some sources of process wastewater may be disposed via independent disposal and treatment alternatives in compliance with the applicable WACs and permits.

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### 15 8-01.3(1)C3 Shaft Drilling Slurry Wastewater

16 This section is revised to read: 17

18 Wastewater generated on-site during shaft drilling activity shall be managed and 19 disposed of in accordance with the requirements below. No shaft drilling slurry 20 wastewater shall be discharged to surface waters of the State. Neither the sediment nor 21 liquid portions of the shaft drilling slurry wastewater shall be contaminated, as detectable 22 by visible or olfactory indication (e.g., chemical sheen or smell). 23

- Water-only shaft drilling slurry or water slurry with approved flocculants may be infiltrated on-site. Flocculants used shall meet the requirements of Section 9-14.5(1) or shall be chitosan products listed as General Use Level Designation (GULD) on the Washington State Department of Ecology's stormwater treatment technologies webpage for construction treatment. Infiltration is permitted if the following requirements are met:
  - a. Wastewater shall have a pH of 6.5 8.5 prior to discharge.
  - b. The amount of flocculant added to the slurry shall be kept to the minimum needed to adequately settle out solids. The flocculant shall be thoroughly mixed into the slurry.
  - c. The slurry removed from the shaft shall be contained in a leak proof cell or tank for a minimum of 3 hours.
  - d. The infiltration rate shall be reduced if needed to prevent wastewater from leaving the infiltration location. The infiltration site shall be monitored regularly during infiltration activity. All wastewater discharged to the ground shall fully infiltrate and discharges shall stop before the end of each work day.
    - e. Drilling spoils and settled sediments remaining in the containment cell or tank shall be disposed of in accordance with Section 6-19.3(4)F.
- f. Infiltration locations shall be in upland areas at least 150 feet away from surface waters, wells, on-site sewage systems, aquifer sensitive recharge areas, sole source aquifers, well head protection areas, and shall be marked on the plan sheets before the infiltration activity begins.

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2 3 4		g. Prio Wa Dra	or to infiltration, the Contractor shall submit a Shaft Drilling Slurry istewater Management and Infiltration Plan as a Type 2 Working awing. This Plan shall be kept on-site, adapted if needed to meet the
5 6 7		cor fiel info	nstruction requirements, and updated to reflect what is being done in the d. The Working Drawing shall include, at a minimum, the following prmation:
8 9 10 11 12		i.	Plan sheet showing the proposed infiltration location and all surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas within 150 feet.
13 14 15 16		ii.	The proposed elevation of soil surface receiving the wastewater for infiltration and the anticipated phreatic surface (i.e., saturated soil).
10 17 18		iii.	The source of the water used to produce the slurry.
19 20		iv.	The estimated total volume of wastewater to be infiltrated.
20 21 22		V.	The approved flocculant to be used (if any).
23 24 25		vi.	The controls or methods used to prevent surface wastewater runoff from leaving the infiltration location.
25 26 27 28 20		vii.	The strategy for removing slurry wastewater from the shaft and containing the slurry wastewater once it has been removed from the shaft.
29 30 31 32		viii.	The strategy for monitoring infiltration activity and adapting methods to ensure compliance.
33 34 35 36		ix.	A contingency plan that can be implemented immediately if it becomes evident that the controls in place or methods being used are not adequate.
37 38 39 40 41 42		х.	The strategy for cleaning up the infiltration location after the infiltration activity is done. Cleanup shall include stabilizing any loose sediment on the surface within the infiltration area generated as a byproduct of suspended solids in the infiltrated wastewater or soil disturbance associated with BMP placement and removal.
42 43 44 45 46 47	2.	Shaft di approve an appr have co with See	rilling mineral slurry, synthetic slurry, or slurry with polymer additives not ed for infiltration shall be contained and disposed of by the Contractor at roved disposal facility in accordance with Section 2-03.3(7)C. Spoils that ome into contact with mineral slurry shall be disposed of in accordance ction 6-19.3(4)F.
48 49	8-01.3(1)C4	Manag	gement of Off-Site Water

- 50 This section is revised to read:
- 51

Prior to clearing and grubbing, the Contractor shall intercept all sources of off-site surface water and overland flow that will run-on to the project. Off-site surface water run-on shall be diverted through or around the project in a way that does not introduce construction related pollution. It shall be diverted to its preconstruction discharge location in a manner that does not increase preconstruction flow rate and velocity and protects contiguous properties and waterways from erosion. The Contractor shall submit a Type 2 Working Drawing consisting of the method for performing this Work.

### 9 8-01.3(1)E Detention/Retention Pond Construction

10 This section is revised to read:

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Whether permanent or temporary, ponds shall be constructed before beginning other grading and excavation Work in the area that drains into that pond. Detention/retention ponds may be constructed concurrently with grading and excavation when allowed by the Engineer. Temporary conveyances shall be installed concurrently with grading in accordance with the TESC Plan so that newly graded areas drain to the pond as they are exposed.

### 19 8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch

20 In the table, the second column heading is revised to read: 21

Eastern Washington<sup>1</sup>

### (East of the Cascade Mountain Crest)

25 Footnote 1 in the table is revised to read:

Seeding may be allowed outside these dates when allowed or directed by the Engineer.

### 29 8-01.3(5) Plastic Covering

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

**Erosion Control** – Plastic coverings used to temporarily cover stockpiled materials, slopes or bare soils shall be installed and maintained in a way that prevents water from intruding under the plastic and prevents the plastic cover from being damaged by wind.

### 36 **8-01.3(7) Stabilized Construction Entrance**

- 37 The first paragraph is revised to read:
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Temporary stabilized construction entrance shall be constructed in accordance with the *Standard Plans*, prior to construction vehicles entering the roadway from locations that generate sediment track out on the roadway. Material used for stabilized construction entrance shall be free of extraneous materials that may cause or contribute to track out.

### 44 8-01.3(8) Street Cleaning

45 This section is revised to read:

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Self-propelled pickup street sweepers shall be used to remove and collect dirt and other
debris from the Roadway. 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.

- 2 When allowed by the Engineer, power broom sweepers may be used in non-3 environmentally sensitive areas. The broom sweeper shall sweep dirt and other debris 4 from the roadway into the work area. The swept material shall be prevented from entering 5 or washing into waters of the State.
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Street washing with water will require the concurrence of the Engineer.

### 9 **8-01.3(12)** Compost Socks

10 The first two sentences of the first paragraph are revised to read:

Compost socks are used to disperse flow and sediment. Compost socks shall be installed as soon as construction will allow but before flow conditions create erosive flows or discharges from the site. Compost socks shall be installed prior to any mulching or compost placement.

### 17 8-01.3(13) Temporary Curb

- 18 The second to last sentence of the second paragraph is revised to read:
- 1920 Temporary curbs shall be a minimum of 4 inches in height.

## 22 8-01.3(14) Temporary Pipe Slope Drain

- 23 The third and fourth paragraphs are revised to read:
- The pipe fittings shall be water tight and the pipe secured to the slope with metal posts,
  wood stakes, sand bags, or as allowed by the Engineer.
- The water shall be discharged to a stabilized conveyance, sediment trap, stormwater pond, rock splash pad, or vegetated strip, in a manner to prevent erosion and maintain water quality compliance.
- 32 The last paragraph is deleted.

### 33 34 8-01.3(15) Maintenance

- 35 This section is revised to read: 36
- Erosion and sediment control BMPs shall be maintained or adaptively managed as required by the CSWGP until the Engineer determines they are no longer needed. When deficiencies in functional performance are identified, the deficiencies shall be rectified immediately.
- 41
- The BMPs shall be inspected on the schedule outlined in Section 8-01.3(1)B for damage
  and sediment deposits. Damage to or undercutting of BMPs shall be repaired
  immediately.
- 45
- In areas where the Contractor's activities have compromised the erosion control functions
  of the existing grasses, the Contractor shall overseed at no additional cost to the
  Contracting Agency.
- 50 The quarry spalls of construction entrances shall be refreshed, replaced, or screened to 51 maintain voids between the spalls for collecting mud and dirt.
- 52

Unless otherwise specified, when the depth of accumulated sediment and debris reaches approximately <sup>1</sup>/<sub>3</sub> the height of the BMP the deposits shall be removed. Debris or contaminated sediment shall be disposed of in accordance with Section 2-03.3(7)C. Clean sediments may be stabilized on-site using BMPs as allowed by the Engineer.

6 8-01.3(16) Removal

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7 This section is revised to read:

The Contractor shall remove all temporary BMPs, all associated hardware and associated accumulated sediment deposition from the project limits prior to Physical Completion unless otherwise allowed by the Engineer. When the temporary BMP materials are made of natural plant fibers unaltered by synthetic materials the Engineer may allow leaving the BMP in place.

14 15 The Contractor shall remove BMPs and associated hardware in a way that minimizes soil 16 disturbance. The Contractor shall permanently stabilize all bare and disturbed soil after 17 removal of BMPs. If the installation and use of the erosion control BMPs have compacted 18 or otherwise rendered the soil inhospitable to plant growth, such as construction 19 entrances, the Contractor shall take measures to rehabilitate the soil to facilitate plant 20 growth. This may include, but is not limited to, ripping the soil, incorporating soil 21 amendments, or seeding with the specified seed.

At the request of the Contractor and at the sole discretion of the Engineer the CSWGP may be transferred back to the Contracting Agency. Approval of the Transfer of Coverage request will require the following:

- 1. All other Work required for Contract Completion has been completed.
- 2. All Work required for compliance with the CSWGP has been completed to the maximum extent possible. This includes removal of BMPs that are no longer needed and the site has undergone all Stabilization identified for meeting the requirements of Final Stabilization in the CSWGP.
- 343. An Equitable Adjustment change order for the cost of Work that has not been completed by the Contractor.
  - 4. Submittal of the Washington State Department of Ecology Transfer of Coverage form (Ecology form ECY 020-87a) to the Engineer.

If the Engineer approves the transfer of coverage back to the Contracting Agency, the requirement in Section 1-07.5(3) for the Contractor's submittal of the Notice of Termination form to the Washington State Department of Ecology will not apply.

- 43 44 8-01.4 Measurement
- 45 This section's content is deleted and replaced with the following new subsections:
- 46

### 47 8-01.4(1) Lump Sum Bid for Project (No Unit Items)

When the Bid Proposal contains the item "Erosion Control and Water Pollution Prevention" there will be no measurement of unit or force account items for Work defined in Section 8-01 except as described in Sections 8-01.4(3) and 8-01.4(4). Also, except as described in Section 8-01.4(3), all of Sections 8-01.4(2) and 8-01.5(2) are deleted.

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### 1 8-01.4(2) Item Bids

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2 When the Proposal does not contain the items "Erosion Control and Water Pollution 3 Prevention", Section 8-01.4(1) and 8-01.5(1) are deleted and the Bid Proposal will contain 4 some or all of the following items measured as noted. 5

- ESC lead will be measured per day for each day that an inspection is made and a report is filed.
- Biodegradable erosion control blanket and plastic covering will be measured by the square vard along the ground slope line of surface area covered and accepted.
- Turbidity curtains will be measured by the linear foot along the ground line of the installed curtain.
- 15 Check dams will be measured per linear foot one time only along the ground line of 16 the completed check dam. No additional measurement will be made for check dams that are required to be rehabilitated or replaced due to wear.
- 19 Stabilized construction entrances will be measured by the square yard by ground 20 slope measurement for each entrance constructed. 21
  - Tire wash facilities will be measured per each for each tire wash installed.
- 24 Street cleaning will be measured by the hour for the actual time spent cleaning 25 pavement, refilling with water, dumping and transport to and from cleaning locations 26 within the project limits, as authorized by the Engineer. Time to mobilize the 27 equipment to or from the project limits on which street cleaning is required will not 28 be measured.
- 30 Inlet protections will be measured per each for each initial installation at a 31 drainage structure.
- 33 Silt fence, gravel filter, compost berms, and wood chip berms will be measured by 34 the linear foot along the ground line of the completed barrier. 35
- 36 Wattles and compost socks will be measured by the linear foot.
- 37 38 Temporary curbs will be measured by the linear foot along the ground line of the 39 completed installation. 40
- 41 Temporary pipe slope drains will be measured by the linear foot along the flow line 42 of the pipe.
- 44 Coir logs will be measured by the linear foot along the ground line of the completed 45 installation.
- 47 Outlet protections will be measured per each initial installation at an outlet location.
  - Tackifiers will be measure by the acre by ground slope measurement.

1	8-01.4(3) F	Reinstating Unit Items with Lump Sum Erosion Control and				
2	Water Poll	ution Prevention				
3	The Contrac	t Provisions may establish the project as lump sum, in accordance with				
4	Section 8-01	-01.4(1) and also include one or more of the items included above in Section 8-				
5	01.4(2). When that occurs, the corresponding measurement provision in Section 8-					
6	01.4(2) is no	t deleted and the Work under that item will be measured as specified.				
7 8	8-01.4(4) I	tems not included with Lump Sum Erosion Control and Water				
9	Pollution F	revention				
10	Compost bla	anket will be measured by the square vard by ground slope surface area				
11	covered and	accepted.				
12						
13	Mulchina wi	If be measured by the acre by ground slope surface area covered and				
14	accepted.	, , , , , , , , , , , , , , , , , , , ,				
15	I					
16	Seeding, fer	tilizing, liming, mulching, and mowing, will be measured by the acre by				
17	ground slope	e measurement.				
18	5 1					
19	Seeding and	fertilizing by hand will be measured by the square yard by ground slope				
20	measureme	nt. No adjustment in area size will be made for the vegetation free zone				
21	around each	i plant.				
22						
23	Fencing will	be measured by the linear foot along the ground line of the completed fence.				
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25	8-01.5 Paymer	nt				
26 27	This section's co	ntent is deleted and replaced with the following new subsections:				
28	8-01.5(1) L	ump Sum Bid for Project (No Unit Items)				
29	Pavment will	be made for the following Bid item when it is included in the Proposal:				
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31	"Erosior	າ Control and Water Pollution Prevention", lump sum.				
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33	The lum	p sum Contract price for "Erosion Control and Water Pollution Prevention"				
34	shall be	full pay to perform the Work as described in Section 8-01 except for costs				
35	compen	sated by Bid Proposal items inserted through Contract Provisions as				
36	describe	ed in Section 8-01.4(2). Progress payments for the lump sum item "Erosion				
37	Control	and Water Pollution Prevention" will be made as follows:				
38						
39	1.	The Contracting Agency will pay 15 percent of the bid amount for the initial				
40		set up for the item. Initial set up includes the following:				
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42		a. Acceptance of the TESC Plan provided by the Contracting Agency or				
43		submittal of a new TESC Plan,				
44		b. Only with the first shaded a family the installation of the DMDs and				
45		b. Submittal of a schedule for the installation of the BMPs, and				
40		a Identifying water quality compliant locations				
41 10		c. Identifying water quality sampling locations.				
40 10	ი	70 percent of the hid amount will be paid in accordance with Section 1.00.0				
+9 50	Ζ.	ropercent of the bid amount will be paid in accordance with Section 1-09.9.				
51	3	Once the project is physically complete and copies of the all reports				
52	0.	submitted to the Washington State Department of Ecology have been				

1 2 3	submitted to the Engineer, and, if applicable, transference of the CSWGP back to the Contracting Agency is complete, the remaining 15 percent of the bid amount shall be paid in accordance with Section 1-09.9.
- 5 6 7	<b>8-01.5(2) Item Bids</b> "ESC Lead", per day.
7 8 9	"Turbidity Curtain", per linear foot.
10 11	"Biodegradable Erosion Control Blanket", per square yard.
12	"Plastic Covering", per square yard.
13 14	"Check Dam", per linear foot.
15 16	"Inlet Protection", per each.
17 18	"Gravel Filter Berm", per linear foot.
19 20	"Stabilized Construction Entrance", per square yard.
21 22	"Street Cleaning", per hour.
23 24	"Silt Fence", per linear foot.
25 26	"Wood Chip Berm", per linear foot.
27 28	"Compost Berm", per linear foot.
29 30	"Wattle", per linear foot.
31 32	"Compost Sock", per linear foot.
33 34	"Coir Log", per linear foot.
35 36	"Temporary Curb", per linear foot.
37 38	"Temporary Pipe Slope Drain", per linear foot.
39 40	"Temporary Seeding", per acre.
41 42	"Outlet Protection" per each
43	"Tackifier" per cach.
45	"Erection Mater Dellution Control" by force account as provided in Section 1.00.6
40 47	Erosion/water Poliution Control, by force account as provided in Section 1-09.6.
48 49 50 51 52	Maintenance and removal of erosion and water pollution control devices including removal and disposal of sediment, stabilization and rehabilitation of soil disturbed by these activities, and any additional Work deemed necessary by the Engineer to control erosion and water pollution will be paid by force account in accordance with Section 1-09.6.

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2	To provide a common Proposal for all Bidders, the Contracting Agency has entered an
3	amount in the Proposal to become a part of the Contractor's total Bid.
4	
5	8-01.5(3) Reinstating Unit Items with Lump Sum Erosion Control and
6	Water Pollution Prevention
7	The Contract may establish the project as lump sum in accordance with Section 8-
2 2	1100000000000000000000000000000000000
0	Section 8.01. $1/2$ ) except for Erosion/Water Pollution Control, by force account. When
10	that accurate the corresponding payment provision in Section 9.01 5(2) is not delated and
10	that occurs, the corresponding payment provision in Section 6-01.5(2) is not deleted and the Work under that item will be paid as appointed
11	the work under that item will be paid as specified.
12	0.04 F(4) Items wet included with Laws Own Encline Control and Water
13	8-01.5(4) Items not included with Lump Sum Erosion Control and water
14	Pollution Prevention
15	Payment will be made for each of the following Bid items when they are included in the
16	Proposal:
17	
18	"Compost Blanket", per square yard.
19	
20	"Mulching", per acre
21	
22	"Mulching with PAM", per acre
23	
24	"Mulching with Short-Term Mulch", per acre.
25	
26	"Mulching with Moderate-Term Mulch", per acre.
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28	"Mulching with Long-Term Mulch", per acre.
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30	"Seeding, Fertilizing and Mulching", per acre.
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32	"Seeding and Fertilizing", per acre.
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34	"Seeding and Fertilizing by Hand", per square yard.
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36	"Second Application of Fertilizer", per acre.
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38	"Liming", per acre.
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40	"Mowing", per acre.
41	5.71
42	"Seeding and Mulching", per acre.
43	
44	"High Visibility Fence", per linear foot,
45	
46	8-02.AP8
47	Section 8-02. Roadside Restoration
48	January 2, 2018
10	
<u>4</u> 9	8-02.2 Materials
	The reference to the material "Soil" is revised to read "Tonsoil"
50	The relevance to the matchar oon is revised to read topson.

### 1 8-02.5 Payment

- 2 The following new paragraph is inserted following the Bid item "Plant Selection \_\_\_\_\_", per each: 3
- The unit Contract price for "Plant Selection \_\_\_\_", per each shall be full pay for all Work to perform the work as specified within the planting area prior to planting for weed control, planting area preparation and installation of plants with initial watering.
- 8 The paragraph following the Bid item "PSIPE \_\_\_\_", per each is revised to read:

10 The unit Contract price for "PSIPE \_\_\_\_", per each, shall be full pay for all Work to perform 11 the work as specified within the planting area for weed control and planting area 12 preparation, planting, cleanup, and water necessary to complete planting operations as 13 specified to the end of first year plant establishment.

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15 8-04.AP8

### 16 Section 8-04, Curbs, Gutters, and Spillways

17 January 2, 2018

### 18 8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways

- 19 The first paragraph is supplemented with the following:
- 20
- 21 Roundabout truck apron cement concrete curb and gutter shall be constructed with air 22 entrained concrete Class 4000 conforming to the requirements of Section 6-02.
- 23
- 24 8-14.AP8

### 25 Section 8-14, Cement Concrete Sidewalks

- 26 January 2, 2018
- 27 8-14.2 Materials

In the second paragraph, each reference to "Federal Standard 595" is revised to read "SAEAMS Standard 595".

- 30
- 31 8-20.AP8

### 32 Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation

- 33 Systems, and Electrical
- 34 January 2, 2018

### 35 8-20.1(1) Regulations and Code

- 36 The last paragraph is revised to read:
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Persons performing electrical Work shall be certified in accordance with and supervised as required by RCW 19.28.161. Proof of certification shall be worn at all times in accordance with WAC 296-46B-942. Persons failing to meet these certification requirements may not perform any electrical work, and shall stop any active electrical work, until their certification is provided and worn in accordance with this Section.

- 44 8-20.3(4) Foundations
- 45 The second sentence of the first paragraph is revised to read:
- 47 Concrete for Type II, III, IV, V, and CCTV signal standards and light standard foundations 48 shall be Class 4000P and does not require air entrainment.
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### 1 8-20.3(5)A General

- 2 The last two sentences of the last paragraph is deleted.
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This section is supplemented with the following:

All conduits shall include a pull tape with the equipment grounding conductor. The pull tape shall be attached to the conduit near the end bell or grounded end bushing, or to duct plugs or caps if present, at both ends of the conduit.

### 10 8-20.3(8) Wiring

- 11 The seventeenth paragraph is supplemented with the following:
- 12 13

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- Pulling tape shall meet the requirements of Section 9-29.1(10). Pull string may not be used.
- 15
- 16 8-21.AP8

### 17 Section 8-21, Permanent Signing

18 January 2, 2018

### 19 8-21.3(9)F Foundations

- 20 Item number 3 of the twelfth paragraph is supplemented with the following new sentence: 21
  - Class 4000P concrete for roadside sign structures does not require air entrainment.
- 22 23
- 24 9-02.AP9

### 25 Section 9-02, Bituminous Materials

26 January 2, 2018

### 27 9-02.1 Asphalt Material, General

- 28 The second paragraph is revised to read:
- 29
- 30 The Asphalt Supplier of Performance Graded (PG) asphalt binder and emulsified asphalt 31 shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 2 "Standard 32 Practice for Asphalt Suppliers That Certify Performance Graded and Emulsified 33 Asphalts". The Asphalt Supplier's QCP shall be submitted and receive the acceptance of 34 the WSDOT State Materials Laboratory. Once accepted, any change to the QCP will 35 require a new QCP to be submitted for acceptance. The Asphalt Supplier of PG asphalt 36 binder and emulsified asphalt shall certify through the Bill of Lading that the PG asphalt 37 binder or emulsified asphalt meets the Specification requirements of the Contract.

### 39 9-02.1(4) Performance Graded Asphalt Binder (PGAB)

- 40 This section's title is revised to read:
- 41 42

43

38

### Performance Graded (PG) Asphalt Binder

- 44 The first paragraph is revised to read:
- 45

PG asphalt binder meeting the requirements of AASHTO M 332 Table 1 of the grades
specified in the Contract shall be used in the production of HMA. For HMA with greater
than 20 percent RAP by total weight of HMA, or any amount of RAS, the new asphalt
binder, recycling agent and recovered asphalt (RAP and/or RAS) when blended in the

- proportions of the mix design shall meet the PG asphalt binder requirements of AASHTO M 332 Table 1 for the grade of asphalt binder specified by the Contract.
- 4 The second paragraph, including the table, is revised to read: 5
  - In addition to AASHTO M 332 Table 1 specification requirements, PG asphalt binders shall meet the following requirements:
- 7 8

1

2

3

		Additional Requirements by Performance Grade (PG) Asphalt Binders			
Property	Test Method	PG58H-22	PG58V-22	PG64H-28	PG64V-28
RTFO Residue: Average Percent Recovery @ 3.2 kPa	AASHTO T 350 <sup>1</sup>		30% Min.	25% Min.	30% Min.
<sup>1</sup> Specimen conditioned in accordance with AASHTO T 240 – RTFO.					

- 9 10
  - The third paragraph is revised to read:
- 11 12

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The RTFO  $J_{nrdiff}$  and the PAV direct tension specifications of AASHTO M 332 are not required.

### 15 9-02.1(6) Cationic Emulsified Asphalt

- 16 This section is revised to read:
  - Cationic Emulsified Asphalt meeting the requirements of AASHTO M 208 Table 1 of the grades specified in the Contract shall be used.

### 21 9-02.5 Warm Mix Asphalt (WMA) Additive

22 This section, including title, is revised to read:

### 24 9-02.5 HMA Additive

- Additives for HMA shall be approved by the Engineer.
- 26 27 9-03.AP9
- 28 Section 9-03, Aggregates
- 29 January 2, 2018

### 30 9-03.1(1) General Requirements

- 31 The second paragraph (up until the colon) is revised to read:
- 32 33

34

Aggregates for Portland Cement Concrete shall meet the following test requirements:

- 35 9-03.1(5)B Grading
- In the last paragraph, "WSDOT FOP for WAQTC/AASHTO T 27/T 11" is revised to read "FOP
   for WAQTC/AASHTO T 27/T 11".
- 38

### 39 9-03.4(1) General Requirements

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

1 2 3 4	Aggregate for bituminous surface treatment shall be manufactured from ledge rock, talus, or gravel, in accordance with Section 3-01. Aggregates for Bituminous Surface Treatment shall meet the following test requirements:							
5 6 7 8	<b>9-03.8(1) General Requirements</b> The first paragraph (up until the colon) is revised to read:							
9 10	Aggregates for Hot Mix Asphalt shall meet the following test requirements:							
11 12 13	<b>9-03.8(7) HMA Tolerances and Adjustments</b> In the table in item number 1, the fifth row is revised to read:							
10	Asphalt binder -0.4% to 0.5% ±0.7%							
14 15 16	In the table in item number 1, the following new row is inserted before the last row:							
	Voids in Mineral -1.5% Aggregate, VMA							
19 20 21 22 23 24 25	The second paragraph (up until the colon) is revised to read: Aggregates for ballast shall meet the following test requirements: 9-04.AP9 Section 9-04, Joint and Crack Sealing Materials January 2, 2018							
26 27 28	<b>9-04.1(2)</b> Premolded Joint Filler for Expansion Joints In this section, each reference to "AASHTO T 42" is revised to read "ASTM D 545".							
29 30 31	<b>9-04.2(1)A1</b> Hot Poured Sealant for Cement Concrete Pavement This section is supplemented with the following:							
32 33 34	Hot poured sealant for cement concrete pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.							
35 36 37	<b>9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement</b> This section is supplemented with the following:							
38 39 40	Hot poured sealant for bituminous pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.							
41 42 43	9-06.AP9 Section 9-06, Structural Steel and Related Materials January 2, 2018							
44 45 46	<b>9-06.5 Bolts</b> This section's title is revised to read:							
Bolts and Rods

# 3 9-06.5(4) Anchor Bolts

- 4 This section, including title, is revised to read:
- 5 6

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# 9-06.5(4) Anchor Bolts and Anchor Rods

Anchor bolts and anchor rods shall meet the requirements of ASTM F1554 and, unless otherwise specified, shall be Grade 105 and shall conform to Supplemental Requirements S2, S3, and S4.

9 10

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Nuts for ASTM F1554 Grade 105 black anchor bolts and anchor rods shall conform to
ASTM A563, Grade D or DH. Nuts for ASTM F1554 Grade 105 galvanized anchor bolts
and anchor rods shall conform to either ASTM A563, Grade DH, or AASHTO M292,
Grade 2H, and shall conform to the overtapping, lubrication, and rotational testing
requirements in Section 9-06.5(3). Nuts for ASTM F1554 Grade 36 or 55 black or
galvanized anchor bolts and anchor rods shall conform to ASTM A563, Grade A or DH.
Washers shall conform to ASTM F436.

- 18 19 The bolts and rods shall be tested by the manufacturer in accordance with the 20 requirements of the pertinent Specification and as specified in these Specifications. 21 Anchor bolts, anchor rods, nuts, and washers shall be inspected prior to shipping to the 22 project site. The Contractor shall submit to the Engineer for acceptance a Manufacturer's 23 Certificate of Compliance for the anchor bolts, anchor rods, nuts, and washers, as defined 24 in Section 1-06.3. If the Engineer deems it appropriate, the Contractor shall provide a 25 sample of the anchor bolt, anchor rod, nut, and washer for testing.
- 26

All bolts, rods, nuts, and washers shall be marked and identified as required in the
 pertinent Specification.

# 30 9-06.18 Metal Bridge Railing

- 31 The second sentence of the first paragraph is revised to read:
- 32

33 Steel used for metal railings, when galvanized after fabrication in accordance with 34 AASHTO M111, shall have a controlled silicon content of either 0.00 to 0.06 percent or 35 0.15 to 0.25 percent.

- 36
- 37 9-08.AP9

# 38 Section 9-08, Paints and Related Materials

39 January 2, 2018

# 40 9-08.1(2)K Orange Equipment Enamel

- In the second sentence of the first paragraph, the reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".
- 43

# 44 **9-08.1(8)** Standard Colors

- 45 In the first paragraph, the reference to "Federal Standard 595" is revised to read "SAE AMS
- 46 Standard 595".
- 47

- 1 9-13.AP9
- 2 Section 9-13, Riprap, Quarry Spalls, Slope Protection, and Rock for Erosion
- 3 and Scour Protection and Rock Walls
- 4 January 2, 2018
- 5 9-13.1(1) General
- 6 The last paragraph is revised to read: 7
- Riprap and quarry spalls shall be free from segregation, seams, cracks, and other defects
   tending to destroy its resistance to weather and shall meet the following test
   requirements:
- 11

# 12 9-13.7(1) Rock for Rock Walls and Chinking Material

- 13 The first paragraph (up until the colon) is revised to read:
- 14
- Rock for rock walls and chinking material shall be hard, sound and durable material,
  free from seams, cracks, and other defects tending to destroy its resistance to weather,
  and shall meet the following test requirements:
- 18
- 19 9-14.AP9

# 20 Section 9-14, Erosion Control and Roadside Planting

21 January 2, 2018

# 22 9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

23 In the second column of Table 1, "ASTM D 586" is revised to read "AASHTO T 267".

- 24
- 25 In Table 1, the second to last row is deleted.
- 26
- 27 9-20.AP9

# 28 Section 9-20, Concrete Patching Material, Grout, and Mortar

29 January 2, 2018

# 30 9-20.5 Bridge Deck Repair Material

- 31 Item number 3 of the first paragraph is revised to read:
- 32 33

34

- 3. Permeability of less than 2,000 coulombs at 28-days or more in accordance with AASHTO T 277.
- 35
- 36 9-21.AP9
- 37 Section 9-21, Raised Pavement Markers (RPM)
- 38 January 2, 2018

# 39 9-21.2 Raised Pavement Markers Type 2

- 40 This section's content is deleted.
- 41

# 42 9-21.2(1) Physical Properties

- 43 This section, including title, is revised to read:
- 44

#### 9-21.2(1) Standard Raised Pavement Markers Type 2

The marker housing shall contain reflective faces as shown in the Plans to reflect incident
light from either a single or opposite directions and meet the requirements of ASTM D
4280 including Flexural strength requirements.

5 6

7

# 9-21.2(2) Optical Requirements

This section, including title, is revised to read:

8 9

#### 9-21.2(2) Abrasion Resistant Raised Markers Type 2

Abrasion Resistant Raised Markers Type 2 shall comply with Section 9-21.2(1) and meet the requirements of ASTM D 4280 with the following additional requirement: The coefficient of luminous intensity of the markers shall be measured after subjecting the entire lens surface to the test described in ASTM D 4280 Section 9.5 using a sand drop apparatus. After the exposure described above, retroreflected values shall not be less than 0.5 times a nominal unblemished sample.

16

#### 17 9-21.2(3) Strength Requirements

- 18 This section is deleted in its entirety.
- 19
- 20 9-28.AP9

#### 21 Section 9-28, Signing Materials and Fabrication

22 January 2, 2018

#### 23 9-28.11 Hardware

- 24 The last paragraph is revised to read:25
- All steel parts shall be galvanized in accordance with AASHTO M111. Steel bolts and related connecting hardware shall be galvanized in accordance with ASTM F 2329.

#### 28

#### 29 9-28.14(2) Steel Structures and Posts

- 30 The first sentence of the third paragraph is revised to read:
- 31
- Anchor rods for sign bridge and cantilever sign structure foundations shall conform to Section 9-06.5(4), including Supplemental Requirement S4 tested at -20°F.
- In the second sentence of the fourth paragraph, "AASHTO M232" is revised to read "ASTM F
  2329".
- 37
- 38 The first sentence of the fifth paragraph is revised to read: 39
- 40 Except as otherwise noted, steel used for sign structures and posts shall have a 41 controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent. 42
- 43 The last sentence of the last paragraph is revised to read:
- If such modifications are contemplated, the Contractor shall submit a Type 2 Working
  Drawing of the proposed modifications.

1 9-29.AP9

#### 2 Section 9-29, Illumination, Signal, Electrical

3 January 2, 2018

#### 4 9-29.1 Conduit, Innerduct, and Outerduct

- 5 This section is supplemented with the following new subsection:

#### 9-29.1(10) Pull Tape

8 Pull tape shall be pre-lubricated polyester pulling tape. The pull tape shall have a minimum width of ½-inch and a minimum tensile strength of 500 pounds. Pull tape may 9 10 have measurement marks.

11

6 7

#### 12 9-29.2(2) A Standard Duty Cable Vaults and Pull Boxes

- 13 In the table in the last paragraph, the fourth, fifth and sixth rows are revised to read:
- 14

Slip Resistant Lid	ASTM A36 steel
Frame	ASTM A36 steel
Slip Resistant Frame	ASTM A36 steel

15

#### 16 9-29.6 Light and Signal Standards

17 In the first sentence of the third paragraph, "AASHTO M232" is revised to read "ASTM F 2329". 18

19 Item number 2 of the last paragraph is revised to read:

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2. The steel light and signal standard fabricator's shop drawing submittal, including supporting design calculations, submitted as a Type 2E Working Drawing in accordance with Section 8-20.2(1) and the Special Provisions.

#### 25 9-29.6(1) Steel Light and Signal Standards

26 In the second paragraph, "AASHTO M232" is revised to read "ASTM F 2329". 27

- 28 The first sentence of the last paragraph is revised to read: 29
  - Steel used for light and signal standards shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

#### 33 9-29.6(5) Foundation Hardware

In the last paragraph, "AASHTO M232" is revised to read "ASTM F 2329". 34 35

#### 36 9-29.10(1) Conventional Roadway Luminaires

- 37 This section is revised to read:
- 38 39

40

All conventional roadway luminaires shall meet 3G vibration requirements as described in ANSI C136.31.

41 42 All luminaires shall have housings fabricated from aluminum. The housing shall be 43 painted flat gray, SAE AMS Standard 595 color chip No. 26280, unless otherwise 44 specified in the Contract. Painted housings shall withstand a 1,000 hour salt spray test 45 as specified in ASTM B117.

46

47 Each housing shall include a four bolt slip-fitter mount capable of accepting a nominal 2" 48 tenon and adjustable within +/- 5 degrees of the axis of the tenon. The clamping

1 2 3 4 5	bracket(s) and the cap screws shall not bottom out on the housing bosses when adjusted within the +/- 5 degree range. No part of the slipfitter mounting brackets on the luminaires shall develop a permanent set in excess of 0.2 inch when the cap screws used for mounting are tightened to a torque of 32 foot-pounds. Each luminaire shall include leveling reference points for both transverse and longitudinal adjustment.			
7	All lumir	naires shall include shorting caps when shipped. The caps shall be removed and		
8	provider	to the Contracting Agency when an alternate control device is required to be		
9	installed	t in the photocell socket. House side shields shall be included when required by		
10	the Con	tract. Order codes shall be modified to the minimum extent necessary to include		
11	the option	on for house side shields.		
12	•			
13 14	This section	is supplemented with the following new subsections:		
15 16	9-29.10 Lumina	0(1)A High Pressure Sodium (HPS) Conventional Roadway aires		
17	HPS co	nventional roadway luminaires shall meet the following requirements:		
18	4	Concrete share shall be "askesheed" at the with flat share long and full sutoff		
19	1.	General snape shall be cobranead style, with that glass lens and full cutoff		
20		oplics.		
21	2	Light pattern distribution shall be IES Type III		
23	۲.			
24 25	3.	The reflector of all luminaires shall be of a snap-in design or secured with screws. The reflector shall be polished aluminum or prismatic borosilicate glass.		
26				
27	4.	Flat lenses shall be formed from heat resistant, high-impact, molded borosilicate		
28		or tempered glass.		
29				
30	5.	The lens shall be mounted in a doorframe assembly, which shall be hinged to		
31		the luminaire and secured in the closed position to the luminaire by means of		
32		an automatic latch. The lens and doorframe assembly, when closed, shall exert		
33		pressure against a gasket seat. The lens shall not allow any light output above		
34		90 degrees hadir. Gaskets shall be composed of material capable of		
35		withstanding the temperatures involved and shall be securely held in place.		
30 27	6	The ballast shall be mounted on a congrate exterior door, which shall be binged		
20	0.	to the luminaire and secured in the closed position to the luminaire bousing by		
30		means of an automatic type of latch (a combination bey/slot stainless steel		
40		screw fastener may supplement the automatic-type latch)		
40 41		sciew lastener may supplement the automatic-type laten).		
42	7	Each luminaire shall be capable of accepting a 150, 200, 250, 310, or 400 watt		
43		lamp complete and associated ballast. Lamps shall mount horizontally.		
44				
45	9-29.10(1)B Light Emitting Diode (LED) Conventional Roadwav Luminaires			
46	LED C	onventional Roadway Luminaires are divided into classes based on their		
47	equivale	ent High Pressure Sodium (HPS) luminaires. Current classes are 200W, 250W,		
48	310W, and 400W. LED luminaires are required to be pre-approved in order to verify their			
49	photometric output. To be considered for pre-approval, LED luminaires must meet the			
50	requirements of this section.			
51				

LED luminaires shall include a removable access door, with tool-less entry, for access to electronic components and the terminal block. The access door shall be removable, but include positive retention such that it can hang freely without disconnecting from the luminaire housing. LED drivers may be mounted either to the interior of the luminaire housing or to the removable door itself.

LED drivers shall be removable for user replacement. All internal modular components shall be connected by means of mechanical plug and socket type quick disconnects. Wire nuts may not be used for any purpose. All external electrical connections to the luminaire shall be made through the terminal block.

LED luminaires shall include a 7-pin NEMA photocell receptacle. The LED driver(s) shall be dimmable from ten volts to zero volts. LED output shall have a Correlated Color Temperature (CCT) of 4000K nominal (4000-4300K) and a Color Rendering Index (CRI) of 70 or greater. LED output shall be a minimum of 85% at 75,000 hours at 25 degrees Celsius.

- 17
  18 LED luminaires shall be available for 120V, 240V, and 480V supply voltages. Voltages
  19 refer to the supply voltages to the luminaires present in the field. LED power usage shall
  20 not exceed the following maximum values for the applicable wattage class:
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Class	Max. Wattage
200W	110W
250W	165W
310W	210W
400W	275W

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Only one brand of LED conventional roadway luminaire may be used on a Contract. They
 do not necessarily have to be the same brand as any high-mast, underdeck, or wall mount luminaires when those types of luminaires are specified in the Contract. LED
 luminaires shall include a standard 10 year manufacturer warranty.

The list of pre-approved LED Conventional Roadway Luminaires is available at http://www.wsdot.wa.gov/Design/Traffic/ledluminaires.htm.

# 31 9-29.10(2) Decorative Luminaires

32 This section, including title, is revised to read: 33

#### 34 **9-29.10(2) Vacant** 35

# 36 9-29.12 Electrical Splice Materials

This section is supplemented with the following new subsections:

# 9-29.12(3) Splice Enclosures

# 9-29.12(3)A Heat Shrink Splice Enclosure

- Heat shrink splice enclosures shall be medium or heavy wall cross-linked polyolefin,
  meeting the requirements of AMS-DTL-23053/15, with thermoplastic adhesive
  sealant. Heat shrink splices used for "wye" connections require rubber electrical
  mastic tape.
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#### 9-29.12(3)B Molded Splice Enclosure

- Molded splice enclosures shall use epoxy resin in a clear rigid plastic mold. The material used shall be compatible with the insulation material of the insulated conductor or cable. The component materials of the resin insulation shall be packaged ready for convenient mixing without removing from the package.
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#### 9-29.12(4) Re-Enterable Splice Enclosure

Re-enterable splice enclosures shall use either dielectric grease or a flexible resin contained in a two-piece plastic mold. The mold shall either snap together or use stainless steel hose clamps.

#### 9-29.12(5) Vinyl Electrical Tape for Splices

Vinyl electrical tape in splicing applications shall meet the requirements of MIL-I-24391C.

#### 15 9-29.12(1) Illumination Circuit Splices

16 This section is revised to read: 17

Underground illumination circuit splices shall be solderless crimped connections capable of securely joining the wires, both mechanically and electrically, as defined in Section 8-20.3(8). Aerial illumination splices shall be solderless crimp connectors or split bolt vice-type connectors.

#### 23 9-29.12(1)A Heat Shrink Splice Enclosure

24 This section is deleted in its entirety.25

#### 26 9-29.12(1)B Molded Splice Enclosure

27 This section is deleted in its entirety.28

#### 29 9-29.12(2) Traffic Signal Splice Material

30 This section is revised to read: 31

Induction loop splices and magnetometer splices shall use an uninsulated barrel-type crimped connector capable of being soldered.

#### 35 9-29.16(2)E Painting Signal Heads

36 In the first sentence, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

# 38 9-29.17 Signal Head Mounting Brackets and Fittings

39 In the first paragraph, item number 2 under **Stainless Steel** is revised to read:

- 2. Bands or cables for Type N mount.
- 41 42

40

#### 43 9-29.20 Pedestrian Signals

- In item 2C of the second paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".
- 46

1 9-34.AP9

#### 2 Section 9-34, Pavement Marking Material

3 January 2, 2018

#### 4 9-34.2(2) Color

5 Each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

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#### 9-34.2(5) Low VOC Waterborne Paint

8 The heading "Standard Waterborne Paint" is supplemented with "Type 1 and 2".

- 10 The heading "High-Build Waterborne Paint" is supplemented with "Type 4".
- 12 The heading "Cold Weather Waterborne Paint" is supplemented with "Type 5".
- 14 In the row beginning with "° @90°F", each minimum value is revised to read "60".
- 16 In the row beginning with "Fineness of Grind, (Hegman Scale)", each minimum value is 17 revised to read "3".
- 18
- 19 The last four rows are replaced with the following:
- 20

Vehicle Composition	ASTM D 2621	100% acrylic emulsion	100% cross-linking acrylic <sup>4</sup>	100% acrylic emulsion
Freeze-Thaw	ASTM D	@ 5 cycles show no	@ 5 cycles show no	@ 3 cycles show no
Stability, KU	2243 and D	coagulation or change	coagulation or change	coagulation or change
	562	in viscosity greater	in viscosity greater	in viscosity greater
		than ± 10 KU	than ± 10 KU	than ± 10 KU
Heat Stability	ASTM D	± 10 KU from the	± 10 KU from the	± 10 KU from the
	562 <sup>2</sup>	initial viscosity	initial viscosity	initial Viscosity
Low Temperature	ASTM D	No Cracks*		No Cracks
Film Formation	2805 <sup>3</sup>			
Cold Flexibility <sup>5</sup>	ASTM D522	Pass at 0.5 in mandrel*		
Test Deck	ASTM D913	≥70% paint retention		
Durability <sup>6</sup>		in wheel track*		
Mud Cracking	(See note 7)	No Cracks	No Cracks	

21

22 After the preceding Amendments are applied, the following new column is inserted after the

23 "Standard Waterborne Paint Type 1 and 2" column:

Semi-Durable Waterborne Paint Type 3			
Wh	White		low
Min.	Max.	Min.	Max.
Within	± 0.3 of qua	alification s	ample
80	95	80	95
60		60	
77		77	
	65		65
43		43	
	1.25		1.25
3		3	
0.98		0.96	

		-		
88		50		
100°		100°		
9.5		9.5		
	10		10	
	100% acryli	c emulsion		
@ 5 cycles show no coagulation or				
change in viscosity greater than ± 10 KU				
± 10 KU from the initial viscosity				
No Cracks				
Pass at 0.25 in mandrel				
≥70% paint retention in wheel track				
No Cracks				

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18 19 The footnotes are supplemented with the following:

<sup>4</sup>Cross-linking acrylic shall meet the requirements of federal specification TT-P-1952F Section 3.1.1.

<sup>5</sup>Cold Flexibility: The paint shall be applied to an aluminum panel at a wet film thickness of 15 mils and allowed to dry under ambient conditions (50±10% RH and 72±5 °F) for 24 hours. A cylindrical mandrel apparatus (in accordance with ASTM D522 method B) shall be put in a 40°F refrigerator when the paint is drawn down After 24 hours, the aluminum panel with dry paint shall be put in the 40°F refrigerator with the mandrel apparatus for 2 hours. After 2 hours, the panel and test apparatus shall be removed and immediately tested to according to ASTM D522 to evaluate cold flexibility. Paint must show no evidence of cracking, chipping or flaking when bent 180 degrees over a mandrel bar of specified diameter.

<sup>6</sup>NTPEP test deck, or a test deck conforming to ASTM D713, shall be conducted for a minimum of six months with the following additional requirements: it shall be applied at 15 wet mils to a test deck that is located at 40N latitude or higher with at least 10,000 ADT and which was applied during the months of September through November.

20 21 22

23

36

<sup>7</sup>Paint is applied to an approximately 4"x12" aluminum panel using a drawdown bar with a 50 mil gap. The coated panel is allowed to dry under ambient conditions ( $50\pm10\%$  RH and  $72\pm5$  °F) for 24 hours. Visual evaluation of the dry film shall reveal no cracks.

24 25

# 26 9-34.3 Plastic

In the first sentence of the last paragraph, "Federal Standard 595" is revised to read "SAE
AMS Standard 595".

# 30 9-34.3(2) Type B – Pre-Formed Fused Thermoplastic

In the last two paragraphs, each reference to "Federal Standard 595" is revised to read "SAE
 AMS Standard 595".

# 34 9-34.7(1) Requirements

35 The first paragraph is revised to read:

Field performance evaluation is required for low VOC solvent-based paint per Section 9-38 34.2(4), Type A – liquid hot applied thermoplastic per Section 9-34.3(1), Type B – 39 preformed fused thermoplastic per Section 9-34.3(2), Type C – cold applied preformed 40 tape per Section 9-34.3(3), and Type D – liquid applied methyl methacrylate per Section 41 9-34.3(4). The last paragraph is deleted.

# 3 **9-34.7(1)C Auto No-Track Time**

- 5 The first paragraph is revised to read: 6
  - Auto No-Track Time will only be required for low VOC solvent-based paint in accordance with Section 9-34.2(4).
- 910 The second and third sentences of the second paragraph are deleted.

11

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PART 5

**SPECIAL PROVISIONS** 

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1 2	TABLE OF CONTENTS	
3	INTRODUCTION TO THE SPECIAL PROVISIONS	1
4	DIVISION 1 GENERAL REQUIREMENTS	2
5	DESCRIPTION OF WORK	2
6	SECTION 4.04 DEEINITIONS AND TERMS	
7	1-01 3 Definitions	<b>۲</b> ۲
, 0		ے
0	1 02 1 Prequalification of Bidders	<b>4</b>
9 10	1-02.1 Prequalifications of Bidder	+4 لا
11	1-02.2 Plans and Specifications	4
12	1-02.4 Examination of Plans. Specifications. and Site of Work	5
13	1-02.5 Proposal Forms	5
14	1-02.6 Preparation of Proposal	5
15	1-02.7 Bid Deposit	6
16	1-02.9 Delivery of Proposal	7
17	1-02.10 Withdrawing, Revising, or Supplementing Proposal	8
18	1-02.12 Public Opening of Proposals	8
19	1-02.13 Irregular Proposals	9
20	1-02.14 Disqualification of Bidders	9
21	1-02.15 Pre Award Information	13
22	SECTION 1-03, AWARD AND EXECUTION OF CONTRACT	13
23	1-03.1 Consideration of Bids	13
24	1-03.3 Execution of Contract	14
25	1-03.4 Contract Bond	
26	1-03.7 Judicial Review	15
27	SECTION 1-04, SCOPE OF THE WORK	16
28	1-04.2 Coordination of Contract Documents, Plans, Special Provisions,	10
29	Specifications, and Addenda	
30	1-04.4 Changes	16
31	1-04.6 Variation in Estimated Quantities	
32	SECTION 1-05, CONTROL OF WORK	17
33	1-05.3 Plans and Working Drawings	
34	1-05.4 Conformity With and Deviations From Plans and Stakes	
35	1-05.7 Removal of Defective and Unauthorized Work	
30	1-05.11 Final Inspection and Operational Testing	
२८ २८	1.05.12 Final Acceptance	20 26
30	1-05.12 I liai Acceptance	∠0 27
40	1-05 14 Cooperation With Other Contractors	21 27
41	(March 13, 1995 WSDOT GSP)	27
42	1-05.15 Method of Serving Notices	
43	1-05.16 Water and Power	

1	SECTION	1-06, CONTROL OF MATERIAL	.28
2	1-06.1	Approval of Materials Prior to Use	.28
3	1-06.4	Handling and Storing Materials	. 32
4	1-06.6	Recycled Materials	. 32
5	SECTION	1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC	. 33
6	1-07.1	Laws to be Observed	. 33
7	1-07.2	State Taxes	. 33
8	1-07.2	State Sales Tax	. 33
9	1-07.5	Environmental Regulations	.35
10	1-07.7	Load Limits	. 35
11	1-07.16	Protection and Restoration of Property	. 35
12	1-07.17	Utilities and Similar Facilities	. 36
13	1-07.18	Public Liability and Property Damage Insurance	. 38
14	1-07.18	Insurance	. 38
15	1-07.23	Public Convenience and Safety	.42
16	1-07.24	Rights of Way	.43
17	SECTION	1-08, PROSECUTION AND PROGRESS	.44
18	1-08.0	Preliminary Matters	.44
19	1-08.3	Progress Schedule	.46
20	1-08.4	Prosecution of Work	.46
21	1-08.5	Time for Completion	.47
22	1-08.6	Suspension of Work	.48
23	1-08.9	Liquidated Damages	.49
24	1-08.10	Termination of Contract	.49
25	SECTION	1-09, MEASUREMENT AND PAYMENT	. 50
26	1-09.3	Scope of Payment	. 50
27	1-09.6	Force Account	. 50
28	1-09.9	Payments	. 50
29	1-09.11	Disputes and Claims	. 52
30	1-09.13	Claims Resolution	. 52
31	SECTION	1-10, TEMPORARY TRAFFIC CONTROL	. 53
32	1-10.1	General	. 53
33	1-10.2	Traffic Control Management	. 54
34	<b>DIVISION 2</b>	EARTHWORK	.56
35	SECTION	2-01. CLEARING, GRUBBING, AND ROADSIDE CLEANUP	56
36	2-01 1	Description	56
37	2-01.3	Construction Requirements	.56
38	2-01.4	Measurement	.57
39	2-01.5	Payment	.57
40	SECTION	2-02. REMOVAL OF STRUCTURES AND OBSTRUCTIONS	. 57
41	2-02.3	Construction Requirements	.57
42	2-02.4	Measurement	. 59
43	2-02.5	Payment	.59
44	SECTION	2-03 ROADWAY FXCAVATION AND EMBANKMENT	60
45	2-03-3		60
.0	2 00.0		

1	2-03.4	Measurement	61
2	2-03.5	Payment	61
3	SECTION	2-09, STRUCTURE EXCAVATION	62
4	2-09.3	Construction Requirements	62
5	2-09.4	Measurement	62
6	2-09.5	Payment	62
7	<b>DIVISION 5</b>	SURFACE TREATMENTS AND PAVEMENTS	63
8	SECTION	5-04, HOT MIX ASPHALT	63
9	5-04.1D	escription	63
10	5-04.2N	laterials	63
11	5-04.3C	onstruction Requirements	65
12	5-04.4N	leasurement	
13	5-04.5P	ayment	
14	<b>DIVISION 6</b>	STRUCTURES	89
15	SECTION	6-16, SOLDIER PILE AND SOLDIER PILE TIEBACK WALLS	
16	6-16.3	Construction Requirements	
17	6-16.4	Measurement	
18	6-16.5	Payment	
19	<b>DIVISION 7</b>	DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWER	₹S,
20	WATER MA	INS, AND CONDUITS	90
21	SECTION	7-04, STORM SEWERS	90
22	7-04.3	Construction Materials	90
23	7-04.5	Payment	90
24	SECTION	7-05, MANHOLES, INLETS, AND CATCH BASINS	91
25	7-05.2	Materials	91
26	7-05.5	Payment	91
27	SECTION	7-08, GENERAL PIPE INSTALLATION REQUIREMENTS	91
28	7-08.2	Materials	91
29	7-08.3	Construction Requirements	92
30	7-08.5	Payment	92
31	SECTION	7-13, ADJUSTING FRANCHISE WATER, SEWER AND GAS	
32	UTILITIES		92
33	7-13.1	Description	
34	7-13.2		
35	7-13.3	Construction Requirements	
30 27	7-13.4	Neasurement	
37	7-13.5		
38	DIVISION 8		
39	SECTION	8-01, EROSION CONTROL AND WATER POLLUTION CONTROL	
40	8-01.3	Construction Requirements	
41	8-01.4		
42	8-01.5	Payment	

1	SECTION	8-02, ROADSIDE RESTORATION	98
2	8-02.1	Description	
3	8-02.2	Materials	
4	8-02.3	Construction Requirements	
5	8-02.4	Measurement	
6	8-02.5	Payment	
7	SECTION	8-04, CURBS, GUTTERS, AND SPILLWAYS	
8	8-04.1	Description	
9	8-04.3	Construction Requirements	
10	8-04.4	Measurement	
11	8-04.5	Payment	
12	SECTION	8-12, CHAIN LINK FENCE AND WIRE FENCE	
13	8-12.2	Materials	
14	8-12.4	Measurement	
15	8-12.5	Payment	
16	SECTION	8-21, PERMANENT SIGNING	
17	8-21.1	Description	
18	8-21.3	Construction Requirements	
19	8-21.4	Measurement	
20	8-21.5	Payment	
21	SECTION	8-22, PAVEMENT MARKING	
22	8-22.1	Description	
23	8-22.4	Measurement	
24	8-22.5	Payment	
25	<b>DIVISION 9</b>	MATERIALS	107
26	SECTION	9-03, AGGREGATES	
27	9-03.9(3	3) Crushed Surfacing	
28	SECTION	9-14, EROSION CONTROL AND ROADSIDE PLANTING	
29	9-14.1	Soil	
30	9-14.3	Fertilizer	
31	9-14.4	Mulch and Amendments	
32	APPENDI	CES	
33			
34			

4

#### INTRODUCTION TO THE SPECIAL PROVISIONS

#### 3 (August 14, 2013 APWA GSP)

5 The work on this project shall be accomplished in accordance with the Standard 6 Specifications for Road, Bridge and Municipal Construction, 2018 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public 7 8 Works Association (APWA), Washington State Chapter (hereafter "Standard 9 Specifications"). The Standard Specifications, as modified or supplemented by the 10 Amendments to the Standard Specifications and these Special Provisions, all of which are 11 made a part of the Contract Documents, shall govern all of the Work.

12

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

20

The project-specific Special Provisions are not labeled as such. The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

- 24 25 (March 8, 2013 APWA GSP)
- 26 (April 1, 2013 WSDOT GSP)
- 27 (May 1, 2013 City of Sammamish)
- 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
    - KING COUNTY Department of Transportation Road Services Division 2007
       Design and Construction Standards
    - CITY OF SAMMAMISH 2016 Sammamish Public Works Standards
- 38 Contractor shall obtain copies of these publications, at Contractor's own expense.
- 39 40

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1 2 3	DIVISION 1 GENERAL REQUIREMENTS
4	DESCRIPTION OF WORK
5 6 7 8 9	This Contract provides for the improvement of Louis Thompson Road SE in the City of Sammamish, King County, from 210 <sup>th</sup> Place SE to 211 <sup>th</sup> Place SE. The project includes construction of a soldier pile wall, storm drain crossing, notched cement concrete curb and gutter, roadside bioretention, channelization, landscaping, surveying, traffic control and other work, all in accordance with the attached Contract Plans, these Contract Provisions,

#### 12 SECTION 1-01, DEFINITIONS AND TERMS

#### 13 1-01.3 Definitions

14 (January 4, 2016 APWA GSP)

15

18

16 Delete the heading **Completion Dates** and the three paragraphs that follow it, and 17 replace them with the following:

#### 19 Dates

20 Bid Opening Date

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

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

#### 25 Contract Execution Date

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

#### 27 Notice to Proceed Date

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

#### 29 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.

#### 36 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.

#### 40 **Completion Date**

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

- Final Acceptance Date
- 1 2 The date on which the Contracting Agency accepts the Work as complete. 3 4 Supplement this Section with the following: 5 6 All references in the Standard Specifications, Amendments, or WSDOT General 7 Special Provisions, to the terms "Department of Transportation", "Washington State 8 Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read 9 10 "Contracting Agency". 11 12 All references to the terms "State" or "state" shall be revised to read "Contracting 13 Agency" unless the reference is to an administrative agency of the State of 14 Washington, a State statute or regulation, or the context reasonably indicates 15 otherwise. 16 17 All references to "State Materials Laboratory" shall be revised to read "Contracting 18 Agency designated location". 19 20 All references to "final contract voucher certification" shall be interpreted to mean the 21 Contracting Agency form(s) by which final payment is authorized, and final 22 completion and acceptance granted. 23 24 Additive 25 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 26 27 addition to the base bid. 28 29 Alternate 30 One of two or more units of work or groups of bid items, identified separately in the 31 Bid Proposal, from which the Contracting Agency may make a choice between 32 different methods or material of construction for performing the same work. 33 34 **Business Day** 35 A business day is any day from Monday through Friday except holidays as listed in 36 Section 1-08.5. 37 38 **Contract Bond** 39 The definition in the Standard Specifications for "Contract Bond" applies to whatever 40 bond form(s) are required by the Contract Documents, which may be a combination 41 of a Payment Bond and a Performance Bond. 42 43 **Contract Documents** See definition for "Contract". 44 45 46 **Contract Time** 47 The period of time established by the terms and conditions of the Contract within
- 48 which the Work must be physically completed.
- 49

#### 1 Notice of Award

- The written notice from the Contracting Agency to the successful Bidder signifying
   the Contracting Agency's acceptance of the Bid Proposal.
- 4

#### 5 Notice to Proceed

6 The written notice from the Contracting Agency or Engineer to the Contractor 7 authorizing and directing the Contractor to proceed with the Work and establishing 8 the date on which the Contract time begins.

#### 9 10 **Traffic**

- Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs,
   and equestrian traffic.
- 13

# 14 SECTION 1-02, BID PROCEDURES AND CONDITIONS

#### 15 **1-02.1 Prequalification of Bidders**

16 Delete this Section and replace it with the following:

#### 18 1-02.1 Qualifications of Bidder

- 19 (January 24, 2011 APWA GSP)
- 20

24

17

21 Before award of a public works contract, a bidder must meet at least the minimum 22 qualifications of RCW 39.04.350(1) to be considered a responsible bidder and 23 qualified to be awarded a public works project.

#### 25 **1-02.2 Plans and Specifications**

- 26 (June 27, 2011 APWA GSP)
- 2728 Delete this Section and replace it with the following:
- 29

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

32 33

After award of the Contract, Plans and Specifications will be issued to the Contractor at no cost as detailed below:

34 35

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	4	Furnished automatically upon award.
Contract Provisions	4	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	1	Furnished only upon request.

36

Additional Plans and Contract Provisions may be purchased by the Contractor bypayment of the cost stated in the Call for Bids.

1	1-02.4 Exar	nination of Plans, Specifications, and Site of Work
2	4 00 44	
3	1-02.4(	1) General
4	(June 20	006 City of Sammamish)
5		
6	Section	1-02.4(1) General numbered paragraph 3 is replaced with the following:
0		a actisfied itself as to the character quality and quantity of surface and
0	na:	s sausned usell as to the character, quality, and quality of surface and
9	sub	osurface materials or obstacles to be encountered including existing utilities
10	and	<u>dutility relocation Work</u> insofar as this information is reasonably ascertainable
11	fror	n an inspection of the Work site (including material sites) as well as from the
12	Bid	Documents and other information made a part of this Contract
12	Bia	Boodmonto and other information made a part of the Contract.
13	4 00 5 0	
14	1-02.5 Prop	osal forms
15	(July 31, 201	17 APWA GSP)
16		
17	Delete this S	Section and replace it with the following:
10		socion and replace it with the following.
10	The Dre	manal Form will identify the preject and its location and departies the work. It
19		posal Form will identify the project and its location and describe the work. It
20	will also	list estimated quantities, units of measurement, the items of work, and the
21	material	is to be furnished at the unit bid prices. The bidder shall complete spaces on
22	the pro	posal form that call for, but are not limited to, unit prices; extensions;
23	summat	ions: the total bid amount: signatures: date: and, where applicable, retail
24	sales ta	xes and acknowledgment of addenda: the bidder's name address telephone
25	numbor	and signature: the hidder's LIDBE/DBE/MM/BE commitment, if applicable: a
20		, and signature, the blocer's ODE/DDE/W/WDE confinitionent, if applicable, a
26	State of	wasnington Contractor's Registration Number; and a Business License
27	Number	; if applicable. Bids shall be completed by typing or shall be printed in ink by
28	hand, p	referably in black ink. The required certifications are included as part of the
29	Proposa	al Form.
30	•	
31	The Co	ntracting Agency reserves the right to arrange the proposal forms with
30	alternat	as and additives, if such be to the advantage of the Contracting Agency. The
0Z	hiddana	bell hid on all alternates and additives act forth in the Drenced Form values
33	bidder s	shall bid on all alternates and additives set forth in the Proposal Form unless
34	otherwis	se specified.
35		
36	1-02.6 Prep	paration of Proposal
37	(June 20, 20	17 APWA GSP)
38	(00,00 20, 20	
20	Section 1 02	G is supplemented with the following:
39	Section 1-02	is supplemented with the following.
40		
41	Supplen	nent the second paragraph with the following:
42		
43	4.	If a minimum bid amount has been established for any item, the unit or lump
44		sum price must equal or exceed the minimum amount stated
15	5	Any correction to a bid made by interlineation alteration or eracure shall
40 16	5.	he initialed by the signer of the hid
40		
4/		
48	Delete t	he tourth paragraph and replace it with the following:
49		

1 The Bidder shall submit with the Bid a completed Underutilized Disadvantaged 2 Business Enterprise (UDBE) Utilization Certification, when required by the Special Provisions. For each and every UDBE firm listed on the Bidder's 3 completed Underutilized Disadvantaged Business Enterprise Utilization 4 5 Certification, the Bidder shall submit written confirmation from that UDBE firm 6 that the UDBE is in agreement with the UDBE participation commitment that the 7 Bidder has made in the Bidder's completed Underutilized Disadvantaged 8 Business Enterprise Utilization Certification. WSDOT Form 422-031U 9 (Underutilized Disadvantaged Business Enterprise Written Confirmation 10 Document) is to be used for this purpose. Bidder must submit good faith effort documentation with the Underutilized Disadvantaged Business Enterprise 11 12 Utilization Certification only in the event the bidder's efforts to solicit sufficient 13 UDBE participation have been unsuccessful. Directions for delivery of the Underutilized Disadvantaged Business Enterprise Written Confirmation 14 15 Documents and Underutilized Disadvantaged Business Enterprise Good Faith 16 Effort documentation are included in Sections 1-02.9 17

18 Delete the last paragraph, and replace it with the following: 19

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.
- 36 **1-02.7 Bid Deposit**

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37 (March 8, 2013 APWA GSP) 38

- 39 Supplement this section with the following:40
  - Bid bonds shall contain the following:
    - 1. Contracting Agency-assigned number for the project;
- 4343434444454647474849<
  - 3. The Contracting Agency named as obligee;
- 45 4. The amount of the bid bond stated either as a dollar figure or as a 46 percentage which represents five percent of the maximum bid amount that 47 could be awarded;
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PART 5

1 2 2	<ol><li>The signature of the surety's officer empowered to sign the bond and the power of attorney.</li></ol>
3 4 5	If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.
6 7	If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.
8	
9	1-02.9 Delivery of Proposal
10	(February 16, 2018 APWA GSP, Option A)
11 12 12	Delete this section and replace it with the following:
13	Each Proposal shall be submitted in a sealed envelope, with the Project Name and
15	Project Number as stated in the Call for Bids clearly marked on the outside of the
16	envelope, or as otherwise required in the Bid Documents, to ensure proper handling
17	and delivery.
18	
19	To be considered responsive on a FHWA-funded project, the Bidder may be required
20	to submit the following items, as required by Section 1-02.6:
21	LIDDE Written Confirmation Desument from each LIDDE firm listed on the
22 22	ODBE Written Confirmation Document from each ODBE firm listed on the Bidder's completed LIDBE Utilization Cortification (WSDOT 272 0561);
23 24	Good Faith Effort (GEE) Documentation:
2 <del>4</del> 25	LIDBE Broker Agreement <sup>.</sup>
26	<ul> <li>UDBE Trucking Credit Form (WSDOT 272-058)</li> </ul>
27	
28	These documents, if applicable, shall be received either with the Bid Proposal or as
29	a Supplement to the Bid. The documents shall be received no later than 24 hours
30	(not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid
31	Proposal.
32	The Ridder shall submit to the Contracting Agona, a signed "Cartification of
১১ २४	Compliance with Wage Payment Statutes" document where the Bidder under penalty
35	of periury verifies that the Bidder is in compliance with responsible hidder criteria in
36	RCW 39.04.350 subsection (1) (a), as required per Section 1-02.14. The
37	"Certification of Compliance with Wage Payment Statutes" document shall be
38	received either with the Bid Proposal or as a Supplement to the Bid. The document
39	shall be received <b>no later than 24 hours</b> (not including Saturdays, Sundays and
40	Holidays) after the time for delivery of the Bid Proposal.
41	If as the sitted often the Did December 1 is due, the decument/s) was at he as the site of in-
4Z 12	If submitted after the Bid Proposal is due, the document(s) must be submitted in a
40 44	Information" added All other information required to be submitted with the Rid
45	Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call
46	for Bids.
47	
48	The Contracting Agency will not open or consider any Bid Proposal that is received
49	after the time specified in the Call for Bids for receipt of Bid Proposals, or received in
50	a location other than that specified in the Call for Bids. The Contracting Agency will

1 not open or consider any "Supplemental Information" (UDBE confirmations, GFE 2 documentation, UDBE Broker Agreement, UDBE Trucking Credit Form, or 3 Certification of Compliance with Wage Payment Statutes) that is received after the 4 time specified above, or received in a location other than that specified in the Call for 5 Bids. 6 1-02.10 Withdrawing, Revising, or Supplementing Proposal 7 8 (July 23, 2015 APWA GSP) 9 10 Delete this section in its entirety, and replace it with the following: 11 12 After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may 13 withdraw, revise, or supplement it if: 14 15 The Bidder submits a written request signed by an authorized person and 1. 16 physically delivers it to the place designated for receipt of Bid Proposals, 17 and 18 2. The Contracting Agency receives the request before the time set for receipt 19 of Bid Proposals, and 20 3. The revised or supplemented Bid Proposal (if any) is received by the 21 Contracting Agency before the time set for receipt of Bid Proposals. 22 23 If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received 24 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 25 26 or supplemented package in its entirety. If the Bidder does not submit a revised or 27 supplemented package, then its bid shall be considered withdrawn. 28 29 Late revised or supplemented Bid Proposals or late withdrawal requests will be date 30 recorded by the Contracting Agency and returned unopened. Mailed, Emailed, or 31 faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable. 32 33 1-02.12 Public Opening of Proposals 34 Section 1-02.12 is supplemented with the following: 35 36 Date of Opening Bids 37 Sealed Bids are to be received at one of the following locations prior to the time 38 specified: 39 40 1. At Sammamish City Hall until **2:00 p.m.** of the Bid opening date. 41 42 Sammamish City Hall 43 801 228th Avenue SE 44 Sammamish, WA 98075 45 46 The Bid opening date for this project is as specified on the Notice to Contractors. Bids 47 received will be publicly opened and read after 2:00 p.m. on this date. 48

#### 1 1-02.13 Irregular Proposals

- 2 (June 20, 2017 APWA GSP) 3
- 4 Delete this section and replace it with the following: 5 6 1. A Proposal will be considered irregular and will be rejected if: 7 The Bidder is not pregualified when so required; а. 8 The authorized Proposal form furnished by the Contracting Agency is not b. 9 used or is altered; 10 The completed Proposal form contains any unauthorized additions, C. 11 deletions, alternate Bids, or conditions; 12 The Bidder adds provisions reserving the right to reject or accept the d. 13 award, or enter into the Contract; 14 A price per unit cannot be determined from the Bid Proposal; e. 15 f. The Proposal form is not properly executed; 16 The Bidder fails to submit or properly complete a Subcontractor list, if g. 17 applicable, as required in Section 1-02.6; 18 The Bidder fails to submit or properly complete an Underutilized h. 19 Disadvantaged Business Enterprise Certification, if applicable, as 20 required in Section 1-02.6; 21 i. The Bidder fails to submit written confirmation from each UDBE firm listed 22 on the Bidder's completed UDBE Utilization Certification that they are in 23 agreement with the bidder's UDBE participation commitment, if 24 applicable, as required in Section 1-02.6, or if the written confirmation that 25 is submitted fails to meet the requirements of the Special Provisions; 26 The Bidder fails to submit UDBE Good Faith Effort documentation, if İ 27 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 28 Condition of Award was made; 29 30 k. The Bid Proposal does not constitute a definite and unqualified offer to 31 meet the material terms of the Bid invitation: or 32 More than one Proposal is submitted for the same project from a Bidder Ι. 33 under the same or different names. 34 35 A Proposal may be considered irregular and may be rejected if: 36 The Proposal does not include a unit price for every Bid item; a. 37 b. Any of the unit prices are excessively unbalanced (either above or below 38 the amount of a reasonable Bid) to the potential detriment of the 39 Contracting Agency; 40 Receipt of Addenda is not acknowledged; C. 41 A member of a joint venture or partnership and the joint venture or d. 42 partnership submit Proposals for the same project (in such an instance, 43 both Bids may be rejected); or 44 If Proposal form entries are not made in ink. e. 45 46 1-02.14 **Disgualification of Bidders** 47 (July 31, 2017 APWA GSP, Option B) 48 49 Delete this section and replace it with the following: 50

1 2 3	A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet Supplemental Criteria 1-7 listed in this Section.			
4 5 6 7 8	The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-7 shall be provided by the Bidder as stated later in this Section.			
10 11 12 13 14 15 16 17	In ad "Cert Bidde respo for "C the C Docu	Iditic tifica onsi Certi Cont ume	on, the Bidder shall submit to the Contracting Agency a signed ation of Compliance with Wage Payment Statutes" document where the nder penalty of perjury verifies that the Bidder is in compliance with ble bidder criteria in RCW 39.04.350 subsection (1)(g). A form appropriate ification of Compliance with Wage Payment Statutes" will be provided by tracting Agency in the Bid Documents. The form provided in the Bid nts shall be submitted with the Bid as stated in Section 1-02.9.	
18	1.	<u>De</u>	linquent State Taxes	
20 21 22 23		A	<u>Criterion</u> : The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.	
24 25 26 27 28 29 30		B.	<u>Documentation</u> : The Bidder shall not be listed on the Washington State Department of Revenue's "Delinquent Taxpayer List" website: http://dor.wa.gov/content/fileandpaytaxes/latefiling/dtlwest.aspx , or if they are so listed, they must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.	
31	2.	Fee	deral Debarment	
32 33 34 35		A	<u>Criterion</u> : The Bidder shall not currently be debarred or suspended by the Federal government.	
36 37 38 39		B.	<u>Documentation</u> : The Bidder shall not be listed as having an "active exclusion" on the U.S. government's "System for Award Management" database (www.sam.gov).	
40 41	3.	<u>Su</u>	bcontractor Responsibility	
42 43 44 45 46 47 48 49 50		A	<u>Criterion</u> : The Bidder's standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder's subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also "responsible" subcontractors as defined by RCW 39.06.020.	

1 2 3 4		B. <u>Documentation</u> : The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.
5 6 7	4.	Claims Against Retainage and Bonds
7 8 9 10 11 12 13 14 15		A <u>Criterion</u> : The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
16 17 18 19 20		B. <u>Documentation</u> : The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:
21 22 23 24 25 26 27		<ul> <li>Name of project</li> <li>The owner and contact information for the owner;</li> <li>A list of claims filed against the retainage and/or payment bond for any of the projects listed;</li> <li>A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.</li> </ul>
28 20	5.	Public Bidding Crime
29 30 31 32 23		A <u>Criterion</u> : The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.
33 34 35 36 37		B. <u>Documentation</u> : The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.
39 40	6.	Termination for Cause / Termination for Default
40 41 42 43 44 45 46		A <u>Criterion</u> : The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
47 48 49 50		B. <u>Documentation</u> : The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years

1 prior to the bid submittal date; or if Bidder was terminated, describe the 2 circumstances. 3 4 7. Lawsuits 5 6 A Criterion: The Bidder shall not have lawsuits with judgments entered 7 against the Bidder in the five years prior to the bid submittal date that 8 demonstrate a pattern of failing to meet the terms of contracts, unless 9 there are extenuating circumstances and such circumstances are 10 deemed acceptable to the Contracting Agency 11 12 B. Documentation: The Bidder, if and when required as detailed below, shall 13 sign a statement (on a form to be provided by the Contracting Agency) 14 that the Bidder has not had any lawsuits with judgments entered against 15 the Bidder in the five years prior to the bid submittal date that 16 demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in 17 18 the five years prior to the bid submittal date, along with a written 19 explanation of the circumstances surrounding each such lawsuit. The 20 Contracting Agency shall evaluate these explanations to determine 21 whether the lawsuits demonstrate a pattern of failing to meet of terms of 22 construction related contracts 23 24 As evidence that the Bidder meets Supplemental Criteria 3-7 stated above, the 25 apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written 26 27 statement verifying that the Bidder meets supplemental criteria 3-7 together with 28 supporting documentation (sufficient in the sole judgment of the Contracting 29 Agency) demonstrating compliance with Supplemental Criteria 3-7. The 30 Contracting Agency reserves the right to request further documentation as needed 31 from the low Bidder and documentation from other Bidders as well to assess 32 Bidder responsibility and compliance with all bidder responsibility criteria. The 33 Contracting Agency also reserves the right to obtain information from third-parties 34 and independent sources of information concerning a Bidder's compliance with the 35 mandatory and supplemental criteria, and to use that information in their 36 evaluation. The Contracting Agency may consider mitigating factors in determining whether the Bidder complies with the requirements of the supplemental criteria. 37 38 39 The basis for evaluation of Bidder compliance with these mandatory and 40 supplemental criteria shall include any documents or facts obtained by Contracting 41 Agency (whether from the Bidder or third parties) including but not limited to: (i) 42 financial, historical, or operational data from the Bidder; (ii) information obtained 43 directly by the Contracting Agency from others for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information 44 45 obtained by the Contracting Agency which is believed to be relevant to the matter. 46 47 If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the 48 49 Contracting Agency shall notify the Bidder in writing, with the reasons for its 50 determination. If the Bidder disagrees with this determination, it may appeal the 51 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.

9 Request to Change Supplemental Bidder Responsibility Criteria Prior To Bid: 10 Bidders with concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria may make or submit requests to the Contracting 11 12 Agency to modify the criteria. Such requests shall be in writing, describe the 13 nature of the concerns, and propose specific modifications to the criteria. Bidders shall submit such requests to the Contracting Agency no later than five (5) 14 15 business days prior to the bid submittal deadline and address the request to the Project Engineer or such other person designated by the Contracting Agency in the 16 17 Bid Documents.

# 19 **1-02.15 Pre Award Information**

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(August 14, 2013 APWA GSP)

22 Revise this section to read: 23

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,
- 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,
  - 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.

# 37

# 38 SECTION 1-03, AWARD AND EXECUTION OF CONTRACT

#### 39 **1-03.1 Consideration of Bids**

- 40 (January 23, 2006 APWA GSP)
- 41
- 42 Revise the first paragraph to read: 43

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.

#### 8 1-03.3 Execution of Contract

- 9 (October 1, 2005 APWA GSP)
- 10

11 Revise this Section to read:

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

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

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

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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.

36 37 **1-03.4 Contract Bond** 

38 (July 23, 2015 APWA GSP)

- 40 Delete the first paragraph and replace it with the following:
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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:

- 47 1. Be on Contracting Agency-furnished form(s);
- 48 2. Be signed by an approved surety (or sureties) that:
  - a. Is registered with the Washington State Insurance Commissioner, and

PART 5

1 2		b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.
- 3 4 5 6	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:
7 8 9		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
10 11 12 13		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:
14 15	4.	Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
16 17	5.	Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
18 19 20 21 22 23 24	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).
24 25 26 27	<i>(June</i> Sectio	2006 City of Sammamish) n 1-03.4 is supplemented with the following <i>:</i>
27 28 29 30 31 32 33 34 35 36 37 38	TI P be ar su co w	he Contractor shall furnish both a Performance Bond and a Labor and Material ayment Bond, each in the full amount of the Contract price which shall guarantee e faithful performance of the Contract and the payment for all taxes, labor, material, ubcontractors and material suppliers. The Labor and Material Payment Bond shall e in force until completion of the project and acceptance by the Contracting Agency, nd also for such period thereafter during which the law allows claims to be filed and ued upon. All Bonds required hereunder shall be issued by a corporate surety ompany authorized to do business in the state in which the Work is located, and hich is also a company acceptable to the Contracting Agency, and on the form tached hereto.
39	1-03.7	' Judicial Review

- 40 *(July 23, 2015 APWA GSP)* 41
- 42 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.
- 50

#### **SECTION 1-04, SCOPE OF THE WORK** 1

2 3 4	<b>1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda</b> (March 13, 2012 APWA GSP)		
6 7	REVISE THE SECOND PARAGRAPH TO READ:		
7 8 9	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):		
10	1. Addenda,		
11	2. Proposal Form,		
12	3. Special Provisions,		
13	4. Contract Plans,		
14	<ol><li>Amendments to the Standard Specifications,</li></ol>		
15	6. Standard Specifications,		
16	7. Contracting Agency's Standard Plans or Details (if any), and		
17	8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.		
18			
19	1-04.4 Changes		
20	Delete the fifth paragraph and replace with the following:		
21			
22 23 24 25 26 27	B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original Contract quantity, <u>and</u> if the Item of Work represents more than 10 percent of the total Contract price. For the purpose of this Section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.		
28	1-04-4(1) Minor Changes		
29	Section 1-04.4(1) is supplemented with the following:		
30	Unexpected Site Changes		
31	Payments or credits for changes amounting to \$15,000 or less may be made under		
32	the Bid item "Unexpected Site Changes", if included in the Bid Schedule. At the		
33	discretion of the Contracting Agency, this procedure for Unexpected Site Changes may		
34	be used in lieu of the more formal procedure as outlined in Section 1-04.4 Changes		
35			
36	The Contractor will be provided a copy of the completed order for Unexpected Site		
37	Changes. The agreement for the Unexpected Site Changes will be documented by		
38	signature of the Contractor or notation of verbal agreement. If the Contractor is in		
39	disagreement with anything required by the order for Unexpected Site Changes, the		
40	Contractor may protest the order as provided in Section 1-04.5.		
41			
42	Payments will be determined in accordance with Section 1-09.6. For the purpose of		

4 43

providing a common Proposal for all Bidders, the Contracting Agency has entered an amount for "Unexpected Site Changes" in the Proposal to become a part of the total 44 Bid by the Contractor. Credits will be determined in accordance with Section 1-09.4. 45 46

LOUIS THOMPSON ROAD SE SLIDE REPAIR AND DRAINAGE IMPROVEMENTS PROJECT CITY OF SAMMAMISH

#### 1 2 1-04.6 Variation in Estimated Quantities

- (July 23, 2015 APWA GSP, Option A)
- 3 4
- Revise the first paragraph to read:
- 5

6 Payment to the Contractor will be made only for the actual quantities of Work 7 performed and accepted in conformance with the Contract. When the accepted 8 quantity of Work performed under a unit item varies from the original Proposal quantity, 9 payment will be at the unit Contract price for all Work unless the total accepted quantity 10 of any Contract item, adjusted to exclude added or deleted amounts included in 11 change orders accepted by both parties, increases or decreases by more than 25 12 percent from the original Proposal quantity, and if the total extended bid price for that 13 item at time of award is equal to or greater than \$25,000. In that case, payment for 14 contract work may be adjusted as described herein.

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#### 16 SECTION 1-05, CONTROL OF WORK

17 1-05.3 Plans and Working Drawings

#### 1-05.3(1) Record Drawings (New Section)

- (June 2006 City of Sammamish)
- 22 Section 1-05.3(1) is added as follows: 23

24 Record drawings refer to those documents to be maintained and annotated by 25 the Contractor during construction and are defined as (1) a neatly and legibly 26 marked set of Contract Plans showing the final location of piping, new structures, 27 paving limits, curbs, gutters, sidewalks, relocated utility structures, monuments, 28 channelization, etc.; (2) additional documents such as schedules, lists, drawings, 29 and easement/permit forms included in the specifications; and (3) Contractor 30 layout and installation drawings.

- 32 Unless otherwise specified, record drawings shall be full size and maintained in 33 a clean, dry, and legible condition. Record documents shall not be used for 34 construction purposes and shall be available for review by the Engineer during 35 normal working hours at the Contractor's field office. At the completion of the 36 Work, prior to final payment, all record drawings and attachments shall be 37 submitted to the Engineer. This Work does not require a field survey of "as-built" 38 conditions. 39
- 40 Marking of the drawings shall be kept current and shall be done at the time 41 materials and equipment are installed. Annotations to the record documents shall 42 be made with an erasable colored pencil conforming to the following color code:

Additions	Red
Deletions	Green
Comments -	Blue
Dimensions -	Graphite

1 Legibly mark to record actual depths, horizontal and vertical location of 2 underground utilities and cables, and appurtenances referenced to permanent 3 surface improvements. 4 5 The Contractor will be provided with one set of blueprint construction drawings 6 for this purpose. At the end of the project, each record drawing shall be signed 7 by a person with authority to represent the Contractor, attesting to the accuracy 8 of the drawing. 9 10 The Contractor's record drawings will be reviewed bi-monthly for completeness 11 by the Resident Engineer. If the record drawings do not reflect the Work 12 performed, payment for those items of Work not reflected on the drawings will 13 not be included in the current monthly progress estimate. 14 15 Payment 16 Payment will be made in accordance with Section 1-04.1 for the following bid item 17 when included in the Proposal: 18 19 "Record Drawings", lump sum. 20 21 1-05.4 Conformity With and Deviations From Plans and Stakes 22 Section 1-05.4 is supplemented with the following: 23 24 (August 7, 2017 WSDOT GSP) 25 **Contractor Surveying - Structure** 26 Copies of the Contracting Agency provided primary survey control data are available 27 for the bidder's inspection at the office of the Engineer. 28 29 The Contractor shall be responsible for setting, maintaining, and resetting all 30 alignment stakes, slope stakes, and grades necessary for the construction of bridges, 31 noise walls, and retaining walls. Except for the survey control data to be furnished by 32 the Contracting Agency, calculations, surveying, and measuring required for setting 33 and maintaining the necessary lines and grades shall be the Contractor's 34 responsibility. 35 36 The Contractor shall inform the Engineer when monuments are discovered that were 37 not identified in the Plans and construction activity may disturb or damage the 38 monuments. All monuments noted on the plans "DO NOT DISTURB" shall be 39 protected throughout the length of the project or be replaced at the Contractors 40 expense. 41 42 Detailed survey records shall be maintained, including a description of the work 43 performed on each shift, the methods utilized, and the control points used. The record 44 shall be adequate to allow the survey to be reproduced. A copy of each day's record 45 shall be provided to the Engineer within three working days after the end of the shift. 46 47 The meaning of words and terms used in this provision shall be as listed in "Definitions" of Surveying and Associated Terms" current edition, published by the American 48 49 Congress on Surveying and Mapping and the American Society of Civil Engineers. 50

1 2	The surv	The survey work by the Contractor shall include but not be limited to the following:			
- 3 4 5 6 7 8	1.	Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.			
9 10 11 12	2.	Establish, by placing hubs and/or marked stakes, the location with offsets of foundation shafts and piles.			
13 14	3.	Establish offsets to footing centerline of bearing for structure excavation.			
15 16	4.	Establish offsets to footing centerline of bearing for footing forms.			
17 18	5.	Establish wing wall, retaining wall, and noise wall horizontal alignment.			
19 20	6.	Establish retaining wall top of wall profile grade.			
20 21 22	7.	Establish elevation benchmarks for all substructure formwork.			
22 23 24 25	8.	Check elevations at top of footing concrete line inside footing formwork immediately prior to concrete placement.			
26 27 28	9.	Check column location and pier centerline of bearing at top of footing immediately prior to concrete placement.			
29 30 31	10.	Establish location and plumbness of column forms, and monitor column plumbness during concrete placement.			
32 33 34	11.	Establish pier cap and crossbeam top and bottom elevations and centerline of bearing.			
35 36 37	12.	Check pier cap and crossbeam top and bottom elevations and centerline bearing prior to and during concrete placement.			
38 39	13.	Establish grout pad locations and elevations.			
40 41 42	14.	Establish structure bearing locations and elevations, including locations of anchor bolt assemblies.			
43 44	15.	Establish box girder bottom slab grades and locations.			
45 46	16.	Establish girder and/or web wall profiles and locations.			
47 48	17.	Establish diaphragm locations and centerline of bearing.			
49 50 51	18.	Establish roadway slab alignment, grades and provide dimensions from top of girder to top of roadway slab. Set elevations for deck paving machine rails.			

1					
2	19. Establish traffic barrier and curb profile.				
3 4 5	20.	20. Profile all girders prior to the placement of any deadload or construction live load that may affect the girder's profile.			
6 7 8	The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.				
9					
10 11 12	To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with the following primary survey and control information:				
12	1	Descriptions of two primary control poi	into upod for the hou	rizontal and vartical	
13	1.	control Primary control points will be	described by refer	izoniai and vertical	
14		control. Finally control points will be	and algorithm det	tum utilized by the	
15		project In addition the Contrac	ting Agency will	supply borizontal	
10		project. In addition, the Contract	anding points and	for each Doint of	
17		Intersection (PI) on each alignment in	cluded in the project		
10		Intersection (FI) on each alignment in		ul.	
19	2	Harizantal coordinates for the contarli	no of oach bridgo r	vior	
20	۷.		ne of each bridge p		
21	3	Computed elevations at top of bridge	e roadway decke r	at one tenth nointe	
22	5.	along centerline of each girder web	All form grades	and other working	
20		and a shall be calculated by the Con		and other working	
25		grades shall be calculated by the oon			
26	The Co	ntractor shall give the Contracting Age	oncy three weeks r	notification to allow	
20	oo onr	te time to provide the data outlined in I	tems 2 and 3 abov	The Contractor	
28	shall on	sure a surveying accuracy within the fo	lowing tolerances:		
20	Shan ch	sure a surveying accuracy within the lo	nowing tolerances.		
30			Vertical	Horizontal	
31	1	Stationing on structures		+0.02 feet	
20	י. כ	Alignment on structures		$\pm 0.02$ feet	
22	2.		10.01 fact		
24	э.	Supersituciule elevations	±0.01 leel		
34 25					
30					
30	4.	Substructure	$\pm 0.02$ feet		
37			variation from		
38			Plan grades.		
39				·	
40	The Co	ntracting Agency may spot-check the	Contractor's surve	ying. These spot-	
41	checks	will not change the requirements for no	rmal checking by th	ne Contractor.	
42					
43	when staking the following items, the Contractor shall perform independent checks				
44	from different secondary control to ensure that the points staked for these items are				
40 46	within th	ie specified survey accuracy tolerances	ö.		
40 47	<b></b>				
4/	PILE	es			
48 40	Snarts				
49	Foolings				
5U	Co	umns			
The Contractor shall calculate coordinates for the points associated with piles, shafts,
footings and columns. The Contracting Agency will verify these coordinates prior to
issuing approval to the Contractor for commencing with the survey work. The
Contracting Agency will require up to seven calendar days from the date the data is
received to issuing approval.

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

### Payment

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

"Structure Surveying", lump sum.

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

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# 22 (August 7, 2017 WSDOT GSP)

#### 23 **Contractor Surveying - Roadway**

Copies of the Contracting Agency provided primary survey control data are available for the bidder's inspection at the office of the Engineer.

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

- The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length of the project or be replaced at the Contractors expense.
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Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

- The meaning of words and terms used in this provision shall be as listed in "Definitions
   of Surveying and Associated Terms" current edition, published by the American
   Congress on Surveying and Mapping and the American Society of Civil Engineers.
- 49 50
  - The survey work shall include but not be limited to the following:

1	1	Verify the primary berizontal and vertical control furnished by the Contracting
2 3 4 5 6 7 8	1.	Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.
9 10 11 12	2.	Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.
13 14 15 16 17	3.	Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.
18 19 20 21 22 23	4.	Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor
23 24 25 26 27	5.	Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.
28 29 30 31 32 33 34 35 36 37 38	6.	Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.
39 40 41	7.	Establish intermediate elevation benchmarks as needed to check work throughout the project.
42 43 44 45	8.	Provide references for paving pins at 25-foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.
46 47 48 49 50 51	9.	For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

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

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

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with primary survey control information consisting of descriptions of two primary control points used for the horizontal and vertical control, and descriptions of two additional primary control points for every additional three miles of project length. Primary control points will be described by reference to the project alignment and the coordinate system and elevation datum utilized by the project. In addition, the Contracting Agency will supply horizontal coordinates for the beginning and ending points and for each Point of Intersection (PI) on each alignment included in the project.

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

23		<u>Vertical</u>	<u>Horizontal</u>
24	Slope stakes	±0.10 feet	±0.10 feet
25	Subgrade grade stakes set		
26	0.04 feet below grade	±0.01 feet	±0.5 feet
27	-		(parallel to alignment)
28			±0.1 feet
29			(normal to alignment)
30			
31	Stationing on roadway	N/A	±0.1 feet
32	Alignment on roadway	N/A	±0.04 feet
33	Surfacing grade stakes	±0.01 feet	±0.5 feet
34	00		(parallel to alignment)
35			±0.1 feet
36			(normal to alignment)
37			
38	Roadway paving pins for		
39	surfacing or paving	±0.01 feet	±0.2 feet
40			(parallel to alignment)
41			±0.1 feet
42			(normal to alignment)
43			
44	The Contracting Agency may spot	t-check the Contra	ctor's surveying. These spot-
45	checks will not change the requirer	ments for normal ch	ecking by the Contractor.

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

- 1 The Contractor shall calculate coordinates for the alignment. The Contracting Agency 2 will verify these coordinates prior to issuing approval to the Contractor for 3 commencing with the work. The Contracting Agency will require up to seven calendar 4 days from the date the data is received. 5
- Contract work to be performed using contractor-provided stakes shall not begin until
  the stakes are approved by the Contracting Agency. Such approval shall not relieve
  the Contractor of responsibility for the accuracy of the stakes.
- Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are
   needed that are not described in the Plans, then those stakes shall be marked, at no
   additional cost to the Contracting Agency as ordered by the Engineer.

### 14 Payment

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- Payment will be made for the following bid item when included in the proposal:
  - "Roadway Surveying", lump sum.

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

### 24 **1-05.7 Removal of Defective and Unauthorized Work**

25 (October 1, 2005 APWA GSP) 26

27 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.
- 43 Direct or indirect costs incurred by the Contracting Agency attributable to correcting 44 and remedying defective or unauthorized Work, or Work the Contractor failed or 45 refused to perform, shall be paid by the Contractor. Payment will be deducted by the 46 Engineer from monies due, or to become due, the Contractor. Such direct and indirect 47 costs shall include in particular, but without limitation, compensation for additional 48 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 49 50 unauthorized Work.

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- 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.

# 10 **1-05.11** Final Inspection

11 Delete this Section and replace it with the following:

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# 1-05.11 Final Inspections and Operational Testing

(October 1, 2005 APWA GSP)

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# 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 therefore.

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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.
- 42 43

# 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.
- 10 The Contractor will not be allowed an extension of Contract time because of a delay 11 in the performance of the Work attributable to the exercise of the Engineer's right 12 hereunder.
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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

- 21 It is the intent of the Contracting Agency to have at the Physical Completion Date a 22 complete and operable system. Therefore when the Work involves the installation of 23 machinery or other mechanical equipment; street lighting, electrical distribution or 24 signal systems; irrigation systems; buildings; or other similar Work it may be desirable 25 for the Engineer to have the Contractor operate and test the Work for a period of time 26 after final inspection but prior to the physical completion date. Whenever items of 27 Work are listed in the Contract Provisions for operational testing they shall be fully 28 tested under operating conditions for the time period specified to ensure their 29 acceptability prior to the Physical Completion Date. During and following the test 30 period, the Contractor shall correct any items of Workmanship, materials, or 31 equipment which prove faulty, or that are not in first class operating condition. 32 Equipment, electrical controls, meters, or other devices and equipment to be tested 33 during this period shall be tested under the observation of the Engineer, so that the 34 Engineer may determine their suitability for the purpose for which they were installed. 35 The Physical Completion Date cannot be established until testing and corrections 36 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.
- 43 Operational and test periods, when required by the Engineer, shall not affect a 44 manufacturer's guaranties or warranties furnished under the terms of the Contract.
- 46 **1-05.12** Final Acceptance
- 47 Add the following new section:
- 48

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- 49 **1-05.12(1)** One-Year Guarantee Period
- 50 (March 8, 2013 APWA GSP)

- 1 2 The Contractor shall return to the project and repair or replace all defects in 3 workmanship and material discovered within one year after Final Acceptance of 4 the Work. The Contractor shall start work to remedy any such defects within 7 5 calendar days of receiving Contracting Agency's written notice of a defect, and 6 shall complete such work within the time stated in the Contracting Agency's 7 notice. In case of an emergency, where damage may result from delay or where 8 loss of services may result, such corrections may be made by the Contracting 9 Agency's own forces or another contractor, in which case the cost of corrections 10 shall be paid by the Contractor. In the event the Contractor does not accomplish 11 corrections within the time specified, the work will be otherwise accomplished 12 and the cost of same shall be paid by the Contractor. 13
- 14 When corrections of defects are made, the Contractor shall then be responsible 15 for correcting all defects in workmanship and materials in the corrected work for 16 one year after acceptance of the corrections by Contracting Agency.
  - This guarantee is supplemental to and does not limit or affect the requirements that the Contractor's work comply with the requirements of the Contract or any other legal rights or remedies of the Contracting Agency.

#### 22 1-05.13 Superintendents, Labor and Equipment of Contractor 23

- (August 14, 2013 APWA GSP)
- 25 Delete the sixth and seventh paragraphs of this section. 26

### 1-05.13(1) Emergency Contact List

- (June 2006 City of Sammamish)
- Section 1-05.13(1) shall be supplemented with the following:
  - The Contractor shall designate and shall provide the Contracting Agency and the Engineer with names and telephone numbers of those persons who will be available at all times in case of emergency. The Contractor will be charged for such expenses as may be incurred by the Contracting Agency to provide such service, if said emergency is not immediately rectified.

#### 38 1-05.14 **Cooperation With Other Contractors**

- 39 (March 13, 1995 WSDOT GSP)
  - Section 1-05.14 is supplemented with the following:

# Other Contracts Or Other Work

- 44 It is anticipated that the following work adjacent to or within the limits of this project 45 will be performed by others during the course of this project and will require coordination of the work: 46 47
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Zackuse Creek Fish Passage and Stream Restoration Project

LOUIS THOMPSON ROAD SE SLIDE REPAIR AND DRAINAGE IMPROVEMENTS PROJECT **CITY OF SAMMAMISH** 

# 2 1-05.15 Method of Serving Notices

- 3 (March 25, 2009 APWA GSP)
- 4 Revise the second paragraph to read:
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All correspondence from the Contractor shall be directed to the Project Engineer. <u>All</u> 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.

14 Add the following new Section:

# 16 **1-05.16 Water and Power**

17 (October 1, 2005 APWA GSP) 18

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.

# 23 SECTION 1-06, CONTROL OF MATERIAL

#### 24 **1-06.1 Approval of Materials Prior to Use**

25 (June 2006 City of Sammamish) 26

# 27 Section 1-06.1 is supplemented with the following: 28

- Within these Contract Documents, certain items are specified by brand, style, trade name, or manufacturer in order to set forth a standard of quality, and/or preference by the Contracting Agency. It is not the intent of these Specifications to exclude other processes or materials of a type and quality equal to those designated.
  - 2. Whenever a manufacturer's name, brand, or item designation is given, it shall be understood that the words "or equal" follow such name or designation whether in fact they do so or not.
- 3. The phrase "or equal" is not to be construed to mean that material or equipment will be necessarily approved as equal by the Engineer; any such approval shall only be effective when the item has been specifically approved in advance and in writing by the Engineer.
- 4. No additional compensation or extension of time will be allowed the Contractor
  45 for any changes required to adopt substituted materials or equipment.
  46

### 47 **1-06.1(5)** Submittals (New Section)

48 (June 2006 City of Sammamish) 49 1 Section 1-06.1(5) is added as follows:

#### 1-06.1(5)1.0 General

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of Work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the requirements of the Specifications and drawings. Submittal documents shall be clearly edited to indicate only those items, models, or series of materials or equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and specifically notify the Contracting Agency in each case where his/her submittal may affect the Work of another Contractor or the Contracting Agency. The Contractor shall ensure coordination of submittals among the related crafts and sub-Contractors. If the Contractor proposes to provide material, equipment, or method of Work, which deviates from the project Specifications, the Contractor shall indicate so under "deviations" on the transmittal form accompanying the submittal copies.

#### 1-06.1(5)1.1 Work Included

Submittals required for this Work shall include any or all of the following as required by the particular Specification section and the submittal schedule:

- a. Manufacturer's Literature
- b. Shop Drawings
- c. Material Samples
- d. Test Report

### 1-06.1(5)1.2 Submittal Information

Shop, catalog, and other appropriate drawings shall be submitted to the Engineer for review prior to fabrication or ordering of all equipment or materials specified. The number of copies of submittal information to be submitted shall be as indicated in the following parts of this Section.

All submittal information shall be sent to the Contracting Agency or the Agency's designated representative through the general Contractor.

### 1-06.1(5)2.0 Product Submittals

### **1-06.1(5)2.1 General**

Each submittal shall be accompanied by a letter of transmittal showing the date of transmittal, Specification section or drawing number to which the submittal pertains, and a brief description of the material submitted.

49 When the Contract documents require a submittal, the Contractor shall submit 50 the specified information as follows:

1	1. One (1) reproducible original and five (5) copies of all the submitted
2	information.
3	2. The original and three (3) copy sets will be retained for Contracting
4	Agency and Engineer records. Two (2) copy sets will be returned to the
5	Contractor with the approval action noted.
7	1.06 1/5/2 2 Manufacturor's Litoraturo
7 8	1-00. I(5)2.2 Manufacturer S Enterature
0 0	Where the contents of submitted literature includes data is not pertinent to the
10	submittal the portion(s) of the contents being submitted for the Engineer's review
11	shall be clearly indicated
12	
13	1-06.1(5)2.3 Shop Drawings
14	
15	Shop Drawings shall be submitted in the form of blue-line or black-line prints of
16	each sheet. Blueprint submittals will not be acceptable.
17	
18	All Shop Drawings shall be accurately drawn to a scale sufficiently large enough
19	to show pertinent features and method of connection or joining. On all Shop
20	Drawings, figure dimensions shall be used as opposed to scaled dimensions.
21	
22	Shop Drawings shall bear the Contractor's certification that it has reviewed,
23	checked, and approved the Shop Drawings.
24	
25	1-06.1(5)2.4 Material Samples
26	
27	All material samples shall be of the exact article proposed to be furnished and
28	shall be submitted in the quantity required to be returned to the Contractor, plus
29	one additional sample to be retained by the Engineer.
30	
31	1-06.1(5)2.5 Test Reports
32	
33	A minimum of four (4) copies of test reports shall be submitted to the Contracting
34	Agency and/or its designated representative.
35	
36	1-06.1(5)2.6 Resubmittals
37	
38	When material is resubmitted for any reason, it shall be resubmitted under a new
39	letter of transmittal and referenced to the previous submittal.
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41	1-06.1(5)2.7 Timing of Product Submittais
42	4.064(4)2.7.4 Conorol
43	1-06.1(4)2.7.1 General
44 15	1 All submittals shall be made far enough in advance of installation to
46	nrovide all required time for reviews and securing of persearch
47	annovale
48	2 In scheduling the Contractor shall allow at least twenty (20) calendar
49	days for the Engineer's review following its receipt of the submittal

2 3	manufacturer's literature, etc.) four (4) copies will be retained by the Engineer. The remaining copies will be returned to the Contractor.
4 5	1-06.1(5)2.7.2 Delays
6 7 8	Cost of delays occasioned by tardiness of submittals on the part of the Contractor will not be borne by the Contracting Agency, or the Engineer.
9 10	1-06.1(5)2.8 Substitutions
12 13	1-06.1(5)2.8.1 General
14 15 16 17 18 19 20	<ol> <li>Wherever possible throughout the Specifications, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number, by reference to recognized industry standards, or by performance requirements.</li> <li>To ensure that the specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of design data and for review and approval or</li> </ol>
21 22	rejection by the Engineer.
23 24	1-06.1(5)2.8.2 Engineer's Review Required
25 26	<ol> <li>Comply with the requirements of the Standard Specifications unless modified herein</li> </ol>
27 28 29 30	<ol> <li>The Engineer will consider proposals for substitutions of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Engineer to evaluate the proposals</li> </ol>
31 32 33	<ol> <li>Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this Work by the Engineer.</li> </ol>
34 35 36	<ol> <li>If the Contractor desires to furnish items of minor equipment by manufacturers other than those specified, he shall secure the approval of the Engineer prior to placing a purchase order.</li> </ol>
37 38 39 40 41	5. Where the phrase "or equal" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Engineer unless the item has been specifically approved in writing for this Work by the Engineer.
42	1-06.1(5)2.8.3 Availability of Specified Items
43 44 45 46 47	<ol> <li>Verify prior to Bidding that all specified items will be available in time for installation during orderly and timely progress of the Work.</li> <li>In the event the specified item or items will not be available, notify the Engineer prior to receipt of Bids</li> </ol>
48 49 50	<ol> <li>Costs of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, shall not be borne by the Contracting Agency. Under such conditions, the</li> </ol>

3. A minimum of six (6) copies are required for submittal (Shop Drawings,

1	Contractor is subject to liquidated damages should Contract time
2	expire.
3	
4 5	1-06.1(5)3.0 Payment
6	No separate payment will be made for submittals or equipment manuals, or the
7	corresponding services and operations required by the Contractor to complete
8	the furnishing of equipment information in accordance with these Specifications
ğ	All costs shall be considered as incidental to the Work
10	
11	1-06.4 Handling and Storing Materials
12	
13	1-06.4(1) On-Site Storage (New Section)
14	(June 2006 City of Sammamish)
15	(
16	Section 1-06 4(1) is added as follows:
17	
18	The Contractor shall store all equipment and materials in a safe and suitable
10	place in accordance with the Manufacturer's recommendations. Materials shall
20	be covered or wrapped to protect them from moisture, dust and deterioration as
20	required. All on-site storage areas shall be approved in advance by the Engineer
27	required. All on-site storage areas shall be approved in advance by the Engineer.
22	1-06 1/2) Off-Site Storage (New Section)
23	(lune 2006 City of Sammamiah)
24	(June 2000 City of Sammannish)
20	Caption 1.06 $1/2$ is added as follows:
20	Section 1-06.4( $z$ ) is added as follows.
21	The Contractor may be required to provide off site storage of equipment and
20	The Contractor may be required to provide on-site storage of equipment and
29	materials to enable construction to occur at the construction site. The Contractor
30	nas full responsibility to secure all oπ-site storage areas, if needed, and shall
31	include the costs for providing such storage areas in the Contract Bid Proposal
32	for the individual equipment and material items requiring offsite storage. All off-
33	site storage areas shall be fenced, secure and have access restricted or withheld
34	from the General Public.
35	
36	1-06.6 Recycled Materials
20	(January 4, 2016 APWA GSP)
30	
39	Delete this section, including its subsections, and replace it with the following:
40	
41	The Contractor shall make their best effort to utilize recycled materials in the
42	construction of the project. Approval of such material use shall be as detailed
43	elsewhere in the Standard Specifications.
44	
45	Prior to Physical Completion the Contractor shall report the quantity of recycled
46	materials that were utilized in the construction of the project for each of the items listed
47	in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete
48	aggregate, recycled glass, steel furnace slag and other recycled materials (e.g.

- 1 The Contractor's report shall be provided on DOT form 350-075 Recycled Materials 2 Reporting.
- 3

#### 4 SECTION 1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC 5

#### 6 1-07.1 Laws to be Observed

- 7 (October 1, 2005 APWA GSP) 8
- 9 Supplement this Section with the following: 10
- 11 In cases of conflict between different safety regulations, the more stringent regulation 12 shall apply.
- 14 The Washington State Department of Labor and Industries shall be the sole and 15 paramount administrative agency responsible for the administration of the provisions 16 of the Washington Industrial Safety and Health Act of 1973 (WISHA). 17
- 18 The Contractor shall maintain at the project site office, or other well-known place at 19 the project site, all articles necessary for providing first aid to the injured. The 20 Contractor shall establish, publish, and make known to all employees, procedures for 21 ensuring immediate removal to a hospital, or doctor's care, persons, including 22 employees, who may have been injured on the project site. Employees should not be 23 permitted to Work on the project site before the Contractor has established and made 24 known procedures for removal of injured persons to a hospital or a doctor's care. 25
- 26 The Contractor shall have sole responsibility for the safety, efficiency, and adequacy 27 of the Contractor's plant, appliances, and methods, and for any damage or injury 28 resulting from their failure, or improper maintenance, use, or operation. The 29 Contractor shall be solely and completely responsible for the conditions of the project 30 site, including safety for all persons and property in the performance of the Work. This 31 requirement shall apply continuously, and not be limited to normal working hours. The 32 required or implied duty of the Engineer to conduct construction review of the 33 Contractor's performance does not, and shall not, be intended to include review and 34 adequacy of the Contractor's safety measures in, on, or near the project site. 35

#### 36 1-07.2 State Taxes

37 Delete this Section, including its sub-sections, in its entirety and replace it with the 38 following:

39

#### 40 1-07.2 State Sales Tax 41

- (June 27, 2011 APWA GSP)
- 42 43 The Washington State Department of Revenue has issued special rules on the State 44 sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The 45 Contractor should contact the Washington State Department of Revenue for answers 46 to questions in this area. The Contracting Agency will not adjust its payment if the 47 Contractor bases a bid on a misunderstood tax liability.
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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.

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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 contractrelated 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.

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# 1-07.2(1) State Sales Tax — Rule 171

14 WAC 458-20-171, and its related rules, apply to building, repairing, or improving 15 streets, roads, etc., which are owned by a municipal corporation, or political 16 subdivision of the state, or by the United States, and which are used primarily for foot 17 or vehicular traffic. This includes storm or combined sewer systems within and 18 included as a part of the street or road drainage system and power lines when such 19 are part of the roadway lighting system. For work performed in such cases, the 20 Contractor shall include Washington State Retail Sales Taxes in the various unit bid 21 item prices, or other contract amounts, including those that the Contractor pays on 22 the purchase of the materials, equipment, or supplies used or consumed in doing the 23 work. 24

# 1-07.2(2) State Sales Tax — Rule 170

26 WAC 458-20-170, and its related rules, apply to the constructing and repairing of new 27 or existing buildings, or other structures, upon real property. This includes, but is not 28 limited to, the construction of streets, roads, highways, etc., owned by the state of 29 Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, 30 31 a street or road drainage system; telephone, telegraph, electrical power distribution 32 lines, or other conduits or lines in or above streets or roads, unless such power lines 33 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 34 35 personal property becomes a part of the realty by virtue of installation. 36

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.

- 42
- 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.
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# 1 **1-07.2(3)** Services

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- 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).
- 6 1-07.5 Environmental Regulations
  - 1-07.5(1) General
  - (June 2006 City of Sammamish)
- 11 Supplement this Section with the following:
- The Contractor's attention is directed to Section 1-07.5 in its entirety, in addition to the following. The Contractor shall provide for the flow of all watercourses, including streams, ditches, drains, and sewers intercepted during the progress of the Work and shall completely restore the same in as good condition as found or shall make such final provisions for restoration as the Contracting Agency may require. The Contractor shall not obstruct the flow of water but shall use all proper measures to provide for the free passage of surface water.
- The Contractor shall make provisions to take care of all surplus water, mud, silt, slickings, or other runoff pumped from excavations or resulting from sluicing or other operations and shall be responsible for any damage of whatever nature resulting from failure to provide for the adequate control of runoff.
- No direct payment shall be allowed for the above Work. Payment for the cost
  thereof shall be included in the prices Bid for the various items which comprise
  the Contract Work.

# 30 **1-07.7 Load Limits**

- 31 Section 1-07.7 is supplemented with the following: 32
- 33 (March 13, 1995 WSDOT GSP)
- 34 If the sources of materials provided by the Contractor necessitates hauling over roads
  35 other than State Highways, the Contractor shall, at the Contractor's expense, make
  36 all arrangements for the use of the haul routes.
  37

# 381-07.16Protection and Restoration of Property

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# 40 **1-07.16(1)** *Private/Public Property*

- 41 (June 2006 City of Sammamish) 42
- 43 Section 1-07.16(1) shall be supplemented with the following:
- Only equipment with rubber tires or smooth tracks will be allowed on the finished
  roads or road surfaces which are not to be reconstructed as a part of this project.
  Tracks with cleats or other devices which damage the road surfacing will not be
  allowed. All outriggers shall be equipped with street pads.
- 49

- 1 Along the street to be improved, there are privately owned improvements on the 2 properties abutting the right-of-way. Even though all reasonable precaution is to be taken by the Contractor, these improvements may in some instances be 3 damaged. In the event such occurs, and claims for damages are filed by the 4 5 individuals, the Contracting Agency will request that the Contractor give evidence 6 that he has requested his insurance company to make personal contact with the 7 claimant. Any settlement for insurance claims shall be strictly an act restricted to 8 the claimant, the Contractor and his insurance company.
  - Any additional costs due to delays or restrictions due to the construction within the Right-of-Way and furnishing access to adjacent property owners shall be considered incidental to the project, and shall also be merged in the respective unit and lump sum prices Bid.
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1-07.16(3) Fences, Mailboxes, Incidentals

- 16 Section 1-07.16(3) is supplemented with the following:
- The Contractor shall coordinate construction activities with the affected local
   branch of the United States Post Office, including relocation of mailboxes.
   Contact information is as follows:
- 21 Zip Code 98075 Deliveries
- 22 Attn: Cindy McCracken, Postmaster
- 23 Phone: (425) 392-5665
- 24 Email: cindy.k.mccracken@usps.gov 25
- 26 **1-07.17 Utilities and Similar Facilities**

#### 28 Utilities and Similar Facilities

- 29 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.
- Public and private utilities, or their Contractors, will furnish all Work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the Work for this project.
- 40 Puget Sound Energy intends to temporarily de-energize the overhead line in proximity
  41 of soldier pile wall for wall construction while Comcast and Frontier intend to lash lines
  42 to tree to provide space as needed.
- 44 The Contractor shall attend a mandatory utility preconstruction meeting with the 45 Engineer, all affected subcontractors, and all utility owners and their Contractors prior 46 to beginning onsite Work.
- 47

1 The following addresses and telephone numbers of utility companies or their 2 Contractors that will be adjusting, relocating, replacing or constructing utilities within 3 the project limits are supplied for the Contractor's use:

4	
5	Puget Sound Energy (Gas & Electric)
6	P.O. BOX 90868
7	Bellevue, WA 98009-0868
8	Attn: Dennis Booth
9	425-417-9188
10	
11	Century Link (Telecommunications)
12	Peter W. Stockton, Project Coordinator – Engineer II
13	1550 Newport Way NW
14	Issaquah, WA 98027
15	206-261-1402
16	
17	Comcast (Telecommunications)
18	Joe Fordon
19	1525 75th Street SW #200
20	Everett, WA 98203
21	425-263-5348
22	
23	Sammamish Plateau Water and Sewer District [SPWSD] (Water & Sewer)
24	1510 – 228th Avenue SE
25	Sammamish, WA 98075
26	Attn: Kyle Wong
27	425-392-4931 ext. 217
28	
29	Frontier
30	1800 41st Street
31	Everett, WA 98203
32	Thomas Dacy
33	425-261-6342
34	
35	The Contractor shall give fourteen (14) calendar-day's notice before planned work
36	requiring relocations and forty-eight (48) hours-notice to all utility companies/agencies
37	involved where work is to take place and in all other respects comply with the
38	provisions of Chapter 19.122 RCW. Notice shall include, but not be limited to, the
39	utility companies/agencies serving the area.
40	

#### 41 Locate Existing Utilities

A reasonable attempt has been made to locate existing utilities; however, the exact
location and/or depth is unknown in most instances. It is the responsibility of the
Contractor to locate the existing utilities and their respective depths.

45

Accordingly, a bid item has been provided in the proposal to cover the cost of field exploration through excavation or other means to locate more precisely the underground utilities as to their precise location and depth. The contractor shall decide on the difficulties to be encountered in constructing the project and determine therefrom the extent of exploration (beyond that specifically referenced and required by the contract documents) required to facilitate the construction of this project to first prevent damage to those utilities by field verifying excavation locations, and secondly
 to determine if the new construction is to go around, over, or under an existing utility,
 or when paralleling an existing utility to insure adequate separation and alignment
 can be maintained.

The Lump Sum contract price for the item "Locate Existing Utilities" shall include all costs of digging exploratory pits, to further locate utilities more precisely, as to location and depth as required in the Contract Documents and as further needed for this project. Where underground utilities are found to be in close proximity or in the way of construction, such condition shall not be deemed to be a changed or differing site condition, if minor pipe alignment or grade can be modified to facilitate construction, such minor alignment shall be provided at no additional cost to the Contracting Agency.

15 **1-07.17(3) Utility Service (New Section)** 

(June 2006 City of Sammamish)

- 18 Section 1-07.17(3) is added as follows:
- 20 The Contractor shall maintain the operational service of all existing utilities, to 21 include water, storm, power, telephone, cable TV, sanitary, and gas except where 22 this Contract requires specifically for its temporary interruption. Where services 23 are to be temporarily interrupted, affected parties shall be notified in writing at 24 least 48 hours and not more than 72 hours in advance of the time and period of 25 shut-down. Language, format, etc. of written notices shall be reviewed and 26 approved by the Contracting Agency prior to distribution by the Contractor. The 27 Contractor shall make every effort to keep scheduled shut downs to periods of 28 anticipated minimum usage and for the least period of time. 29
- 30 No utility service shall be shut down or "out of service" for more than four (4) 31 hours per day.
- Should a non-scheduled shutdown of any utility be required for a period in excess
   of four hours, the Contractor shall take necessary measures to provide temporary
   service. The method of all temporary utility services shall first be approved by the
   Contracting Agency.
- 38 1-07.18 Public Liability and Property Damage Insurance 39
- 40 Delete this section in its entirety, and replace it with the following:
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### 42 1-07.18 Insurance

43 (January 4, 2016 APWA GSP)

### 45 **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 selfinsured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.
  - E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.
  - F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency
- G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.
- **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.

# 14 **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.

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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.

### 31 **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.

- 40 Verification of coverage shall include:
- 41 1. An ACORD certificate or a form determined by the Contracting Agency to be42 equivalent.
- 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.
- 47 3. Any other amendatory endorsements to show the coverage required herein.
- 48
   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

8 The insurance shall provide the minimum coverages and limits set forth below. 9 Contractor's maintenance of insurance, its scope of coverage, and limits as required 10 herein shall not be construed to limit the liability of the Contractor to the coverage 11 provided by such insurance, or otherwise limit the Contracting Agency's recourse to 12 any remedy available at law or in equity.

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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 selfinsured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

20 21

# 1-07.18(5)A Commercial General Liability

22 Commercial General Liability insurance shall be written on coverage forms at least as 23 broad as ISO occurrence form CG 00 01, including but not limited to liability arising 24 from premises, operations, stop gap liability, independent contractors, products-25 completed operations, personal and advertising injury, and liability assumed under an 26 insured contract. There shall be no exclusion for liability arising from explosion, 27 collapse or underground property damage. 28

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.

- 36 Such policy must provide the following minimum limits:
- 37 \$1,000,000 Each Occurrence
- 38 \$2,000,000 General Aggregate
- 39 \$2,000,000 Products & Completed Operations Aggregate
- 40 \$1,000,000 Personal & Advertising Injury each offence
- 41 \$1,000,000 Stop Gap / Employers' Liability each accident 42

# 43 **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.
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- 49 Such policy must provide the following minimum limit:
- 50 \$1,000,000 Combined single limit each accident

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# 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.

# 6 1-07.23 Public Convenience and Safety

# 1-07.23(1) Construction Under Traffic

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

(June 2006 City of Sammamish)

The Contractor shall be responsible for proper notification to and coordination with all school districts, police and fire departments, U.S. mail, and all other persons or agencies which provide public service types of business (refuse, etc.) which will be affected by this project, and written notification shall be given at least one (1) week in advance of construction. It shall be the Contractor's responsibility to keep the school district and fire departments and others fully advised of his construction progress, any required detours, and also the time of completion of the project.

21 (January 2, 2012 WSDOT GSP)

### 22 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.
- 30During nonworking hours equipment or materials shall not be within the WZCZ31unless they are protected by permanent guardrail or temporary concrete barrier.32The use of temporary concrete barrier shall be permitted only if the Engineer33approves the installation and location.
- 3435During actual hours of work, unless protected as described above, only materials36absolutely necessary to construction shall be within the WZCZ and only37construction vehicles absolutely necessary to construction shall be allowed38within 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.
- 48 Minimum WZCZ distances are measured from the edge of traveled way and will 49 be determined as follows:
- 50

	Regulatory	Distance From	
	Posted Speed	Traveled Way	
		(Feet)	
	35 mph or less	10 *	
	40 mph	15	
	45 to 55 mph	20	
	60 mph or greater	30	
1	* or 2-feet beyond the outs	ide edge of sidewalk	
2			
3	Minimum Work Zone C	lear Zone Distance	
4			
5	(January 5, 2015 WSDOT GSP)		
0 7	Lane closures are subject to the follow	ving restrictions:	
/ 8	1 The Contractor shall maintain	one (1) lane of traffic (	open at all times
0			
10	2 No lane closures prior to Augus	st 31st 2018 due to plann	ed road closures
11	on nearby East Lake Sammar	nish Parkway.	
12	3. Vehicles in queues shall not be	e stopped for more than 1	5 minutes durina
13	single lane closures. During	the operation of one-wa	av traffic control,
14	flaggers shall work to minim	ize the time that vehicle	s are waiting in
15	queues.		Ū
16			
17	If the Engineer determines the permi	tted closure hours advers	sely affect traffic,
18	the Engineer may adjust the hours	accordingly. The Engine	er will notify the
19	Contractor in writing of any change in	the closure hours.	
20			
21	Lane closures are not allowed on any	of the following:	
22	1 Abaliday		
23 24	<ol> <li>A holiday,</li> <li>A holiday weekend: holidaya t</li> </ol>	bat accur on Friday Sat	urday, Sunday, ar
24 25	2. A nonday weekend, nondays i Monday are considered a boli	day weekend A boliday w	Judy, Sunday Or
26	Saturday Sunday and the hol	iday	reekend melddes
27	3 After 12:00 PM (noon) on the	day prior to a holiday or h	olidav weekend
28	and		ionady neonona,
29	4. Before 7:00 AM on the day aft	er the holiday or holiday v	veekend.
30	,	, , , , , , , , , , , , , , , , , , ,	
31	(NWR February 14, 2005)		
32	Signs and Traffic Control Devices		
33	All signs and traffic control devices	for the permitted closur	es shall only be
34	installed during the specified hours. C	onstruction signs, if place	d earlier than the
35	specified hours of closure, shall be tu	irned or covered so as no	ot to be visible to
36	motorists.		
31 20	1 07 24 Dighto of May		
30 20			
39 10	(JUIY 23, 2013 AFVVA GSF)		
40 41	Delete this section and replace it with the follow	vina <sup>.</sup>	
		····ອ·	

- 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.
- 10 Whenever any of the work is accomplished on or through property other than public 11 Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any 12 easement agreement obtained by the Contracting Agency from the owner of the 13 private property. Copies of the easement agreements may be included in the Contract 14 Provisions or made available to the Contractor as soon as practical after they have 15 been obtained by the Engineer.
- 16 17 Whenever easements or rights of entry have not been acquired prior to advertising, 18 these areas are so noted in the Plans. The Contractor shall not proceed with any 19 portion of the work in areas where right of way, easements or rights of entry have not 20 been acquired until the Engineer certifies to the Contractor that the right of way or 21 easement is available or that the right of entry has been received. If the Contractor is 22 delayed due to acts of omission on the part of the Contracting Agency in obtaining 23 easements, rights of entry or right of way, the Contractor will be entitled to an extension 24 of time. The Contractor agrees that such delay shall not be a breach of contract.
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- 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.
- 29
- 30 The Contractor shall be responsible for providing, without expense or liability to the 31 Contracting Agency, any additional land and access thereto that the Contractor may 32 desire for temporary construction facilities, storage of materials, or other Contractor 33 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 34 35 owner, and, upon vacating the premises, a written release from the property owner of 36 each property disturbed or otherwise interfered with by reasons of construction 37 pursued under this contract. The statement shall be signed by the private property 38 owner, or proper authority acting for the owner of the private property affected, stating 39 that permission has been granted to use the property and all necessary permits have 40 been obtained or, in the case of a release, that the restoration of the property has been 41 satisfactorily accomplished. The statement shall include the parcel number, address, 42 and date of signature. Written releases must be filed with the Engineer before the 43 Completion Date will be established.
- 44

# 45 SECTION 1-08, PROSECUTION AND PROGRESS

46 Add the following new Section: 47

### 48 **1-08.0 Preliminary Matters**

- 49 (May 25, 2006 APWA GSP)
- 50

1	Add the follo	wing new Section:
2	4 00 0	(1) Dress and truction Conference
3	1-08.0(	1) Preconstruction Conference
4	(Octobe	er 10, 2008 APWA GSP)
5		
6	Prior to	the Contractor beginning the Work, a preconstruction conference will be held
7	betweer	n the Contractor, the Engineer and such other interested parties as may be
8	invited.	The purpose of the preconstruction conference will be:
9		
10	1.	To review the initial progress schedule;
11	2.	To establish a working understanding among the various parties associated
12		or affected by the Work;
13	3.	To establish and review procedures for progress payment, notifications,
14		approvals, submittals, etc.;
15	4.	To establish normal working hours for the Work;
16	5.	To review safety standards and traffic control; and
17	6.	To discuss such other related items as may be pertinent to the Work.
18		
19	The Co	ontractor shall prepare and submit at the preconstruction conference the
20	followin	d:
21		5.
22	1	A breakdown of all lump sum items:
23	2	A preliminary schedule of working drawing submittals: and
24	3	A list of material sources for approval if applicable
25	0.	
26	Add the follo	wing new section.
20 27		
28	1-08 0/2	) Hours of Work
20	(Decemb	ber 8 $2014 \Delta PW/\Delta GSP$
30	(Beeening	
31	Except in	the case of emergency or unless otherwise approved by the Engineer, the
32	normalw	orking hours for the Contract shall be any consecutive 8-hour period between
33	7:00 o m	and 6:00 nm. Monday through Eriday, exclusive of a lunch break. If the
34	Contract	or desires different than the normal working hours stated above the request
25	must bo	submitted in writing prior to the precentiustion conference, subject to the
36	nust be	submitted in whiting prior to the preconstruction contenence, subject to the
27	to the pr	aconstruction conference
31 20	to the pr	
30		
39	All worki	ng hours and days are also subject to local permit and ordinance conditions
40	(such as	noise ordinances).
41		
42	If the Co	ntractor wishes to deviate from the established working hours, the Contractor
43	shall sub	omit a written request to the Engineer for consideration. This request shall
44	state wh	at hours are being requested, and why. Requests shall be submitted for
45	review n	o later than noon on the working day prior to the day(s) the Contractor is
46	requestir	ng to change the hours.
47	I	
18	If the Co	ntracting Agancy approves such a deviation, such approval may be subject to

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	1.	On non-Federal aid projects, requiring the Contractor to reimburse the
2		Contracting Agency for the costs in excess of straight-time costs for
3		Contracting Agency representatives who worked during such times. (The
4		Engineer may require designated representatives to be present during the
5		work. Representatives who may be deemed necessary by the Engineer
6		include, but are not limited to: survey crews; personnel from the Contracting
7		Agency's material testing lab; inspectors; and other Contracting Agency
8		employees or third party consultants when, in the opinion of the Engineer,
9		such work necessitates their presence.)
10	2.	Considering the work performed on Saturdays. Sundays, and holidays as
11		working days with regard to the contract time.
12	3.	Considering multiple work shifts as multiple working days with respect to
13		contract time even though the multiple shifts occur in a single 24-hour period.
14	4.	If a 4-10 work schedule is requested and approved the non working day for
15		the week will be charged as a working day.
16	5.	If Davis Bacon wage rates apply to this Contract, all requirements must be
17		met and recorded properly on certified payroll
18		
19	1-08.3 Pr	ogress Schedule
20		
21	1-08.3(2)A	Type A Progress Schedule
22	(March 13	. 2012 APWA GSP)
23		, , , , , , , , , , , , , , , , , ,
24	Revise this	s section to read:
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26	The Co	ontractor shall submit 5 copies of a Type A Progress Schedule no later than at
27	the pre	econstruction conference, or some other mutually agreed upon submittal time.
28	The so	chedule may be a critical path method (CPM) schedule, bar chart, or other
29	standa	rd schedule format. Regardless of which format used, the schedule shall
30	identify	the critical path. The Engineer will evaluate the Type A Progress Schedule and
31	approv	e or return the schedule for corrections within 15 calendar days of receiving the
32	submit	tal.
33		

- 34 1-08.4 Prosecution of Work35
- 36 Delete this section and replace it with the following:

#### 1-08.4 Notice to Proceed and Prosecution of Work

39 *(July 23, 2015 APWA GSP)* 40

41 Notice to Proceed will be given after the contract has been executed and the contract 42 bond and evidence of insurance have been approved and filed by the Contracting 43 Agency. The Contractor shall not commence with the work until the Notice to Proceed 44 has been given by the Engineer. The Contractor shall commence construction 45 activities on the project site within ten days of the Notice to Proceed Date, unless 46 otherwise approved in writing. The Contractor shall diligently pursue the work to the 47 physical completion date within the time specified in the contract. Voluntary shutdown 48 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. 49

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1 When shown in the Plans, the first order of work shall be the installation of high visibility 2 fencing to delineate all areas for protection or restoration, as described in the Contract. 3 Installation of high visibility fencing adjacent to the roadway shall occur after the 4 placement of all necessary signs and traffic control devices in accordance with 1-5 10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to 6 inspect the fence. No other work shall be performed on the site until the Contracting 7 Agency has accepted the installation of high visibility fencing, as described in the 8 Contract.

9 10 11

Section 1-08.4 is supplemented with the following:

12 Following Notice to Proceed, the procurement period begins where the Contractor 13 shall submit shop drawings, provide submittal documents and place purchase orders for all material deemed critical by the Contracting Agency for physical completion of 14 15 the contract. The Contractor shall provide copies of purchase orders for the critical materials. Such purchase orders shall disclose the purchase order date and estimated 16 17 delivery dates for such critical material. Due to planned construction activities at East 18 Lake Sammamish Parkway (Zackuse Creek Fish Passage and Stream Restoration 19 Project), construction activities resulting in lane closures on the project site shall not 20 begin until completion of work on the Zackuse Creek Fish Passage and Stream Restoration Project, anticipated August 31st, 2018. Working days shall begin after the 21 22 mentioned dates or once construction activities have begun.

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### 1-08.5 Time for Completion

26 (September 12, 2016 APWA GSP, Option A) 27

28 Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following <u>the Notice to Proceed</u>
 <u>Date</u>.

33 Each working day shall be charged to the contract as it occurs, until the contract 34 work is physically complete. If substantial completion has been granted and all the 35 authorized working days have been used, charging of working days will cease. Each 36 week the Engineer will provide the Contractor a statement that shows the number of 37 working days: (1) charged to the contract the week before; (2) specified for the 38 physical completion of the contract; and (3) remaining for the physical completion of 39 the contract. The statement will also show the nonworking days and any partial or 40 whole day the Engineer declares as unworkable. Within 10 calendar days after the 41 date of each statement, the Contractor shall file a written protest of any alleged 42 discrepancies in it. To be considered by the Engineer, the protest shall be in 43 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 44 deemed as having accepted the statement as correct. If the Contractor is approved 45 46 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 47 then the fifth day of that week will be charged as a working day whether or not the 48 49 Contractor works on that day.

- 1 2 Revise the sixth paragraph to read: 3 4 The Engineer will give the Contractor written notice of the completion date of the 5 contract after all the Contractor's obligations under the contract have been performed 6 by the Contractor. The following events must occur before the Completion Date can 7 be established: 8 1. The physical work on the project must be complete; and 9 2. The Contractor must furnish all documentation required by the contract and 10 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 11 prior to establishing a completion date: 12 13 a. Certified Payrolls (per Section 1-07.9(5)). 14 b. Material Acceptance Certification Documents 15 c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions. 16 17 d. Final Contract Voucher Certification 18 e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor 19 and all Subcontractors 20 Property owner releases per Section 1-07.24 f. 21 22 (March 13, 1995 WSDOT GSP) 23 Section 1-08.5 is supplemented with the following: 24 25 This project shall be physically completed within 60 working days noted in the Notice to Contractors. 26 27 28 1-08.6Suspension of Work 29 (January 3, 2017 WSDOT GSP) 30 31 Section 1-08.6 is supplemented with the following: 32
- 33 Contract time may be suspended for the HMA mix design evaluation report or for 34 procurement of critical materials (Procurement Suspension). In order to receive a 35 Procurement Suspension, the Contractor shall within 21 calendar days after 36 execution by the Contracting Agency, submit all HMA mix designs not already on the 37 QPL according to Section 5-04.2(1) or place purchase orders for all materials deemed critical by the Contracting Agency for Physical Completion of the Contract. The 38 Contractor shall provide a copy of the completed WSDOT Form 350-042 indicating 39 40 the date the mix design was submitted, or copies of purchase orders for the critical 41 materials. Such purchase orders shall disclose the purchase order date and 42 estimated delivery dates for such critical material. 43
- The Contractor shall show the HMA mix design evaluation report or procurement of the critical materials listed below as activities in the Progress Schedule. If the approved Progress Schedule indicates that acceptance of the HMA mix designs or materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then Contract time will be suspended upon Physical

1 Completion of all critical work except that work dependent upon the below listed 2 critical materials:

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Structural Steel for Soldier Pile Wall

Charging of Contract time will resume upon the Contractor's receipt of a WSDOT mix design evaluation report or delivery of the critical materials to the Contractor, notification that the critical materials are ready for delivery to the Contractor from the Contracting Agency's Materials Laboratory, or 5 calendar days after execution by the Contracting Agency, whichever occurs first.

No additional Procurement Suspension will be provided if the Contractor's HMA mix designs did not meet Contract requirements and are resubmitted.

#### 15 **1-08.9 Liquidated Damages**

16 (August 14, 2013 APWA GSP)

18 Revise the fourth paragraph to read:

19 20 When the Contract Work has progressed to Substantial Completion as defined in the 21 Contract, the Engineer may determine that the work is Substantially Complete. The 22 Engineer will notify the Contractor in writing of the Substantial Completion Date. For 23 overruns in Contract time occurring after the date so established, the formula for 24 liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be 25 26 assessed on the basis of direct engineering and related costs assignable to the project 27 until the actual Physical Completion Date of all the Contract Work. The Contractor 28 shall complete the remaining Work as promptly as possible. Upon request by the 29 Project Engineer, the Contractor shall furnish a written schedule for completing the 30 physical Work on the Contract.

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# 1-08.10 Termination of Contract

# 1-08.10(2) Termination for Public Convenience

(June 2006 City of Sammamish)

Section 1-08.10(2) is deleted and replaced with the following:

39 The Contracting Agency may by written notice terminate this Contract at any time 40 in whole or in part, without cause, and except where termination is due to Contractor's default, the Contracting Agency shall pay the Contractor that portion 41 42 of the Contract price corresponding to the work completed to the Contracting 43 Agency's satisfaction, together with reasonable costs, as determined in the sole 44 discretion of the Engineer, necessarily incurred by the Contractor in terminating 45 the remaining portion of work, less any payments made before termination. In no event shall the Contracting Agency be required to pay the Contractor any 46 amounts aggregating in excess of the Contract Price, nor shall Contracting 47 48 Agency be required to pay Contractor any amount for lost anticipated profits on work which is not performed as a result of termination. 49

#### 1 1-08.10(3) Termination for Public Convenience Payment Request

- (June 2006 City of Sammamish) 2
- 3 Section 1-08.10(3) is deleted. 4
- 5 1-08.10(4) Payment for Termination for Public Convenience
- (June 2006 City of Sammamish) 6 7
  - Section 1-08.10(4) is deleted.
- 8

#### 9 SECTION 1-09, MEASUREMENT AND PAYMENT

#### 10 1-09.2(5) Measurement

- 11 (May 2, 2017 APWA GSP)
- 12
- 13 Revise the first paragraph to read:
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15 Scale Verification Checks – At the Engineer's discretion, the Engineer may perform 16 verification checks on the accuracy of each batch, hopper, or platform scale used in 17 weighing contract items of Work.

#### 19 1-09.3 Scope of Payment

- 20 (June 2006 City of Sammamish)
- 21 Section 1-09.3 is supplemented with the following:
- 22

23 The Contractor shall, whenever so requested, give the Contracting Agency and/or the 24 Engineer access to all invoices, bills of lading and other records relating to the Work, 25 and shall, without charge therefore, provide measures and scales with adequate 26 capacity for and assistance for measuring or weighing any of the materials. 27

#### 28 1-09.6 Force Account

- 29 (October 10, 2008 APWA GSP)
- 30 Supplement this section with the following:
- 31

32 The Contracting Agency has estimated and included in the Proposal, dollar amounts 33 for all items to be paid per force account, only to provide a common Proposal for 34 Bidders. All such dollar amounts are to become a part of Contractor's total Bid. 35 However, the Contracting Agency does not warrant expressly or by implication, that 36 the actual amount of Work will correspond with those estimates. Payment will be 37 made on the basis of the amount of Work actually authorized by Engineer.

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- (June 2006 City of Sammamish)
- 41 Prior to performing force account work, the Contractor shall submit to the Engineer 42 an Equipment List containing pertinent information as to the type of equipment to be 43 used, i.e., make, model, year, horse-power, serial numbers, optional attachments, 44 capacity, etc., and the current equipment rental rates for such equipment. No force 45 account payment will be made until the Engineer has received the completed 46 Equipment List.
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#### 48 1-09.9 Payments

49 (March 13, 2012 APWA GSP) Delete the first four paragraphs and replace them with the following:

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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.

15 Progress payments for completed work and material on hand will be based upon 16 progress estimates prepared by the Engineer. A progress estimate cutoff date will be 17 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.

6 **1-09.11 Disputes and Claims** 

### 1-09.11(3) Time Limitation and Jurisdiction

9 (July 23, 2015 APWA GSP)

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11 Delete this section and replace it with the following:

12 13 For the convenience of the parties to the Contract it is mutually agreed by the parties 14 that any claims or causes of action which the Contractor has against the Contracting 15 Agency arising from the Contract shall be brought within 180 calendar days from the 16 date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; 17 and it is further agreed that any such claims or causes of action shall be brought only 18 in the Superior Court of the county where the Contracting Agency headquarters is 19 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 20 21 Contractor's failure to bring suit within the time period provided, shall be a complete 22 bar to any such claims or causes of action. It is further mutually agreed by the parties 23 that when any claims or causes of action which the Contractor asserts against the 24 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 25 26 access to any records deemed necessary by the Contracting Agency to assist in 27 evaluating the claims or action.

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# 29 **1-09.13 Claims Resolution** 30

# 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.

# 42 **1-09.13(3)A** Administration of Arbitration

- 43 (July 23, 2015 APWA GSP) 44
- 45 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 <u>the county in which the Contracting Agency's</u>
headquarters is located, provided that where claims subject to arbitration are asserted

- 1 against a county, RCW 36.01.05 shall control venue and jurisdiction of the Superior
- <u>Court</u>. 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.
- 45

# SECTION 1-10, TEMPORARY TRAFFIC CONTROL

#### 6 **1-10.1 General**

- 7 (June 2006 City of Sammamish) 8
- 9 Section 1-10.1 is supplemented with the following:
- 10

11 The Contractor shall conduct its operations so as to offer the least possible 12 obstruction and inconvenience to the public, and the Contractor shall have under 13 construction no greater length or amount of Work than the Contractor can prosecute 14 properly with due regards to the rights of the public. The Contractor shall not open up sections of the Work and leave them unfinished, but rather, the Work shall be finished 15 16 as it proceeds, insofar as practicable. The Contractor shall further note that daily 17 cleanup, waste haul, pavement restoration requirements, etc., are also important and 18 are required as further noted herein. 19

All public traffic shall be permitted to pass through the Work with as little inconvenience and delay as possible. The Contracting Agency will not furnish flagmen or any devices for the control of traffic.

24 The Contractor shall keep all existing roads, temporary detour roadway, and streets 25 adjacent to or within the limits of the project open and maintained in a good and safe 26 condition for traffic at all times unless otherwise specified herein or approved by the 27 Contracting Agency. The Contractor shall promptly remove any deposits or debris and 28 shall repair any damage resulting from its operations. Trenches shall be completely 29 backfilled and capped with approved asphalt mix or be steel plated (suitable for HS-30 20 loading) at the end of each day. Temporary patching of pavement cuts with an approved asphalt concrete mix shall be completed prior to opening to traffic. 31 32 Temporary patches shall be maintained in a "smooth" condition by the Contractor at 33 all times and checked on a daily basis. Temporary striping shall be provided. 34

35 Construction shall also be conducted so as to cause as little inconvenience as 36 possible to abutting property owners. Convenient and clearly marked access to 37 driveways, houses and buildings along the line of Work shall be maintained and 38 temporary approaches to crossing or intersecting streets shall be provided and kept 39 in good and smooth condition. When the abutting owners' access across the Rights-40 of-Way line is to be replaced under the Contract by other access, the existing access 41 shall not be closed until the replacement access facility is available. Adjacent property 42 owner's driveways must be left open and accessible at all times during the course of 43 the project unless otherwise specified herein or approved by the Contracting Agency. 44

Upon completion of trench backfilling and compaction and prior to opening to vehicular traffic, all trenches shall be brought to a smooth, even condition free of bumps and depressions, satisfactory for the use of public traffic with steel plates, controlled density fill, or approved temporary asphalt mix, as required per these Special Provisions.

- Roadways, streets and driveways, including sidewalks, shall be swept clean at the
   conclusion of each day's operations and at such other times to insure the safety of
   the traveling public and to prevent inconvenience to the public and owners of private
   property adjacent to the project. This will be paid under the lump sum bid item for
   "Street Cleaning".
  - The Contracting Agency reserves the right to restrict the Contractor to various streets and times of construction during the entire project; all costs of which shall be included in other pay items involved on the project.
- 11 The Contractor shall be responsible for constructing, furnishing, placing, and 12 maintaining all barricades, warning lights, and related traffic control signs, and for the 13 furnishing of all flag persons, equipment for flag persons, pilot cars, and labor for 14 traffic control as necessary and in accordance with the traffic control plan(s), modified 15 traffic control plan(s), or temporary access plan(s) approved by the Engineer. If a modification to traffic control is deemed necessary by the Engineer, the Contractor 16 17 shall immediately implement any requested modification(s). The need for flashing 18 warning lights shall be as determined by the Engineer. 19
- The Contractor shall patrol the traffic control area at the beginning of the work day, twice during the work day, at the end of the work day, and more often if necessitated to reset all disturbed or missing signs and traffic control devices or immediately refurnish such items if they have been stolen or permanently damaged. All control signs necessary for nighttime traffic control shall be effective and have flashing lights installed to enhance visibility.
- Upon failure of the Contractor to provide immediately such flagmen and provide, erect, maintain, and remove such signs when ordered to do so by the Contracting Agency, the Contracting Agency shall be at liberty, without further notice to the Contractor or its Surety, to provide the necessary flagmen, and labor to erect, maintain, install and/or remove barricades and lights and to erect, maintain and remove additional signs and deduct all of the costs thereof from any payments due or coming due the Contractor.
- 35 1-10.2 Traffic Control Management
- 37 **1-10.2(1)** General

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- 38 (January 3, 2017 WSDOT GSP)
- 39 Section 1-10.2(1) is supplemented with the following: 40
- 41 Only training with WSDOT TCS card and WSDOT training curriculum is 42 recognized in the State of Washington. The Traffic Control Supervisor shall be 43 certified by one of the following: 44
- 45 The Northwest Laborers-Employers Training Trust
- 46 27055 Ohio Ave.
- 47 Kingston, WA 98346
- 48 (360) 297-3035 49
- 50 Evergreen Safety Council

1 2 3	12545 135 <sup>th</sup> Ave. NE Kirkland, WA 98034-8709 1-800-521-0778
5 6 7 8 9	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
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11	1-10.2(2) Traffic Control Plans
12	(June 2006 City of Sammamisn)
13	The first paragraph is revised to read:
14	The first paragraph is revised to read.
16	The Contractor will prepare a Traffic Control Plan showing a method of handling
17	traffic through the work areas conforming to the Contractor's method of
18	construction sequencing. This plan shall be prepared in accordance with the
19	latest issue of the MUTCD. WSDOT Standard Plans and these Specifications.
20	All construction signs, flaggers, spotters, and other traffic control devices are to
21	be shown on the traffic control plan. This plan shall be provided to the Engineer
22	for approval at least 10-calendar days in advance of the time the signs and other
23	traffic control devices are scheduled to be installed and utilized.
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25	Section 1-10.2(2) is supplemented with the following:
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27	The Contractor shall be responsible for traffic control in the vicinity of the Work
28	being performed to include furnishing, supplying and maintaining proper
29	barricading, flagmen and signing. It is the intent of the Contracting Agency to
30	have Roadways "open" during construction. The Contractor shall allow access
31	by local traffic and emergency vehicles at all times during construction.
32	Temporary closures, detours, or restricted use may be approved by the
33	Contracting Agency due to special construction situations or concerns; however,
34	the Contractor shall Bid the project to leave the Roadway open during
35	construction activities and to provide adequate traffic control.
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<i>ও।</i> ২০	The minimum lane wigths through traffic control zones shall be ten feet with a
30 20	minimum sny distance of one foot to any pavement edge, shoulder obstruction,
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1 2 3	DIVISION 2 EARTHWORK
4	SECTION 2-01, CLEARING, GRUBBING, AND ROADSIDE CLEANUP
5 6 7	<b>2-01.1 Description</b> Section 2-01.1 is supplemented with the following:
8 9 10 11 12 13 14 15 16	The Contractor shall clear, grub, and clean up those areas within the Right-of-Way and slope easements as shown in the Plans or as necessary to construct the proposed improvements. This Work includes protecting from harm all trees, bushes, shrubs, or other objects selected to remain and removal of bushes, tree limbs, trees or other vegetation as necessary to construct and utilize the improvements. To provide drawing clarity, not all vegetation to be removed is shown in the Plans or called out to be removed or trimmed. All vegetation up to ten (10) feet above the finished walkway grade shall be trimmed or removed.
17 18 19 20 21 22 23 24 25	The property owners shall be responsible for removing and/or relocating yard lights, trees, shrubs and other landscaping materials within right-of-way limits that they wish to save. The Contractor shall give property owners ten (10) calendar days written notice prior to removing landscaping materials, with a copy provided to the Engineer. All landscaping materials that remain within the construction limits after the notice period has elapsed shall be removed and disposed of or relocated by the Contractor in accordance with Section 2-01 and the Plans. The Contractor shall receive approval from the Engineer prior to removal. Removed materials shall be disposed of to a waste site obtained by the Contractor.
26 27	The second paragraph of Section 2-01.1 is revised to read as follows:
20 29 30 31 32	"Clearing" means removing and disposing of all unwanted material from the surface, such as trees less than 12 inches in diameter, measured at a height 48 inches above ground level, brush, down timber, or other natural material.
33 34 35	<b>2-01.3 Construction Requirements</b> Section 2-01.3 is supplemented with the following:
36 37 38 30	Existing landscaping, including, but not limited to, sod, rockeries, beauty bark, decorative gravel or rock, bushes, and shrubbery adjacent to the work area shall be protected from damage. The cost of this work shall be included in this bid item.
40 41 42	<b>2-01.3(1) Clearing</b> Section 2-01.3(1) is supplemented with the following:
43 44 45 46 47 48	The Contractor shall fell all trees within the area to be cleared, except those identified on the Plan or by the Engineer to remain. The Contractor is forewarned that not all trees to be removed within the clearing area are shown on the Plans. The Contractor shall independently verify the size and number of trees to be removed for construction of the improvements.
# 1 **2-01.3(3)** Limbing

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- 2 Section 2-01.3(3) is supplemented with the following:
  - Trees outside the right of way with branches extending into the right of way shall be limbed at tree to provide construction clearance for wall construction. Portions of blackberries and shrubs overhanging and shading the roadside bioretention ditch will also be trimmed.

#### 2-01.3(3)A Surface Improvements (New Section)

Section 2-01.3(3)A is added as follows:

The Contractor shall be responsible for the protection and preservation of existing surface improvements and trees outside the construction limits, and any damage resulting from the Contractor's operations shall be the Contractor's sole responsibility.

#### 2-01.3(3)B Subsurface Improvements (New Section)

- Section 2-01.3(3)B is added as follows:
- The Contractor shall be responsible for locating subsurface improvements/utilities, and for coordinating activities with utilities and others.

### 24 **2-01.4 Measurement**

Clearing and Grubbing will be measured by the acre of cleared area. There will be no measurement for limbing.

# 28 **2-01.5 Payment**

29 Clearing and Grubbing will be *paid* by the acre for all costs associated with clearing, 30 hauling and disposing of material within the limits to be cleared. Limbing of trees, black 31 berries and shrubs shall be considered incidental to the Clearing and Grubbing item. No 32 separate payment will be made for limbing trees.

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34 SECTION 2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS

# 35 **2-02.3 Construction Requirements**

36 Section 2-02.3 is supplemented with the following: 37

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

- 39 Section 2-02.3(3), item 3, is supplemented with the following:
- All full-depth sawcuts shall be continuous, and shall be made with saws
  specifically equipped for the purpose. No skip cutting or jack hammering will be
  allowed unless specifically approved otherwise in writing by the Engineer. The
  location of all pavement cuts shall be where shown in the Plans or as approved
  by the Engineer in the field before cutting commences.
- 47 The approximate thickness of the asphalt concrete pavement is <u>6 to 13</u> inches 48 based on pothole investigations made in specific locations and no additional

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compensation will be made for thicker sections of asphalt concrete pavement to be removed.

All sawcutting performed in the Contract shall provide for and include removal and disposal of slurry created from water cooling/lubrication, in accordance with the Washington State Department of Ecology regulations. Waste material (slurry) shall not be allowed to enter drainage systems, ditches, or streams.

# 2-02.3(4) Removing Drainage Structure (NEW SECTION)

All grates, frames, and covers shall remain the property the property of the Contracting Agency. The Contractor shall exercise care in the removal and salvaging of existing grates, frames, and covers, and shall stockpile the salvaged grates, frames, and covers in locations designated by the Engineer for removal from the project site by the Contracting Agency.

### 2-02.3(5) Asbestos Cement Pipe Removal (NEW SECTION)

18 Any asbestos cement pipe removal required to construct the project shall be removed and disposed by a State certified asbestos abatement Contractor and shall be listed 19 20 on the Subcontractor's List under Forms and Certificates.

22 In order to maintain workers' exposure to or below the exposure limit to asbestos 23 material as prescribed in WAC 296-62-07705 State/Federal Guidelines and 24 Certification, the Contractor shall provide protective work clothing and equipment. No 25 employee shall be allowed to work on asbestos cement pipe unless the following tools 26 and protective work clothing are used.

28 Carbide Blade Cutting (hand operated only)

30 Blade cutters consist of a frame, adjustable to the circumference of the pipe, and a 31 number of outboard, self-tracking rollers that align one or more carbide-tipped cutting blades. The cutter is rotated around the pipe with the blades cutting a groove into the 32 33 pipe. As the cutter is rotated, the blades are slowly tightened with screws to cut 34 deeper and deeper into the pipe until the pipe is severed. 35

Equipment required:

38 Hand operated carbide blade cutter, • 39 Water source and means of application sufficient to maintain a • 40 continuously wetted cutting area, 41 Disposable coveralls, • 42 Respiratory protection consisting of 1/2 face respirator equipped with • HEPA filters or respirator which provides equivalent or better protection, 43 44 Rubber boots, and • 45 Hard hat. 46 47 1. Excavate around the AC pipe a sufficient distance to assure adequate tool 48 clearance in the area to be cut. Care must be taken to avoid any abrasion 49 to the pipe. 50

1 2. Don protective equipment and have sufficient water available before 2 entering the trench to begin cutting operations. 3 4 3. Clean and wash with water the surface of the pipe in the area to be cut and 5 attach the cutting equipment around the AC pipe. 6 7 4. Begin applying water to the area being cut and continue until cutting is 8 complete. 9 10 5. Operate the cutting tool in accordance with the manufacturer's instructions 11 until cutting is complete, making sure that water is applied in sufficient 12 quantities to assure that the area being cut is continuously wetted and no 13 AC dust is created. 14 15 Detach cutting equipment, move to new cutting location, and repeat 6. 16 procedure described above. Upon completion of final cut, thoroughly wash the cutting equipment with clean water to remove all AC debris. Allow wash 17 18 water to drain into the bottom of the trench. Remove washed cutting 19 equipment from the trench. 20 21 7. Install other pipe and fittings as necessary to complete the job taking care 22 to avoid any abrasions to the AC pipe. 23 24 8. When all pipe work is completed, remove disposable coveralls and leave 25 them in the bottom of the trench. Thoroughly wash hands, boots, and any small tools with clean water to remove all AC debris. Allow wash water to 26 27 drain into the bottom of the trench. Leave all AC pipe and asbestos 28 containing materials in the trench unless arrangements have been made 29 for proper disposal at an approved landfill. 30 31 9. Exit ditch in such a manner that no AC debris will contaminate work 32 clothing, boots, tools, etc. 33 34 Any other method proposed by the Contractor shall be one approved by the 35 Washington State Department of Labor and Industries and shall meet the approval 36 of the City prior to commencement of construction. 37 38 2-02.4 Measurement 39 Section 2-02.4 is supplemented with the following: 40 41 Asphalt concrete pavement removal will be measured by the square yard of area 42 removed. 43 44 Asbestos-cement pipe removal will be measured per linear foot of pipe removed. 45 46 2-02.5 Payment 47 Section 2-02.5 is supplemented with the following: 48 49 "Removing Asphalt Conc. Pavement", per square yard. 50

1 2 3 4	The unit Contract price per square yard for "Removing Asphalt Conc. Pavement" shall be full pay for all costs necessary to complete the Work as specified including sawcutting regardless of the depth encountered or the material to be cut, including collection, removal, and disposal of slurry.
5 6 7 8	Sawcutting required for pipe trenching or the installation of drainage Structures shall be included in the unit Contract price of the related item of Work.
9 10	"Asbestos-Cement Pipe Removal, Handling, Haul and Disposal", per linear foot.
11 12 13	The unit contract price per linear foot of AC pipe removed shall be full compensation for all labor, materials, tools and equipment necessary for excavation, identification, tracking, handling, haul and disposal of AC pipe that is required to be removed for
14 15	installation of replacement water main.
16 17 18	Payment for AC pipe removal, handling, haul and disposal shall be full compensation for:
19 20 21	<ul> <li>Obtaining all required permits and payment of fees associated with removal of AC pipe, including but not limited to the Puget Sound Clean Air Agency (PSCAA) Asbestos Notice of Intent (Appendix D)</li> </ul>
22 23 24	<ul> <li>Locating existing utilities and potholing in advance to determine their horizontal and vertical location,</li> <li>excepting trench</li> </ul>
24 25	<ul> <li>trench dewatering (if needed)</li> </ul>
26 27	<ul> <li>stockpiling suitable excavated material for use as pipe bedding and trench backfill as directed by the Engineer,</li> </ul>
28	<ul> <li>hauling and disposing of surplus and unsuitable excavated material,</li> <li>placing and compacting tranch backfill</li> </ul>
29 30	<ul> <li>placing and compacting iteraction backing,</li> <li>specialized tools, equipment, containers, and safety clothing and safety</li> </ul>
31	apparatus,
32	<ul> <li>replacing, protecting and/or maintaining utilities,</li> <li>cutting, removal and bagging of AC pipe</li> </ul>
34	<ul> <li>water for wetting pipe and cleaning tools and equipment as required</li> </ul>
35	<ul> <li>identification and marking of AC pipe sections, as required,</li> </ul>
36	<ul> <li>handling and secure storage of AC pipe sections prior to disposal,</li> </ul>
37	<ul> <li>hauling and delivery of pipe to approved disposal site, and</li> </ul>
38 39	<ul> <li>development and delivery of all chain-of-custody documentation, including PSCAA Asbestos Waste Material Shipment Record to Engineer.</li> </ul>
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41 42	SECTION 2-03, ROADWAY EXCAVATION AND EMBANKMENT
43 44	2-03.3 Construction Requirements
45	2-03.3(3) Excavation Below Grade
46 47	Section $2-03.3(3)$ is supplemented with the following:
48 49	Any over-excavation not specifically authorized by the Engineer shall be replaced with Gravel Backfill for Foundation, Class B meeting the requirements

1	of Section 9-03.12(1)B, and compacted in accordance with Section 2-03.3(14),
2	by the Contractor at no expense to the Contracting Agency.
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4	2-03.3(7) Disposal of Surplus Material
5	Section 2-03.3(7) is supplemented with the following:
6	
7	A waste site has not been provided by the Contracting Agency for the disposal
8	and/or storage of surplus materials and debris
a	analor storage of surplus materials and debris.
10	2022/11) Embankment Construction
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12	2-03.3(14)E Unsuitable Foundation Excavation
13	Section 2-03.3(14)E is supplemented with the following:
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15	Excavated unsuitable foundation material shall be replaced with Gravel
16	Backfill for Foundation, Class B meeting the requirements of Section 9-
17	03.12(1)B.
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19	2-03.4 Measurement
20	Section 2-03.4 is supplemented with the following:
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22	(March 13, 1995 WSDOT GSP)
23	Only one determination of the original ground elevation will be made on this project.
24	Measurement for Roadway excavation and embankment will be based on the original
25	ground elevations recorded previous to the award of this Contract
26	ground olovatione recorded provided to the analy of the Contract.
27	If discrepancies are discovered in the ground elevations which will materially affect
28	the quantities of earthwork the original computations of earthwork quantities will be
20	adjusted accordingly
20	adjusted accordingly.
31	Earthwork quantities will be computed, either manually or by means of electronic data
32	processing equipment by use of the average end area method or by the finite element
22	analysis method utilizing digital terrain modeling techniques
24	analysis method utilizing digital terrain modeling techniques.
34	Conjos of the ground gross costion notes will be susilable for the Bidder's inspection
30	before the energing of Dide, at the office of City of Commercials Dublic Works
30	before the opening of Blos, at the onice of City of Sammanish Public Works.
37	the encount of the Ocentre to enclose of the enclosed encount encounter will be
38	Upon award of the Contract, copies of the original ground cross-sections will be
39	furnished to the successful Bidder on request to the Project Engineer.
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41	2-03.5 Payment
42	Section 2-03.5 is supplemented with the following:
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44	Excavation and removal of items specified in Section 2-02 will not be considered as
45	"Roadway Excavation Including Haul."
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47	All costs for subgrade preparation shall be included in the unit contract price per cubic
48	yard for "Roadway Excavation Including Haul".
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# 1 SECTION 2-09, STRUCTURE EXCAVATION

2 2-09.3 Construction Requirements 3 4 2-09.3(3) Shoring and Cofferdams 5 Section 2-09.3(3)D is supplemented with the following: 6 7 (March 13, 1995) 8 The Contractor shall protect the existing pavement from damage due to the Contractor's operations and shall shore all excavation adjacent to the existing 9 10 pavement. 11 12 2-09.4 Measurement 13 Section 2-09.4 is revised with the following: 14 15 The first sentence in the first paragraph is revised to read: "No measurement will be made for Structure Excavation Class B." 16 17 The tenth paragraph "Gravel Backfill" is deleted and revised to read: "No 18 19 measurement will be made for gravel backfill for pipe bedding." 20 21 2-09.5 Payment 22 Section 2-09.5 is revised with the following: 23 24 The first paragraph, bid item description "Structure Excavation Class B," per cubic 25 yard is deleted and replaced with the following: "Structure Excavation Class B," shall 26 be included in the unit contract prices for the various bid items involved. 27

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### DIVISION 5 SURFACE TREATMENTS AND PAVEMENTS

# 4 SECTION 5-04, HOT MIX ASPHALT

5 (March 5, 2018 APWA GSP)

7 Delete this entire section and replace it with the following:

# 9 **5-04.1 Description**

10 This Work shall consist of providing and placing one or more layers of plant-mixed 11 hot mix asphalt (HMA) on a prepared foundation or base in accordance with these 12 Specifications and the lines, grades, thicknesses, and typical cross-sections shown 13 in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) 14 processes in accordance with these Specifications. WMA processes include organic 15 additives, chemical additives, and foaming.

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

# 21 5-04.2 Materials

22 Materials shall meet the requirements of the following sections:

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23	Asphalt Binder	9-02.1(4)
24	Cationic Emulsified Asphalt	9-02.1(6)
25	Anti-Stripping Additive	9-02.4
26	HMA Additive	9-02.5
27	Aggregates	9-03.8
28	Recycled Asphalt Pavement	9-03.8(3)B
29	Mineral Filler	9-03.8(5)
30	Recycled Material	9-03.21
31	Portland Cement	9-01
32	Sand	9-03.1(2).
33	(As noted in 5-04 3(5)C for crack se	ealing)
34	loint Sealant	Q_04 2
35		9-04.2 0.04.0(2)A
00	Foam Backer Rod	9-04.2(3)A
36		

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

44 The Contractor may choose to utilize recycled asphalt pavement (RAP) in the 45 production of HMA. The RAP may be from pavements removed under the Contract, 46 if any, or pavement material from an existing stockpile. 1 The Contractor may use up to 20 percent RAP by total weight of HMA with no 2 additional sampling or testing of the RAP. The RAP shall be sampled and tested at a 3 frequency of one sample for every 1,000 tons produced and not less than ten samples 4 per project. The asphalt content and gradation test data shall be reported to the 5 Contracting Agency when submitting the mix design for approval on the QPL. The 6 Contractor shall include the RAP as part of the mix design as defined in these 7 Specifications.

8 The grade of asphalt binder shall be as required by the Contract. Blending of asphalt 9 binder from different sources is not permitted.

- 10 The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA. The Contractor shall 11 12 submit to the Engineer for approval the process that is proposed and how it will be 13 used in the manufacture of HMA.
- 14 Production of aggregates shall comply with the requirements of Section 3-01.
- 15 Preparation of stockpile site, the stockpiling of aggregates, and the removal of 16 aggregates from stockpiles shall comply with the requirements of Section 3-02.

#### 18 5-04.2(1) How to Get an HMA Mix Design on the QPL

- 19 If the contractor wishes to submit a mix design for inclusion in the Qualified Products 20 List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1). 22
- 23 5-04.2(1)A – Vacant

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- 5-04.2(2) Mix Design Obtaining Project Approval
- No paving shall begin prior to the approval of the mix design by the Engineer.

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

32 Commercial evaluation will be used for Commercial HMA and for other classes of 33 HMA in the following applications: sidewalks, road approaches, ditches, slopes, 34 paths, trails, gores, prelevel, and pavement repair. Other nonstructural applications 35 of HMA accepted by commercial evaluation shall be as approved by the Project 36 Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. The Proposal quantity of HMA that is accepted by 37 38 commercial evaluation will be excluded from the quantities used in the determination 39 of nonstatistical evaluation. 40

41 Fifteen days prior to the first day of paving the Nonstatistical Mix Design. 42 contractor shall provide one of the following mix design verification certifications for 43 Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and 46 • 47 certification (stamp & signature) of a valid licensed Washington State 48 Professional Engineer.
- 49 The Mix Design Report for the proposed HMA mix design developed by a • 50 gualified City or County laboratory that is within one year of the approval date.\*\*

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1 2 3 4 5 6 7	The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.
8 9 10 11 12 13 14 15	<ul> <li>Mix designs for HMA accepted by Nonstatistical evaluation shall;</li> <li>Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).</li> <li>Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.</li> </ul>
17 18 19 20	At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.
22 23 24 25 26 27 28	<b>Commercial Evaluation</b> Approval of a mix design for "Commercial Evaluation" will be based on a review of the Contractor's submittal of WSDOT Form 350-042 (For commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.
20 29 30 31 32	For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use.
33 34 35 36 37 38	<b>5-04.2(2)B Using Warm Mix Asphalt Processes</b> The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:
39 40 41 42 43	<ul> <li>Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.</li> <li>Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.</li> </ul>
44	5-04.3 Construction Requirements
45 46	5-04.3(1) Weather Limitations
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48 49	Do not place HMA for wearing course on any Traveled Way beginning October 1 <sup>st</sup> through March 31 <sup>st</sup> of the following year without written concurrence from the

50 Engineer.

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

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

Minimum Surface Temperature for Paving

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# 5-04.3(2) Paving Under Traffic

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

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

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

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

All costs in connection with performing the Work in accordance with these requirements, except the cost of temporary pavement markings, shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3)Equipment

# 5-04.3(3)A Mixing Plant

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

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1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.

44 2. **Thermometric Equipment** – An armored thermometer, capable of 45 detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The
thermometer location shall be convenient and safe for access by Inspectors. The
plant shall also be equipped with an approved dial-scale thermometer, a mercury
actuated thermometer, an electric pyrometer, or another approved thermometric
instrument placed at the discharge chute of the drier to automatically register or
indicate the temperature of the heated aggregates. This device shall be in full view
of the plant operator.

3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.

4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).

5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:

a. A mechanical sampling device attached to the HMA plant.

b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

# 5-04.3(3)B Hauling Equipment

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

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

# **5-04.3(3)C Pavers**

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

1 The HMA paver shall be in good condition and shall have the most current 2 equipment available from the manufacturer for the prevention of segregation of the 3 HMA mixture installed, in good condition, and in working order. The equipment 4 certification shall list the make, model, and year of the paver and any equipment 5 that has been retrofitted. 6

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

- 16 When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. 17 18 Horizontal control utilizing the reference line will be permitted. The grade and slope 19 for intermediate lanes shall be controlled automatically from reference lines or by 20 means of a mat referencing device and a slope control device. When the finish of 21 the grade prepared for paving is superior to the established tolerances and when, 22 in the opinion of the Engineer, further improvement to the line, grade, cross-23 section, and smoothness can best be achieved without the use of the reference 24 line, a mat referencing device may be substituted for the reference line. 25 Substitution of the device will be subject to the continued approval of the Engineer. 26 A joint matcher may be used subject to the approval of the Engineer. The reference 27 line may be removed after the completion of the first course of HMA when approved 28 by the Engineer. Whenever the Engineer determines that any of these methods 29 are failing to provide the necessary vertical control, the reference lines will be 30 reinstalled by the Contractor. 31
- The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

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

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

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

44 Where an MTD/V is required by the contract, the Engineer may approve paving 45 without an MTD/V, at the request of the Contractor. The Engineer will determine if 46 an equitable adjustment in cost or time is due.

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

- 1 To be approved for use, an MTV: 2 Shall be self-propelled vehicle, separate from the hauling vehicle or paver. 1. 3 2. Shall not be connected to the hauling vehicle or paver. 4 3. May accept HMA directly from the haul vehicle or pick up HMA from a 5 windrow. 6 4. Shall mix the HMA after delivery by the hauling equipment and prior to 7 placement into the paving machine. 8 5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout 9 the mixture. 10 To be approved for use, an MTD: 11 1. Shall be positively connected to the paver. 12 2. May accept HMA directly from the haul vehicle or pick up HMA from a 13 windrow. 14 3. Shall mix the HMA after delivery by the hauling equipment and prior to 15 placement into the paving machine.
  - Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

# 5-04.3(3)E Rollers

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

# 5-04.3(4) Preparation of Existing Paved Surfaces

- When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.
- Preleveling of uneven or broken surfaces over which HMA is to be placed may
  be accomplished by using an asphalt paver, a motor patrol grader, or by hand
  raking, as approved by the Engineer.
- 40 Compaction of preleveling HMA shall be to the satisfaction of the Engineer and 41 may require the use of small steel wheel rollers, plate compactors, or pneumatic 42 rollers to avoid bridging across preleveled areas by the compaction equipment. 43 Equipment used for the compaction of preleveling HMA shall be approved by the 44 Engineer. 45
- Before construction of HMA on an existing paved surface, the entire surface of the
  pavement shall be clean. All fatty asphalt patches, grease drippings, and other
  objectionable matter shall be entirely removed from the existing pavement. All
  pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil,
  pavement grindings, and other foreign matter. All holes and small depressions shall

be filled with an appropriate class of HMA. The surface of the patched area shall
be leveled and compacted thoroughly. Prior to the application of tack coat, or
paving, the condition of the surface shall be approved by the Engineer.

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

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

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

5-04.3(4)A Crack Sealing

# 5-04.3(4)A1 General

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When the Proposal includes a pay item for crack sealing, seal all cracks 1/4 inch in width and greater.

**Cleaning:** Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

**Sand Slurry:** For cracks that are to be filled with sand slurry, thoroughly mix the components and pour the mixture into the cracks until full. Add additional CSS-1 cationic emulsified asphalt to the sand slurry as needed for workability to ensure the mixture will completely fill the cracks. Strike off the sand slurry flush with the existing pavement surface and allow the mixture to cure. Top off cracks that were not completely filled with additional sand slurry. Do not place the HMA overlay until the slurry has fully cured.

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall

- 1 be topped off with additional sand slurry. After the sand slurry is placed, the filler 2 shall be struck off flush with the existing pavement surface and allowed to cure. 3 The HMA overlay shall not be placed until the slurry has fully cured. The 4 requirements of Section 1-06 will not apply to the portland cement and sand used 5 in the sand slurry. 6 7 In areas where HMA will be placed, use sand slurry to fill the cracks. 8 9 In areas where HMA will not be placed, fill the cracks as follows: 10 1. Cracks <sup>1</sup>/<sub>4</sub> inch to 1 inch in width - fill with hot poured sealant. 11 2. Cracks greater than 1 inch in width – fill with sand slurry. 12 13 Hot Poured Sealant: For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's 14 recommendations. Furnish a Type 1 Working Drawing of the manufacturer's 15 16 product information and recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures, 17 18 allowable storage time and temperatures after initial heating, allowable reheating 19 criteria, and application temperature range. Confine hot poured sealant material 20 within the crack. Clean any overflow of sealant from the pavement surface. If, in 21 the opinion of the Engineer, the Contractor's method of sealing the cracks with hot 22 poured sealant results in an excessive amount of material on the pavement 23 surface, stop and correct the operation to eliminate the excess material. 24 25 5-04.3(4)A2 Crack Sealing Areas Prior to Paving 26 In areas where HMA will be placed, use sand slurry to fill the cracks. 27 28 5-04.3(4)A3 Crack Sealing Areas Not to be Paved 29 In areas where HMA will not be placed, fill the cracks as follows: 30 a. Cracks  $\frac{1}{4}$  inch to 1 inch in width - fill with hot poured sealant. 31 b. Cracks greater than 1 inch in width - fill with sand slurry. 32 5-04.3(4)B Vacant 33 34 5-04.3(4)C Pavement Repair 35 The Contractor shall excavate pavement repair areas and shall backfill these with 36 HMA in accordance with the details shown in the Plans and as marked in the field. 37 The Contractor shall conduct the excavation operations in a manner that will 38 protect the pavement that is to remain. Pavement not designated to be removed 39 that is damaged as a result of the Contractor's operations shall be repaired by the 40 Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved 41 42
  - otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.
- Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required. The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become the property of the Contractor and shall be disposed of in a

Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

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

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

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

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

# 5-04.3(5)A Vacant

# 5-04.3(6) Mixing

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

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

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

1 Recycled asphalt pavement (RAP) utilized in the production of HMA shall be sized 2 prior to entering the mixer so that a uniform and thoroughly mixed HMA is 3 produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately 4 5 suspend the use of the RAP until changes have been approved by the Engineer. 6 After the required amount of mineral materials, RAP, new asphalt binder and 7 asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed 8 until complete and uniform coating of the particles and thorough distribution of the 9 asphalt binder throughout the mineral materials, and RAP is ensured. 10

# 5-04.3(7) Spreading and Finishing

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

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

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

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

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

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

#### 40 5-04.3(9) HMA Mixture Acceptance

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

- Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.
- 47 Commercial evaluation will be used for Commercial HMA and for other classes of 48 HMA in the following applications: sidewalks, road approaches, ditches, slopes, 49 paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other 50 nonstructural applications of HMA accepted by commercial evaluation shall be as

approved by the Engineer. Sampling and testing of HMA accepted by commercial
 evaluation will be at the option of the Engineer.

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

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Job Mix Formula Tolerances – The constituents of the mixture at the time of
 acceptance shall conform to the following tolerances:

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8"	+/- 6%	+/- 8%
sieves		
No. 4 sieve	+/-6%	+/- 8%
No. 8 Sieve	+/- 6%	+/-8%
No. 200 sieve	+/- 2.0%	+/- 3.0%
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5%	N/A
	max	

These tolerance limits constitute the allowable limits as described in Section 1-06.2. The tolerance limit for aggregate shall not exceed the limits of the control points, except the tolerance limits for sieves designated as 100 percent passing will be 99-100.

 Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

a. **Aggregates** –2 percent for the aggregate passing the  $1\frac{1}{2}$ ", 1",  $\frac{3}{4}$ ",  $\frac{1}{2}$ ",  $\frac{3}{8}$ ", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).

b. **Asphalt Binder Content** – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

- 31 **5-04.3(9)A Vacant** 32
- 33 **5-04.3(9)B Vacant** 34

# 35 5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation 36 HMA mixture which is accepted by Nonstatistical Evaluation will be

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

# 5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots A lot is represented by randomly selected samples of the same mix design

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

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

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

# 5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

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

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

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

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

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

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- Testing of HMA for compliance of Va will at the option of the Contracting Agency. If tested, compliance of Va will use WSDOT SOP 731.
- Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.
- Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.
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# 5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors

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

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

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

#### 5-04.3(9)C5 Vacant

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

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

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

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

The Contractor may request a sublot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be

retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, Va. The results of the retest will be used for the acceptance of the HMA in place of the original sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$500 per sample.

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

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

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be 24 calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

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

# 5-04.3(10) HMA Compaction Acceptance

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a minimum of 92 percent of the maximum density. The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

- 45 Tests for the determination of the pavement density will be taken in accordance 46 with the required procedures for measurement by a nuclear density gauge or 47 roadway cores after completion of the finish rolling.
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- If the Contracting Agency uses a nuclear density gauge to determine density the
   test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on
   the day the mix is placed and prior to opening to traffic.
  - Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.
- 11 If the Contract includes the Bid item "Roadway Core" the cores shall be obtained 12 by the Contractor in the presence of the Engineer on the same day the mix is 13 placed and at locations designated by the Engineer. If the Contract does not 14 include the Bid item "Roadway Core" the Contracting Agency will obtain the cores. 15 For a lot in progress with a CPF less than 0.75, a new lot will begin at the 16 Contractor's request after the Engineer is satisfied that material conforming to the 17 Specifications can be produced.
- A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 400 tons, whichever is less except that the final sublot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per sublot per WSDOT T 738.
- HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.
  - HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

# Test Results

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- For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of the relative density of the sublot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the sublot and will be used for calculation of the CPF and acceptance of HMA compaction lot.
- When cores are taken by the Contracting Agency at the request of the Contractor,
  they shall be requested by noon of the next workday after the test results for the
  sublot have been provided or made available to the Contractor. Core locations
  shall be outside of wheel paths and as determined by the Engineer. Traffic control
  shall be provided by the Contractor as requested by the Engineer. Failure by the

Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the traffic control.

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

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

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

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

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

# 5-04.3(10)C Vacant

# 5-04.3(10)D HMA Nonstatistical Compaction

#### 5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance, with a maximum of 15 sublots per lot; the final lot for a mix design may be increased to 25 sublots. Sublots will be uniform in size with a maximum sublot size based on original Plan quantity tons of HMA as specified in the table below. The sublot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA Original Plan Quantity (tons)	Sublot Size (tons)
<20,000	100
20,000 to 30,000	150
>30,000	200

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

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

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

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

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

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

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

# **5-04.3(11) Reject Work**

# 40 5-04.3(11)A Reject Work General

42 Work that is defective or does not conform to Contract requirements shall be 43 rejected. The Contractor may propose, in writing, alternatives to removal and

replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in <u>Section 1-06.2(2)</u> and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

# 5-04.3(11)B Rejection by Contractor

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45 46 The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

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

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

17 No payment will be made for the rejected materials or the removal of the materials 18 unless the Contractor requests that the rejected material be tested. If the 19 Contractor elects to have the rejected material tested, a minimum of three 20 representative samples will be obtained and tested. Acceptance of rejected 21 material will be based on conformance with the nonstatistical acceptance 22 Specification. If the CPF for the rejected material is less than 0.75, no payment will 23 be made for the rejected material; in addition, the cost of sampling and testing shall 24 be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of 25 sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, 26 27 compensation for the rejected material will be at a CPF of 0.75. If rejection occurs 28 after placement and the CPF is greater than or equal to 0.75, compensation for the 29 rejected material will be at the calculated CPF with an addition of 25 percent of the 30 unit Contract price added for the cost of removal and disposal.

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

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

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

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

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

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

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

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

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

# 5-04.3(12) Joints

# 5-04.3(12)A HMA Joints

# 5-04.3(12)A1 Transverse Joints

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

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

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

# 5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than ½ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

46 5-04.3(12)B Bridge Paving Joint Seals

# **5-04.3(12)B1 HMA Sawcut and Seal**

49 Prior to placing HMA on the bridge deck, establish sawcut alignment points at both 50 ends of the bridge paving joint seals to be placed at the bridge ends, and at interior

- 1 joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in a manner that they remain functional for use in aligning the sawcut after placing the overlay.
  - Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application procedure.

Construct the bridge paving joint seal as specified ion the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with the detail shown in the Standard Plan. Construct the sawcut in accordance with Section 5-05.3(8)B and the manufacturer's application procedure.

# 5-04.3(12)B2 Paved Panel Joint Seal

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Construct the paved panel joint seal in accordance with the requirements specified in section 5-04.3(12)B1 and the following requirement:

1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

# 5-04.3(13) Surface Smoothness

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

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

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

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

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

48 When utility appurtenances such as manhole covers and valve boxes are located 49 in the traveled way, the utility appurtenances shall be adjusted to the finished grade 50 prior to paving. This requirement may be waived when requested by the 51 Contractor, at the discretion of the Engineer or when the adjustment details

- provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.
  - Utility appurtenance adjustment discussions will be included in the Pre-Paving planning (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.
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### 5-04.3(14) Planing (Milling) Bituminous Pavement

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

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

- Use the cold milling method for planing unless otherwise specified in the Contract.
  Do not use the planer on the final wearing course of new HMA.
- Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.
- Repair or replace any metal castings and other surface improvements damaged
  by planing, as determined by the Engineer.
- A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.
- A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.
- 42 After planing is complete, planed surfaces must be swept, cleaned, and if required 43 by the Contract, patched and preleveled.
- 45 The Engineer may direct additional depth planing. Before performing this additional 46 depth planing, the Contractor must conduct a hidden metal in pavement detection 47 survey as specified in Section 5-04.3(14)A.
- 48

# 1 5-04.3(14) A PRE-PLANING METAL DETECTION CHECK

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

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

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

# 5-04.3(14)B PAVING AND PLANING UNDER TRAFFIC

16 5-04.3(14)B1 GENERAL

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

- 1. Intersections:
  - a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).
  - b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.
  - c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.
  - d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.
  - e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.

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- 2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
- 3. Permanent pavement marking must comply with Section 8-22.

# 5-04.3(14)B2 SUBMITTALS - PLANING PLAN AND HMA PAVING PLAN

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

19 The planing operation and the paving operation include, but are not limited to, 20 metal detection, removal of asphalt and temporary asphalt of any kind, tack coat 21 and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may 22 be discussed at the briefing. 23

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

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

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

- Names, job titles, and contact information for field, office, and plant supervisory
   personnel.
  - 9. A copy of the approved Mix Designs.

- 10. Tonnage of HMA to be placed each day.
- 11. Approximate times and days for starting and ending daily operations.

# 5-04.3(14)B3 PRE-PAVING AND PRE-PLANING BRIEFING

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, Metro transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to: 1. General for both Paving Plan and for Planing Plan:

- a. The actual times of starting and ending daily operations.
- b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
- c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other contractors who may operate in the Project Site.
- d. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
  - e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and to paving.
- f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed
  - g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, street car rail, and castings, before planning, see Section 5-04.3(14)B2.
  - h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
  - i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
  - j. Other items the Engineer deems necessary to address.
- 2. Paving additional topics:
  - a. When to start applying tack and coordinating with paving.
  - b. Types of equipment and numbers of each type equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type equipment as it relates to meeting Specification requirements.

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- c. Number of JMFs to be placed, and if more than one JMF how the Contractor will ensure different JMFs are distinguished, how pavers and MTVs are distinguished if more than one JMF is being placed at the time, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
- d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.
- e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

# 5-04.3(15) Sealing Pavement Surfaces

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

# 5-04.3(16) HMA Road Approaches

HMA approaches shall be constructed at the locations shown in the Plans or where staked by the Engineer. The Work shall be performed in accordance with Section 5-04.

# 5-04.4 Measurement

HMA CI. PG, HMA for CI. PG, will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will be measured by the linear foot as provided in Section 8-23.4.

# 32 **5-04.5 Payment**

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

- 35 "HMA CI. \_\_\_\_ PG \_\_\_\_", per ton.
- 36 "Planing Bituminous Pavement", per square yard.
- 37 The unit Contract price per square yard for "Planing Bituminous Pavement" shall be
- full payment for all costs incurred to perform the Work described in Section 5-
- 39 04.3(14).

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#### DIVISION 6 STRUCTURES

# 4 SECTION 6-16, SOLDIER PILE AND SOLDIER PILE TIEBACK WALLS

# 5 6-16.3 Construction Requirements

Section 6-16.3 is supplemented with the following:

#### 6-16.3(1) Submittals

Soldier pile wall shall have a wall access plan. The Contractor shall submit a Type 2
Working Drawing consisting of the wall access plan. The wall access plan shall include,
but not be limited to, the locations of access to the wall construction site, and the method,
materials, and equipment used to construct the access, remove the access, and recontour and reseed the disturbed ground.

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### 6-16.3(9) Work Access and Site Preparation

17 The Contractor shall construct temporary work accesses in accordance with the wall 18 access plan. The construction of work access roads shall minimize disturbance to the 19 existing vegetation, especially trees. Only trees and shrubs in direct conflict with the 20 approved construction access road alignment shall be removed. Only one access road 21 into the retaining wall from the main roadway and one access road from the retaining wall 22 to the main roadway shall be constructed at each retaining wall.

23

Existing vegetation that has been identified by the Engineer shall be protected in accordance with Sections 1-07.16 and 2-01, and the Special Provisions.

# 27 **6-16.4 Measurement**

28 Section 6-16.4 is supplemented with the following:

29

Soldier Pile Wall" will be measured by the square foot of completed wall facing in
place. The vertical limits for measurement are the top of wall and bottom of wall as
shown on the plans. The horizontal limits for measurement are from the end to the
end of the wall.

# 35 6-16.5 Payment

36 Section 6-16.5 is supplemented with the following:

- 37 38
- "Soldier Pile Wall", per square foot.

39 The unit Contract price per square foot for "Soldier Pile Wall" shall be full pay to 40 construct the wall according to the plans including all costs associated with 41 fabricating, providing, drilling and excavation, including casings if necessary, and 42 installing soldier piles; development of wall access plan and other working drawings; 43 construction and removal of temporary work access including fill materials, walls, and 44 slopes; painting soldier piles; permanent timber lagging and shims; wall excavation 45 and backfill including Crushed Ledge Rock for Permeable Base; required modifications to existing soldier pile wall, and all labor and other materials required to 46 47 complete the wall.

# **DIVISION 7**

#### 1 2 DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER 3 MAINS, AND CONDUITS

#### 5 **INCLUDED WORK**

6 Sections 7-04, 7-05, and 7-08 are supplemented with the following:

#### 8 **Construction Requirements**

9 Structure excavation Class B (pipe trench and excavation for manholes, catch basins, and 10 inlets), backfilling with native material or hauling and disposing of native material, gravel 11 backfill for pipe bedding, and compaction shall be included in the various related drain 12 pipe, underdrain pipe, storm sewer pipe, culvert pipe, manhole, and catch basin items as 13 included in the Proposal.

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#### 15 Payment

16 The unit Contract prices per linear foot for drain, underdrain, storm sewer, and culvert 17 pipe, and per each for manholes, and catch basins, drain basins, shall be full 18 compensation for all labor, tools, materials, and equipment necessary to provide and 19 install the complete item including removal, hauling and disposal of native material, backfill 20 with native material, gravel backfill for pipe bedding, and compaction. The unit Contract 21 price per linear foot for storm sewer pipe shall also include the cost of cleaning (flushing) 22 and air-testing the pipe.

23

24 The unit Contract price per ton for "Gravel Borrow Incl. Haul" for backfill in storm drain 25 trench shall be used only if the Engineer determines that the native material is unsuitable 26 for backfill, and shall be full compensation for all labor, tools, materials, and equipment 27 necessary for providing, placing, and compacting the backfill.

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#### 29 SECTION 7-04, STORM SEWERS

#### 30 7-04.3 Construction Materials

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# 7-04.3(1) Cleaning and Testing

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

Testing of the storm drain system will not be required unless departures from the best construction practices are observed by the Engineer. Any departures from the best constructed practices, such as pipeline misalignment, shall be corrected by the Contractor at his own expense.

- 38 39
- 40 The Contractor shall clean and flush all pipes and structures prior to final 41 acceptance.
- 42

#### 43 7-04.5 Payment

44 Section 7-04.5 is supplemented with the following: 45

- 46 "Polypropylene Storm Sewer Pipe, \_\_\_\_\_ In. Diam.", per linear foot.
- 47
- 48 The third paragraph of Section 7-04.5 are deleted and replaced with the following:
- 49

- 1 The unit Contract price for storm sewer pipe of the kind and size specified shall be 2 full pay for all Work to complete the installation, including to furnish, place, assemble, and install storm sewer line, complete in place, all wyes, tees, caps, plugs, 3 4 connections, beveled end sections, trash racks, headwalls, locator post, special 5 fittings, joint materials, commercial concrete, adjustment of inverts to manholes, 6 connection to existing manholes and catch basins, dewatering, bypass pumping, 7 testing and construction geotextile wrapped around gravel backfill for drains 8 surrounding the pipe. Further, all excavation, native or imported bedding, ballast, 9 hauling, disposal, compaction and other required earthwork shall be included. The 10 cost for exposing various utilities at storm pipe crossings shall be incidental to the per 11 foot unit contract price for pipes.
- 12

# 13 SECTION 7-05, MANHOLES, INLETS, AND CATCH BASINS

- 14 **7-05.2 Materials**
- 15 Section 7-05.2 is supplemented with the following: 16
- All storm drainage catch basins and manholes shall be approved by WSDOT and
  shall have a WSDOT approval stamp visible on the structure. Catch basins and
  manholes without WSDOT approval will be rejected.
- 21 Catch Basin with Spill Control shall be as shown on the Plans. 22

# 23 **7-05.5 Payment**

- 24 Section 7-05.5 is supplemented with the following: 25
- 26 "Catch Basin Type 1L w/ Beehive Grate", per each. 27
- 28 "Catch Basin Type 2, 48-Inch Diam.", per each. 29
- 30 "Catch Basin Type 2, 48-Inch Diam. w/ Debris Cage", per each. 31
- 32 "Catch Basin Type 2, 48-Inch Diam. w/ Beehive Grate", per each.
- 33
- 34 "Catch Basin Type 2, 54-Inch Diam. w/ Spill Control", per each.
- 35 The unit contract price per each for all manholes, inlet and catch basins shall be full 36 pay for furnishing all labor, tools, equipment, and materials necessary to complete 37 each unit according to the Plans and Specifications. This includes all pavement 38 removal and disposal, dewatering (if required), temporary flow bypass, connections 39 to existing and new pipe, foundation material, bedding material, backfilling, 40 compaction, surface restoration, testing, and furnishing and placing of all accessories 41 such as frames, solid lids, grates, debris cage, combination inlets, rings, traps, steps 42 or ladders, temporary patching hot mix to allow for the passage of traffic, and other items as applicable. Further, all excavation, native or imported bedding, ballast, 43 44 hauling, disposal, compaction and other required earthwork shall be included.
- 45

# 46 SECTION 7-08, GENERAL PIPE INSTALLATION REQUIREMENTS

# 47 **7-08.2 Materials**

48 Section 7-08.2 is supplemented with the following:

2	Foam protection shall be a strong, resilient, medium-density, closed-cell, polyethylene
3	foam pad.
4	•
5	7-08.3 Construction Requirements
6	Section 7-08.3 is supplemented with the following:
7	
8	The minimum clearance spacing between the outside of water mains and storm drain
9	pipelines, shall be 18 inches. For storm drain crossings with gas mains, electrical or
10	communication conduits, and sewer pipe and other underground utility facilities,
11	minimum clearance spacing shall be 12 inches. If clearance is not possible, the use
12	of polyethylene foam pads may be allowed with approval from the Engineer. The size
13	of the pad shall be based on the outside diameter (O.D.) of the larger crossing pipe.
14	The pad shall be O.D. by O.D. square by 2.5 inches thick minimum or as required to
15	protect the pipes.
16	
17	7-08.3(1) Excavation and Preparation of Trench
18	
19	7-08.3(1)B Shoring
20 24	Section 7-08.3(1)B is supplemented as follows:
21 22	The Contractor shall submit a transh sharing plan for approval. If transh
22 23	hoves are to be used the Contractor shall submit copies of the
20	manufacturer's certified trench box plans containing Professional Engineer's
25	stamp and seal depth restrictions, and serial number for field verification of
26	the trench box
27	
28	7-08.3(4) Plugging Existing Pipe
29	Section 7-08.3(4) is replaced with the following:
30	
31	Where shown on the Plans and when the pipe will not be removed by excavation
32	for new structures, or when designated by the Engineer, existing pipes shall be
33	plugged with controlled density fill (CDF) for the entire length of the pipe or as
34	directed by the Engineer.
35	
36	7-08.5 Payment
27	Section 7.08 5 is supplemented as follows:

37 Section 7-08.5 is supplemented as follows:38

All costs associated with furnishing and installing the pads between pipes, structures and utilities shall be included in the unit contract price per linear foot for the type and kind of pipe and structure being installed.

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# 43 SECTION 7-13, ADJUSTING FRANCHISE WATER, SEWER AND GAS 44 UTILITIES (NEW SECTION)

- 45 Section 7-13 is added as follows:
- 46

# 47 7-13.1 Description

- 48 This Work shall consist of recording the locations of any existing manholes, cleanouts, air
- 49 valves, water meter boxes, water valves and gas valves that will be temporarily covered
- 1 or lowered; removing the material around the structure casting storing the castings, and
- 2 plating the structures; adjusting the structure casting to grade; and backfilling around the
- adjusted structures with materials in accordance with the Plans, these Specifications and
   the Standard Plans.
- 5

6 The Contractor shall coordinate this Work with the City of Sammamish and respective 7 utility owners. The utility owner may choose to eliminate this Work from the contract and 8 perform the Work using their own forces.

9

#### 10 7-13.2 Materials

11 Materials shall be in accordance with Owner's and Utility's specifications.

12

#### 13 7-13.3 Construction Requirements

Critical utility structures such as water control valves shall be accessible at all times unless
 the utility company gives permission for the structures to remain temporarily covered.

Utility structures adjusted after placement of the HMA surface layer shall be according to
the plan details or as permitted by the Engineer. Utility structures shall be adjusted within
5 working days after placement of the final pavement surface layer.

20

Adjustments to grade shall be performed according to Section 7-05.3(1) Adjusting Manholes, Catch Basins, and Other Structures to Grade.

23

Removal operations shall be conducted preventing damage to boxes. Parts or materialsdamaged due to Contractor's operations shall be replaced at his expense.

26

Contractor shall conduct his box adjustments so fully adjusted box allows respective valve
 or meter to be fully operational. Contractor shall remove debris from adjusted boxes to
 ensure such operational condition.

#### 31 7-13.3(1) Coordination

The Contractor shall coordinate the structure adjustments with the appropriate utility companies. Utility companies may require additional inspection of the Work performed for the structure adjustments. It is the Contractor's responsibility to notify the utility companies and coordinate inspection of the work with the utility companies. If a utility company decides to adjust their structures using their own forces, the Contractor shall coordinate with the utility company to complete the structure adjustments within the required time for adjustments.

39

The following companies have utilities located within the project limits. Work for adjusting
 the utility structures shall be coordinated with the following contacts.

42

43	Company:	Sammamish Plateau Sewer and Water
44	Contact:	Kyle Wong
45	Phone:	425-295-3203
46	Address:	1510 228th Avenue SE
47	City, State, Zip:	Sammamish, WA 98075
48		
49	Company:	Puget Sound Energy (Gas and Power)
50	Contact:	Dennis Booth, EST-11W

PART 5

1	Phone:	425-417-9188	
2	Address:	P.O. Box 9086	8
3	City, State, Zip:	Bellevue, WA.	98009-0868

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#### 7-13.4 Measurement

Adjustment of water valves and gas valves will be per each.

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9 No specific unit of measurement will apply to the force account item of "Utility Conflict 10 Resolution." 11

#### 12 7-13.5 Payment

13 Payment will be made in accordance with Section 1-04.1, for the following Bid items: 14

- "Utility Conflict Resolution", per force account.
- 17 Payment for "Utility Conflict Resolution" shall be by force account as described 18 in Section 1-09.6 of the Standard Specifications and no other compensation will 19 be allowed. 20
- 21 For the purpose of providing a common Bid Proposal for all Bidders and for that purpose only, the estimated cost of this Bid item has been arbitrarily entered in 22 23 the Proposal to become part of the total Bid by the Contractor.
- 24

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1 2 2	DIVISION 8 MISCELLANEOUS CONSTRUCTION			
3 4	SECTION 8-01, EROSION CONTROL AND WATER POLLUTION CONTROL			
5	8-01.3 Construction Requirements			
0 7 8	8-01.3(2) Seeding, Fertilizing and Mulching			
9 10	<b>8-01.3(2)A Preparation For Application</b> Section 8-01.3(2)A is supplemented with the following:			
12 13 14 15 16 17 18	All areas to be seeded shall meet the specified finish grades and shall be free of undesirable weed or plant growth. Scarify Subgrade to a minimum six (6) inch depth. Lightly compact soil to 85% maximum density and establish a smooth and uniform finished grade that protects against obstruction to surface drainage. Rake and remove rocks, roots, and debris one (1) inches or larger in any dimension.			
19 20 21	<b>8-01.3(2)B Seeding and Fertilizing</b> Section 8-01.3(2)B is supplemented with the following:			
22 23 24 25	<b>Erosion Control Seed</b> Seed of the following composition, proportion, and quality shall be applied on areas requiring seeding and fertilizing:			
26 27 28 29	Seed, of the following composition, proportion, and quality shall be applied at the rates shown below on all areas requiring roadside seeding within the project:			
30 31 32 33	Kind and Variety of % By Minimum % <u>Seed in Mixture</u> <u>Weight</u> <u>% Pure Seed</u> <u>Germination</u> Barkley Lo-Gro 60 98 90 Perennial Rye			
34 35	Red Creeping 20 98 90 Fescue			
36 37 38 39	Hard Fescue       10       98       90         White Clover       10       98       90         Weed Seed       0.50 (max)       100.00			
40 41 42 43	Seeds shall be certified "Weed Free," indicating there are no noxious or nuisance weeds in the seed.			
44 45 46	The rate of application shall be six (6) pounds per one thousand (1000) square feet.			
47 48 49	Hydroseeding is anticipated to begin after finish-grading Work has been completed and while the soil remains friable and weed free. Throughout hydroseeding operations, the Contractor shall keep the premises clean, free			

1 2 3 4	of excess soils and other materials, including refuse and debris, resulting from the Contractor's Work. At the conclusion of Work, the Contractor shall remove surplus hydroseeding materials and installation debris from the construction site and shall leave the project in a neat condition.
5 6 7 8 9	<b>Fertilizer</b> Fertilizer for seed areas shall be a commercially prepared mix of 10-20-20 and shall be applied at a rate of ten (10) pounds per one thousand (1000) square feet.
10 11 12	See the plans for composition and rates of Bioretention Hydroseed Mix.
12 13 14 15	<b>8-01.3(2)D Mulching</b> Section 8-01.3(2)D is supplemented with the following:
16 17 18 19	Wood cellulose fiber mulch used with erosion control seeding and meeting the requirements of Section 9-14.4(2) shall be applied in accordance with manufacturer's recommended rate. Mulch shall be applied with a tackifier per Section 8-01.3(2)E.
20 21 22 23 24	( <i>NWR January 17, 2006</i> ) Wood cellulose fiber mulch shall be applied at a rate of 2,000 pounds per acre.
25 26 27	<b>8-01.3(8) Street Cleaning</b> Section 8-01.3(8) is supplemented with the following:
28 29 30 31 32 33 34	The Contractor shall be responsible for controlling dust and mud within the project limits and on any street that is utilized by his equipment for the duration of the project. The Contractor shall be prepared to use power sweepers and any other pieces of equipment necessary to avoid creating a nuisance or safety hazard. All streets used by the Contractor under this Contract shall be maintained in a clean condition.
35 36 37 38 39	Contractors, operating dump trucks and other equipment on paved streets and roadways outside the area of construction, shall clean these streets at the conclusion of each day's operation and, if required by the Contracting Agency, during the day. Streets within the area of construction will require cleaning on a daily basis.
40 41 42 43 44	Any violation of these requirements will result in a citation for littering the traveled way and will be sufficient grounds for the Contracting Agency to order the roadways, streets, and appurtenances cleaned by others and to deduct all costs of such cleaning from any monies due or to become due to the Contractor.
46 47 48 49 50 51	Complaints of dust, mud, or unsafe practices and/or property damage to Contracting Agency will be transmitted to the Contractor and prompt action in correcting will be required. Written notice of correction of complaint items will be required should repetitive complaints be received by the Contracting Agency. Should the Contractor fail to perform, the Contracting Agency shall, at the Contractor's expense, hire the necessary work done.

1 2 When work is being performed that is not in accordance with standards 3 established in the state safety codes, or when the Contracting Agency believes 4 the condition endangers the safety of the general public and employees of the 5 project, the Contracting Agency may immediately issue a written stop-work order 6 describing the substandard work and deliver same to the Contractor. The 7 Contractor shall cease all work and not resume work on any portion of the project 8 until acceptable remedial action has been taken. Such protective measures shall 9 not be construed as releasing the Contractor of any obligation or liability arising 10 under the contract. Extensions of contract time will not be allowed for any period 11 of time covered by such stop-work order. 12

Upon completion of the work, the Contractor shall remove all rubbish, scrap
material, tools, surplus materials, and equipment used in and about the work.
Before the Contract shall be considered complete and prior to final payment, the
Contractor shall remove all surplus materials, temporary structures, including
foundations, thereof, debris of every nature, resulting from his operations, shall
clean out all ditches that may have been filled during the work, replace damaged

surfacing, and put the site in a neat, orderly condition.

#### 21 8-01.4 Measurement

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- 22 Section 8-01.4 is supplemented with the following: 23
  - No specific unit of measurement will apply to the lump sum item "Erosion/Water Pollution Control"
- No specific unit of measurement will apply to the lump sum item "Seeding, Fertilizingand Mulching"

#### 29 30 **8-01.5 Payment**

- 31 Section 8-01.5 is supplemented with the following:
- 33 "Erosion/Water Pollution Control", lump sum.
  - The unit contract price for "Erosion/Water Pollution Control" shall be full pay for all Work associated with furnishing, installing, inspecting and managing all TESC measures and BMP's including silt fence, high visibility fence, inlet protection installation and removal.
- 40 "Seeding, Fertilizing and Mulching", lump sum.
  - The unit contract price for "Seeding, Fertilizing and Mulching" shall be full pay for all Work associated with furnishing, installing, re-applying, and maintaining erosion control and bioretention seed mixes.
- 46 "Stormwater Pollution Prevention Plan (SWPPP)", lump sum.
- The unit contract price for "Stormwater Pollution Prevention Plan (SWPPP)", shall also be full pay for all Work and materials necessary to prepare and implement the SWPPP and achieve the runoff turbidity and pH levels compliant with the identified benchmarks and permit requirements including permit,

- reporting, and ESC lead activities. All erosion control measures are included in
   "Erosion/Water Pollution Control", except as otherwise noted in the Contract
   Documents.
  - "Street Cleaning", lump sum.
    - No specific unit of measurement will apply to the lump sum item "Street Cleaning".
- 10 "Biodegradable Erosion Control Blanket", square yard.11
  - The unit contract price for "Biodegradable Erosion Control Blanket" shall be full pay for all Work and materials associated with furnishing and installing, including wood stakes and 8" streambed cobbles.

#### 16 SECTION 8-02, ROADSIDE RESTORATION

#### 17 8-02.1 Description

- 18 Section 8-02.1 is supplemented with the following:
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This Work shall consist of planting trees, shrubs and groundcovers in accordance with these Specifications and as shown in the Plans or as directed by the Engineer.

#### 23 8-02.2 Materials

24 Section 8-02.2 is supplemented with the following:

#### 26 Bioretention Soil

- Bioretention soil shall consist of two parts fine compost (approximately 35 to 40 percent) by volume and three parts aggregate (approximately 60 to 65 percent),
  by volume. The mixture shall be well blended to produce a homogeneous mix.
  Organic matter content shall be 8 to 10 percent.
- Aggregate for bioretention soils shall be analyzed by an accredited lab using the
   sieve sizes noted below, and shall meet the following gradation:

Sieve Size	Percent Passing
3/8 Inch	100
No. 4	95-100
No. 10	75-90
No. 40	25-40
No. 100	4-10
No. 200	2-5

35

- 36 Aggregate for bioretention soils shall meet the following gradation coefficients:
- Coefficient of Uniformity (Cu = D60/D10) equal to or greater than 6; and
   Coefficient of Curve (Cc = D30/D60D10) greater than or equal to 1 and less
- 39 than or equal to 3.
- 40

#### 1 8-02.3 Construction Requirements

8-02.3(1) Responsibility During Construction

Section 8-02.3(1) is supplemented with the following:

Landscape construction shall begin after all curbs, sidewalks and associated Work is completed.

Throughout planting operations, the Contractor shall keep the premises clean, free of excess soils, plants, and other materials, including refuse and debris, resulting from the Contractor's Work. At the end of each Work day, and as each planting area is completed, it shall be neatly dressed, and all surrounding walks and paved areas shall be cleaned to the satisfaction of the Engineer. At the conclusion of Work, the Contractor shall remove surplus soils, materials, and debris from the construction site and shall leave the project in a condition acceptable to the Engineer.

#### 18 8-02.3(2) Roadside Work Plan

19 Section 8-02.3(2) is supplemented with the following:

Within fourteen (14) calendar days after award of the Contract, the Contractor shall submit written documentation to the Engineer that all specified plant materials have been ordered. Documentation shall include a list of suppliers' names, addresses, and phone numbers along with a list of respective growing or storage locations with addresses.

The Contractor shall provide all plants of the size, species, variety, and quality noted and specified. If unavailable, the Contractor shall notify the Engineer in writing immediately and provide the names and telephone numbers of 5 nursery suppliers that have been contacted. If substitution should be permitted, it can be made only with the prior written approval of the Engineer.

The use of chemical herbicides shall be considered on a case-by-case basis.
The Contractor must submit, as part of the Work Plan, the intent to use chemical herbicides to the Engineer for approval prior to use.

#### 8-02.3(4) Topsoil

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

- After the topsoil has been spread, all large clods, hard lumps and rocks 1-inch in diameter and larger, and litter shall be raked up, removed, and disposed of by the Contractor.
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#### Bioretention Soil Placement

- The Contractor shall not place bioretention soil until the Project Site draining to the bioretention area has been stabilized and authorization is given by Engineer.
- 48 Mixing or placing bioretention soil shall not be allowed if the area receiving 49 bioretention soil is wet or saturated or has been subjected to more than ½-inch 50 of precipitation within 48-hours prior to mixing or placement.

1	
2	Place landscape bioretention soil loosely. Final soil depth shall be measured and
3	verified only after the soil has been water compacted, which requires filling the
4	cell with water without creating any scour or erosion to at least 1 inches of
5	ponding
6	ponangi
7	
o o	8-02 3/5) Planting Area Proparation
0	The last contenes in the third nergerand of Section 9.02.2(5) is deleted and replaced
9 10	with the following:
10	with the following.
10	All evenes meterial and debris stumms, and reals larger than 1 inch, shall be
12	All excess material and debris, stumps, and rocks larger than 1-inch, shall be
13	removed and disposed of on the project site or as approved by the Engineer prior
14	to placement of Topsoll Type A.
15	
16	
17	8-02.3(13) Plant Establishment
18	Section 8-02.3(13) is supplemented with the following:
19	
20	Any suspensions for non-compliance, as indicated elsewhere within these
21	Special Provisions, will increase the duration of first-year plant establishment.
22	
23	Suspension of Time
24	·
25	Failure to Comply
26	Failure to comply with corrective steps as outlined by the Engineer shall
27	result is a suspension of time for first-year plant establishment.
28	······································
29	Suspension Relief
30	Any such suspension of time shall not be lifted until all unsatisfactory
31	conditions have been corrected to the satisfaction of the Engineer
32	
33	Suspension and Penalties
3/	If a suspension of time is in effect for more than fifteen (15) calendar days
35	without effective action being taken by the Contractor the Contracting
36	Agapey will have justification to take corrective stops and to deduct all costs
27	Agency will have justification to take corrective steps and to deduct all costs
20	thereof norm moneys due the Contractor.
30	Plant Establishment Plan
39	Fidili Establishinent Fidil Drier to initial planting accontance on defined in Section 9.02.2(12) and in
40 44	Phot to initial planting acceptance as defined in Section 6-02.5(12) and in
41	accordance with Section 6-02.3(13), the Contractor shall submit a plant
42	establishment plan for approval by the Engineer. The plan shall define the work
43	necessary to maintain all Contract areas during the period between initial
44	planting acceptances through the acceptance of first year plant establishment.
45	
46	I he plan shall show the scheduling, frequency, dates, materials and equipment
47	utilized, whichever may apply, for all maintenance activities including, but not
48	limited to, the following:
49	
50	A. Plant Establishment Activities
51	

1 2 3 4	<ol> <li>Pruning</li> <li>Fertilizing</li> <li>Watering – amount in inches per week</li> <li>Weed Control and Chemical Application – post and pre-</li> </ol>		
5			
6	2. Litter and Debris Removal		
1	3. Erosion Control Methods and Procedures		
8	4. Plant Replacement		
9			
10	B. Other items as determined by the Engineer		
11			
12	Also indicate the following:		
13			
14	A. Maintenance Supervisor/Responsible Contact Name		
15			
16	1 Local Address		
17	2 Local Telephone Number		
18			
10	B Emergency Contact Name – 24 hours 7 days per week		
20	b. Energency contact Name – 24 nours, 7 days per week		
20	availability		
21			
22	1. Local Address		
23	2. Local Phone Number		
24			
25	C. Sign and Date the Plant Establishment Plan		
26			
27	Should this plan become unworkable at any time during the specified period, the		
28	Contractor shall submit and receive approval of a revised plan. Failure to comply		
29	with the plant establishment plan or to revise the plan as outlined by the		
30	Engineer, shall result in a suspension of time for first year plant establishment in		
31	accordance with Section 8-02.3(12) of these Special Provisions.		
32			
33	8-02.3(17) Property Restoration (New Section)		
34	Section 8-02 3(17) is added as follows:		
35			
36	The Contractor shall blend the new construction into developed private property		
37	adjacent to the project using similar materials to those existing (e.g. sod shall be		
20	aujacent to the project using similar materials to those existing, (e.g. sou shall be		
30	used to match into lawn aleas, bark shall be used to match into planting aleas,		
39	lopson shan be used to match into garden areas, etc.).		
40			
41	If the items used for the restoration have pay items in the Contract, they will be		
42	paid under those items.		
43			
44	If restoration of adjacent property requires use of materials that have no pay		
45	items, payment will be by force account under the item "Restoration and		
46	Roadside Cleanup".		
47			
48	8-02.3 (18) Streambed Cobble (New Section)		
49	Section 8-02.3(18) is added as follows:		
50			

1 2 2	Streambed Cobbles shall meet size and composition described in Section 9-03.3(1) for 12" Cobbles.
3 4 5 6 7	Place Streambed Cobbles to a 12" depth. Contractor shall prepare one Streambed Cobble area (cobble beds) for approval by Engineer prior to commencement of this work.
8 0	8-02 A Maasuramant
10 11	Section 8-02.4 is supplemented with the following:
12 13	No specific unit of measurement will apply to the force account item of "Restoration and Roadside Cleanup."
14 15 16	Fine Compost, Bark or Wood Chip Mulch and Bioretention soil will be measured by the cubic yard based on the neat-line calculated volume of soil installed.
17 18 19	Measurement for "Streambed Cobble 12 In." will be per ton.
20 21	8-02.5 Payment
22 23	Section 8-02.5 is supplemented with the following:
24 25	"Restoration and Roadside Cleanup", per force account.
26 27 28	Payment for "Restoration and Roadside Cleanup" shall be by force account as described in Section 1-09.6 of the Standard Specifications and no other compensation will be allowed.
29 30 31 32	For the purpose of providing a common Bid Proposal for all Bidders and for that purpose only, the estimated cost of this Bid item has been arbitrarily entered in the Proposal to become part of the total Bid by the Contractor.
33 34 25	"Bioretention Soil", per cubic yard.
35 36 37	"Bark or Wood Chip Mulch", per cubic yard.
38 39	"Fine Compost", per cubic yard.
40 41	"Streambed Cobble 12 In.", per ton.
42 43 44 45	The bid item price for "Streambed Cobble 12 In." shall include all costs for the work required for furnishing, hauling, stockpiling and installation of material as well as work associated with the excavation and final placement.
46 47	SECTION 8-04, CURBS, GUTTERS, AND SPILLWAYS

#### 48 8-04.1 Description

49 Section 8-04.1 is supplemented with the following:

- 1 2 This Work consists of constructing Notched Cement Concrete Curb and Gutter at the 3 locations shown in the Plans or where designated by the Engineer in accordance with 4 these Specifications and details shown in the Plans and in the Standard Plans. 5 6 8-04.3 Construction Requirements 7 8 8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways 9 Section 8-04.3(1) is supplemented with the following: 10 11 Notched Cement Concrete Traffic Curb and Gutter shall be constructed with curb 12 openings and spacing as shown on the Plans and details. Notched Cement 13 Concrete Traffic Curb and Gutter shall otherwise be the same as Cement Concrete Traffic Curb and Gutter. 14 15 16 Notched Cement Concrete Traffic Curb and Gutter shall be temporarily backfilled 17 and compacted if necessary to hold new curb and gutter in place (to prevent 18 lateral movement) during paving and surfacing operations. Temporary backfilling, compaction, and removing temporary backfill will not be measured for separate 19 20 payment. 21 22 23 8-04.4 Measurement 24 Section 8-04.4 is supplemented with the following: 25 26 "Notched Cement Concrete Traffic Curb and Gutter" will be measured by the linear 27 foot. 28 29 8-04.5 Payment 30 Section 8-04.5 is supplemented with the following: 31 32 "Notched Cement Concrete Traffic Curb and Gutter", per linear foot. 33 34 The unit Contract price per linear foot for "Notched Cement Concrete Traffic Curb and 35 Gutter", shall be full pay for costs including, but not limited to, curb notch and 36 placement and removal of temporary backfill material. 37 38 SECTION 8-12, CHAIN LINK FENCE AND WIRE FENCE 8-12.2 Materials 39 40 Section 8-12.2 is supplemented with the following: 41
- 42 (January 3, 2017)

#### 43 **Coated Chain Link Fence**

44 Chain link fence fabric shall be hot-dip galvanized with a minimum of 0.8 ounce per 45 square foot of surface area.

46

- 47 Fencing materials shall be coated with an ultraviolet-insensitive plastic or other inert
- 48 material at least 2 mils in thickness. Any pretreatment or coating shall be applied in
- 49 accordance with the manufacturer's written instructions. The Contractor shall provide

- the Engineer with the manufacturer's written specifications detailing the product and
   method of fabrication. The color shall match SAE AMS Standard 595 color number
   \*\*\*595-37040 Black\*\*\*, or be as approved by the Engineer.
  - Samples of the coated fencing materials shall be approved by the Engineer prior to installation on the project.
- 8 The Contractor shall supply the Engineer with 10 aerosol spray cans containing a 9 minimum of 14 ounces each of paint of the color specified above. The touch-up paint 10 shall be compatible with the coating system used. 11

#### 12 8-12.4 Measurement

- 13 Section 8-12.4 is supplemented with the following:
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15 Coated Chain Link Fence, 4-ft Fabric Height will be measured by the linear foot of 16 completed fence, along the ground line, exclusive of openings.

#### 18 8-12.5 Payment

- 19 Section 8-12.5 is supplemented with the following:
- 20 21

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- "Coated Chain Link Fence, 4-ft Fabric Height", per linear foot.
- The unit contract price for "Coated Chain Link Fence, 4-ft Fabric Height" shall be full
  compensation for all costs for the specified Work including brace post, end, corner,
  top rail, and pull post installations and all other requirements of Section 8-12 for Chain
  Link Fence.

#### 28 SECTION 8-21, PERMANENT SIGNING

#### 29 8-21.1 Description

- 30 Section 8-21.1 is supplemented with the following:
- 31
- This work shall also include installing Project Signs at the locations shown; in accordance with the details.

# 3435 8-21.3 Construction Requirements

- 36 Section 8-21.3 is supplemented with the following:
- The Contractor shall be responsible for picking up the project signs from the City of
  Sammamish Maintenance and Operation Center located at 1801 244th Ave NE,
  Sammamish, WA providing and installing sign posts, maintaining, and disposing of
  the sign at the completion of the project.
- 42
- 43 The project signs shall be installed within one (1) week of the Notice to Proceed. 44
- 45 At completion of the project or when directed by the Engineer, the Contractor shall 46 remove each project sign and restore the area where the sign was installed to its 47 original or better condition.
- 48

1	For permanent signing, yellow advisory signs shall have MUTCD compliant vertical
2	retroreflective strips installed on sign supports. Retroreflective material used on the
3	sign support shall be at least 2 inches in width, it shall be placed for the full length of
4	the support from the sign to within 2 feet above the edge of the roadway, and its color
5	shall match the background color of the sign, except that the color of the strip for the
6	YIELD and DO NOT ENTER signs shall be red. Vertical retroreflective strips shall be
1	Vis-Z-Shield or approved equal.
8	
9	8-21.3(4) Sign Removal
10	Section 8-21.3(4) is deleted and replaced with the following:
11	Endeding states with the discussion of the the discussion of the second states of the second
12	Existing signs within the project limits shall be removed, stored in a safe place,
13	and reinstalled at the locations shown on the plans of as instructed by the
14 15	chiproced to the Contracting Ageney
16	delivered to the Contracting Agency.
17	The Contractor shall remove signs posts and appurtenances in such a manner
18	to prevent damage to the items
19	to provont daniago to the tento.
20	In the event that damage is caused to signs or appurtenances during the
21	removal, storage, or installation of these items, the Contractor shall replace the
22	damaged items at no cost to the Contracting Agency. The Engineer will
23	determine and approve all sign locations.
24	
25	8-21.4 Measurement
26	Section 8-21.4 is deleted and replaced with the following:
27	
28	Measurement for Project Sign shall be per each. New posts will not be measured for
29	separate payment.
30	
31	Temporary signing will not be measured for separate payment.
32	
33	8-21.5 Payment
21	Soction 8 21 5 is supplemented with the following:

- 34 Section 8-21.5 is supplemented with the following:35
- 36 "Permanent Signing", per lump sum.37

The lump sum unit price for "Permanent Signing" shall be full compensation for all labor, tools, materials, and equipment necessary to perform the work as shown on the plans, as specified herein, or as directed by the Engineer. This includes, but is not limited to, furnish and install new signs, vertical retroreflective strips, existing sign removal and relocation and temporary signing.

44 "Project Sign", per each.45

The unit bid price per each for "Project Sign" shall be full pay for all Work associated
with the fabricating, installation, maintenance, removal, and disposal of project signs.

#### 1 SECTION 8-22, PAVEMENT MARKING

#### 2 8-22.1 Description

- 3 Section 8-22.1 is revised as follows:
  - The last sentence of the second paragraph is deleted.

#### 7 8-22.4 Measurement

- 8 Section 8-22.4 is supplemented with the following:
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- 10 8" White Painted Line shall be measured by the linear foot.
- 11 4" Double Yellow Painted Centerline shall be measured by the linear foot.
- 12

#### 13 8-22.5 Payment

- 14 Section 8-22.5 is supplemented with the following:
- 15
- 16 "8" White Painted Line", per linear foot.
- 17 "4" Double Yellow Painted Centerline", per linear foot.

1 2 2	1 DIVISION 9 2 MATERIALS 3 4 SECTION 9-03, AGGREGATES		
3 4			
5	9-03.9(3) Crushed Surfacing		
6 7 8	<b>9-03.9(3)A Crushed Ledge Rock f</b> Add this new section with the following	for Permeable Base	
9 10 11 12 13 14	Crushed Ledge Rock for Permeable requirements of the American Assoc Officials (AASHTO) No. 57. Recycled consist of clean ½ to 1-1/2 inch unifor crushed material shall consist of 100 p	e Base shall meet the grading and quality iation of State Highway and Transportation concrete is not permitted. This material shall rmly graded crushed surfacing material. The ercent crushed ledge rock.	
16	Los Angeles Wear, 500 Rev	30% maximum, WSDOT Test Method T 96	
17 18	Degradation Factor	30 minimum, WSDOT Test Method T 113	
19 20 21	Minimum Void Ration Content:	30% as determined by AASHTO T19 or ASTM C29, rodding procedure	
22	The grading and quality requiremen	ts are:	
24 25 26 27 28 29 30 31 32	Sieve SizePerce1-1/2 inch1001 inch95-100½ inch25-60#40-10#80-5% Fracture100	<u>nt Passing</u> 0	
33	All percentages are b	by weight.	
34 35	SECTION 9-14, EROSION CONTROL	AND ROADSIDE PLANTING	
36	9-14.1 Soil		
37 38 39 40	<b>9-14.1(1) Topsoil Type A</b> Section 9-14.1(1) is supplemented with	n the following:	
40 41 42 43 44 45 46	Topsoil Type A shall consist of a uniform Loam, and 30-33% compost, plus soil a all topsoil prior to delivery. One hundre 1-inch sieve. Compost shall comply w shall have pH range of 5.0 to 7.0.	n blend composed by volume of 67-70% Sandy amendments. Mechanically blend and pre-mix ed percent of this mixture shall pass through a vith the requirements of 9-14.4(8). Mixed soil	

For supplying the Topsoil Type A mix, the Contractor may import premixed, commercially available planting soil mixes that are comprised of sandy loam soil that meet the USDA Standards and shall have the following characteristics:

Class	Particle Size	
01855	<u>Range</u>	
Coarse sand	0.5 - 2.0 mm	
All sands	0.05 - 2.0 mm	
Silt	0.002 - 0.05 mm	
Clay	<0.002 mm	

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The Sandy/Loam component shall also meet or exceed the following specifications:

	<u>Percent</u>	<u>Percent</u>
Screen Size	Retained	Passing
6.35mm	5%	95%
#10	15	85
#30	50	50
#60	60	40
#100	80	20
#200	90	10

9 Contractor shall send minimum of one representative sample of Topsoil Type A to an 10 approved soil-testing laboratory (state or commercial laboratory) for approval prior to use on the project site. The Contractor shall be responsible for whatever Topsoil 11 12 additives may be required, as recommended by the testing laboratory. The cost for testing and Topsoil additives shall be borne by the Contractor. Testing shall be 13 14 performed in accordance with the most current edition of Methods of Soil Analysis 15 published by the Soil Science Society of America, Inc. The soil test analysis reports and recommendations for Topsoil additives shall include the following: 16

1. Fertility Analysis

Extractable analyses: nitrate nitrogen, ammonium nitrogen, phosphorous, potassium, calcium, magnesium, copper, zinc, manganese and iron.

Saturation extract values: calcium, magnesium, potassium, sodium, boron, sulfate, pH, lime content, salinity and sodium adsorption ratio (SAR).

2. Organic Content and Particle Size Appraisal

Organic percent by oven dried weight, and USDA Particle size.

- 3. Cation Exchange Capacity (CEC)
- 4. Recommendations

Statement that the laboratory has reviewed the planting plan and the planting specifications, and that its recommendations respond to the specific needs of the Contract.

Submit soil laboratory tests for Topsoil Type A and supplier's certification of Compost
 for Owner's Representative review and approval prior to installing Topsoil Type A.

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#### 2 9-14.3 Fertilizer

- 3 Section 9-14.3 is supplemented with the following:
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Fertilizer for shrubs and groundcovers shall be 21-gram Agriform tablets 20-10-5 or acceptable equal. Apply per manufacturer's written recommendations.

#### 9-14.4 Mulch and Amendments

#### 10 9-14.4(3) Bark or Wood Chips

11 The first paragraph of Section 9-14.4(3) is revised to read:

13 Bark Mulch shall be derived from Douglas Fir and Western Hemlock tree species. 14 Bark is defined as the outermost coarse protective layer of the tree, located 15 outside of the cambium layer. It shall be ground so that a minimum of 95-percent, 16 by volume, of the material will pass through a 1-inch sieve. Ground bark shall not 17 contain elements in quantities that would be detrimental to plant life. Wood cellulose tissue fiber (wood pulp), wood waste, wood shavings, wood sawdust, 18 wood chips, or any product that contains greater than 5-percent, by volume, of 19 20 the hard, lignified wood portion of the tree will not be accepted. 21

#### 22 APPENDICES

23 (January 2, 2012 WSDOT GSP)

- 24 The following appendices are attached and made a part of this Contract:
- 25 26 APPENDIX A: Prevailing Wage Rates
- 27 APPENDIX B: Standard Plans and Details
- 28 APPENDIX C: Geotechnical Memorandum
- 29 APPENDIX D: Puget Sound Clean Air Agency Asbestos Notice of Intent
- 30

# **APPENDIX A**

# **Prevailing Wage Rates**

(To be included at the final submittal.)

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#### State of Washington Department of Labor & Industries Prevailing Wage Section - Telephone 360-902-5335 PO Box 44540, Olympia, WA 98504-4540

### Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

## Journey Level Prevailing Wage Rates for the Effective Date: 6/14/18

County	Trade	Job Classification	Wage	Holiday	Overtime	Note
King	Asbestos Abatement Workers	Journey Level	\$46.57	<u>5D</u>	<u>1H</u>	
King	<u>Boilermakers</u>	Journey Level	\$66.54	<u>5N</u>	<u>1C</u>	
King	Brick Mason	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Brick Mason	Pointer-Caulker-Cleaner	\$55.82	<u>5A</u>	<u>1M</u>	
King	Building Service Employees	Janitor	\$23.73	<u>5S</u>	<u>2F</u>	
King	Building Service Employees	Traveling Waxer/Shampooer	\$24.18	<u>5S</u>	<u>2F</u>	
King	Building Service Employees	Window Cleaner (Non- Scaffold)	\$27.23	<u>55</u>	<u>2F</u>	
King	Building Service Employees	Window Cleaner (Scaffold)	\$28.13	<u>5S</u>	<u>2F</u>	
King	Cabinet Makers (In Shop)	Journey Level	\$22.74		<u>1</u>	
King	<u>Carpenters</u>	Acoustical Worker	\$57.18	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Bridge, Dock And Wharf Carpenters	\$57.18	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Carpenter	\$57.18	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Carpenters on Stationary Tools	\$57.31	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Creosoted Material	\$57.28	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Floor Finisher	\$57.18	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Floor Layer	\$57.18	<u>5D</u>	<u>4C</u>	
King	<u>Carpenters</u>	Scaffold Erector	\$57.18	<u>5D</u>	<u>4C</u>	
King	Cement Masons	Journey Level	\$57.21	<u>7A</u>	<u>1M</u>	
King	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	\$110.54	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Dive Supervisor/Master	\$72.97	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Diver	\$110.54	<u>5D</u>	<u>4C</u>	<u>8V</u>
King	Divers & Tenders	Diver On Standby	\$67.97	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Diver Tender	\$61.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Manifold Operator	\$61.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Manifold Operator Mixed Gas	\$66.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$61.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders		\$57.43	<u>5A</u>	<u>4C</u>	

		Remote Operated Vehicle				
King	Dredge Workers	Assistant Engineer	\$56.44	5D	3F	
King	Dredge Workers	Assistant Mate (Deckhand)	\$56.00	5D	3F	
King	Dredge Workers	Boatmen	\$56.44	5D	3F	
King	Dredge Workers	Engineer Welder	\$57.51	5D	3F	
King	Dredge Workers	Leverman, Hydraulic	\$58.67	5D	3F	
King	Dredge Workers	Mates	\$56.44	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Oiler	\$56.00	<u>5D</u>	<u>3F</u>	
King	Drywall Applicator	Journey Level	\$56.78	<u>5D</u>	<u>1H</u>	
King	Drywall Tapers	Journey Level	\$57.43	<u>5P</u>	<u>1E</u>	
King	Electrical Fixture Maintenance Workers	Journey Level	\$28.99	<u>5L</u>	<u>1E</u>	
King	Electricians - Inside	Cable Splicer	\$76.96	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Cable Splicer (tunnel)	\$82.24	<u>7C</u>	<u>4E</u>	
King	<u>Electricians - Inside</u>	Certified Welder	\$74.38	<u>7C</u>	<u>4E</u>	
King	<u>Electricians - Inside</u>	Certified Welder (tunnel)	\$79.80	<u>7C</u>	<u>4E</u>	
King	<u>Electricians - Inside</u>	Construction Stock Person	\$39.69	<u>7C</u>	<u>4E</u>	
King	<u>Electricians - Inside</u>	Journey Level	\$71.80	<u>7C</u>	<u>4E</u>	
King	<u>Electricians - Inside</u>	Journey Level (tunnel)	\$76.96	<u>7C</u>	<u>4E</u>	
King	<u> Electricians - Motor Shop</u>	Craftsman	\$15.37		<u>1</u>	
King	<u> Electricians - Motor Shop</u>	Journey Level	\$14.69		<u>1</u>	
King	Electricians - Powerline Construction	Cable Splicer	\$79.43	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Certified Line Welder	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Groundperson	\$46.28	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Journey Level Lineperson	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Line Equipment Operator	\$59.01	<u>5A</u>	<u>4D</u>	
King	<u>Electricians - Powerline</u> <u>Construction</u>	Meter Installer	\$46.28	<u>5A</u>	<u>4D</u>	<u>8W</u>
King	Electricians - Powerline Construction	Pole Sprayer	\$69.75	<u>5A</u>	<u>4D</u>	
King	<u>Electricians - Powerline</u> <u>Construction</u>	Powderperson	\$52.20	<u>5A</u>	<u>4D</u>	
King	Electronic Technicians	Journey Level	\$31.00		<u>1</u>	
King	Elevator Constructors	Mechanic	\$91.24	<u>7D</u>	<u>4A</u>	
King	Elevator Constructors	Mechanic In Charge	\$98.51	<u>7D</u>	<u>4A</u>	
King	Fabricated Precast Concrete Products	All Classifications - In-Factory Work Only	\$17.72	<u>5B</u>	<u>1R</u>	
King	Fence Erectors	Fence Erector	\$15.18		<u>1</u>	
King	<u>Flaggers</u>	Journey Level	\$39.48	<u>7A</u>	<u>31</u>	
King	<u>Glaziers</u>	Journey Level	\$61.81	<u>7L</u>	<u>1Y</u>	
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King	Heat & Frost Insulators And Asbestos Workers	Journeyman	\$67.93	<u>5J</u>	<u>4H</u>	
King	Heating Equipment Mechanics	Journey Level	\$78,17	7F	1F	
King	Hod Carriers & Mason Tenders	Journey Level	\$48.02	7A	31	
King	Industrial Power Vacuum Cleaner	Journey Level	\$11.50		<u>1</u>	
King	Inland Boatmen	Boat Operator	\$61.41	5B	1K	
King	Inland Boatmen	Cook	\$56.48	5B	1K	
King	Inland Boatmen	Deckhand	\$57.48	5B	1K	
King	Inland Boatmen	Deckhand Engineer	\$58.81	5B	1K	
King	Inland Boatmen	Launch Operator	\$58.89	5B	1K	
King	Inland Boatmen	Mate	\$57.31	5B	1K	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$31.49	_	<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$11.50		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$24.91		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$19.33		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$20.45		<u>1</u>	
King	Insulation Applicators	Journey Level	\$57.18	<u>5D</u>	<u>4C</u>	
King	Ironworkers	Journeyman	\$67.88	<u>7N</u>	<u>10</u>	
King	Laborers	Air, Gas Or Electric Vibrating Screed	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Airtrac Drill Operator	\$48.02	<u>7A</u>	<u>31</u>	
King	Laborers	Ballast Regular Machine	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Batch Weighman	\$39.48	<u>7A</u>	<u>31</u>	
King	Laborers	Brick Pavers	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Brush Cutter	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Brush Hog Feeder	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Burner	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Caisson Worker	\$48.02	<u>7A</u>	<u>31</u>	
King	Laborers	Carpenter Tender	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Caulker	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Cement Dumper-paving	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Cement Finisher Tender	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Change House Or Dry Shack	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Chipping Gun (under 30 Lbs.)	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Chipping Gun(30 Lbs. And Over)	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Choker Setter	\$46.57	<u>7A</u>	<u>31</u>	
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King	<u>Laborers</u>	Chuck Tender	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Clary Power Spreader	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Clean-up Laborer	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Concrete Dumper/chute Operator	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Concrete Form Stripper	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Concrete Placement Crew	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Concrete Saw Operator/core Driller	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Crusher Feeder	\$39.48	<u>7A</u>	<u>3I</u>	
King	Laborers	Curing Laborer	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Ditch Digger	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Diver	\$48.02	<u>7</u> A	<u>31</u>	
King	Laborers	Drill Operator (hydraulic,diamond)	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Dry Stack Walls	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Dump Person	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Epoxy Technician	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Erosion Control Worker	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Faller & Bucker Chain Saw	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Fine Graders	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Firewatch	\$39.48	<u>7A</u>	<u>31</u>	
King	Laborers	Form Setter	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Gabian Basket Builders	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	General Laborer	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Grade Checker & Transit Person	\$48.02	<u>7A</u>	<u>31</u>	
King	Laborers	Grinders	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Grout Machine Tender	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Groutmen (pressure)including Post Tension Beams	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Guardrail Erector	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Hazardous Waste Worker (level A)	\$48.02	<u>7A</u>	<u>31</u>	
King	Laborers	Hazardous Waste Worker (level B)	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Hazardous Waste Worker (level C)	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	High Scaler	\$48.02	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Jackhammer	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Laserbeam Operator	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Maintenance Person	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Manhole Builder-mudman	\$47.44	<u>7A</u>	<u>31</u>	
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King	Laborers	Motorman-dinky Locomotive	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Bla	\$47.44	<u>7A</u>	31	
King	Laborers	Pavement Breaker	\$47.44	<u>/A</u>	<u>31</u>	
King	Laborers	Pilot Car	\$39.48	<u>7A</u>	<u>31</u>	
King	Laborers	Pipe Layer Lead	\$48.02	<u>7A</u>	<u>31</u>	
King	Laborers	Pipe Layer/tailor	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Pipe Pot Tender	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Pipe Reliner	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Pipe Wrapper	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Pot Tender	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Powderman	\$48.02	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Powderman's Helper	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Power Jacks	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Railroad Spike Puller - Power	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Raker - Asphalt	\$48.02	<u>7A</u>	<u>31</u>	
King	Laborers	Re-timberman	\$48.02	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Remote Equipment Operator	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Rigger/signal Person	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Rip Rap Person	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Rivet Buster	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Rodder	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Scaffold Erector	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Scale Person	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Sloper (over 20")	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Sloper Sprayer	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Spreader (concrete)	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Stake Hopper	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Stock Piler	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Tamper & Similar Electric, Air & Gas Operated Tools	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Tamper (multiple & Self- propelled)	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Toolroom Person (at Jobsite)	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Topper	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Track Laborer	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Track Liner (power)	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Traffic Control Laborer	\$42.22	<u>7A</u>	<u>31</u>	<u>8R</u>
King	Laborers	Traffic Control Supervisor	\$42.22	<u>7A</u>	<u>31</u>	<u>8R</u>
King	Laborers	Truck Spotter	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers	Tugger Operator	\$47.44	<u>7A</u>	<u>31</u>	

King	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 0-30 psi	\$92.60	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$97.63	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$101.31	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$107.01	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$109.13	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$114.23	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$116.13	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$118.13	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$120.13	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	<u>Laborers</u>	Tunnel Work-Guage and Lock Tender	\$48.12	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	<u>Laborers</u>	Tunnel Work-Miner	\$48.12	<u>7A</u>	<u>31</u>	<u>8Q</u>
King	<u>Laborers</u>	Vibrator	\$47.44	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Vinyl Seamer	\$46.57	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Watchman	\$35.88	<u>7A</u>	<u>31</u>	
King	<u>Laborers</u>	Welder	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Well Point Laborer	\$47.44	<u>7A</u>	<u>31</u>	
King	Laborers	Window Washer/cleaner	\$35.88	<u>7A</u>	<u>31</u>	
King	Laborers - Underground Sewer & Water	General Laborer & Topman	\$46.57	<u>7A</u>	<u>31</u>	
King	Laborers - Underground Sewer <u>&amp; Water</u>	Pipe Layer	\$47.44	<u>7A</u>	<u>31</u>	
King	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	\$13.56		<u>1</u>	
King	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	\$28.17		<u>1</u>	
King	Landscape Construction	Landscaping or Planting Laborers	\$17.87		<u>1</u>	
King	<u>Lathers</u>	Journey Level	\$56.78	<u>5D</u>	<u>1H</u>	
King	Marble Setters	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Metal Fabrication (In Shop)	Fitter	\$15.86		<u>1</u>	
King	Metal Fabrication (In Shop)	Laborer	\$11.50		<u>1</u>	
King	Metal Fabrication (In Shop)	Machine Operator	\$13.04		<u>1</u>	
King	Metal Fabrication (In Shop)	Painter	\$11.50		<u>1</u>	
King	Metal Fabrication (In Shop)	Welder	\$15.48		<u>1</u>	
King	<u>Millwright</u>	Journey Level	\$58.68	<u>5D</u>	<u>4C</u>	
King	Modular Buildings	Cabinet Assembly	\$11.56		<u>1</u>	
King	Modular Buildings	Electrician	\$11.56		<u>1</u>	
King	Modular Buildings	Equipment Maintenance	\$11.56		<u>1</u>	
King	Modular Buildings	Plumber	\$11.56		<u><u>1</u></u>	

King	Modular Buildings	Production Worker	\$11.50		<u>1</u>	
King	Modular Buildings	Tool Maintenance	\$11.56		<u>1</u>	
King	<u>Modular Buildings</u>	Utility Person	\$11.56		<u>1</u>	
King	Modular Buildings	Welder	\$11.56		<u>1</u>	
King	Painters	Journey Level	\$41.60	<u>6Z</u>	<u>2B</u>	
King	Pile Driver	Crew Tender	\$52.37	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$71.35	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	\$76.35	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$80.35	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$85.35	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$87.85	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$92.85	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$94.85	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$96.85	<u>5D</u>	<u>4C</u>	
King	<u>Pile Driver</u>	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$98.85	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Journey Level	\$57.43	<u>5D</u>	<u>4C</u>	
King	<u>Plasterers</u>	Journey Level	\$54.89	<u>7Q</u>	<u>1R</u>	
King	Playground & Park Equipment Installers	Journey Level	\$11.50		<u>1</u>	
King	Plumbers & Pipefitters	Journey Level	\$81.69	<u>6Z</u>	<u>1G</u>	
King	Power Equipment Operators	Asphalt Plant Operators	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Assistant Engineer	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Barrier Machine (zipper)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Batch Plant Operator, Concrete	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Bobcat	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Brooms	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Bump Cutter	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cableways	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Chipper	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>

King	Power Equipment Operators	Compressor	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Finish Machine -laser Screed	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Conveyors	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes Friction: 200 tons and over	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Crusher	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Deck Engineer/deck Winches (power)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Derricks, On Building Work	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Dozers D-9 & Under	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Drilling Machine	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators		\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>

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

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

King	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Transporters, All Track Or Truck Type	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Trenching Machines	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Truck Mount Portable Conveyor	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Welder	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Wheel Tractors, Farmall Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Yo Yo Pay Dozer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Asphalt Plant Operators	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Assistant Engineer	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Barrier Machine (zipper)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Batch Plant Operator, Concrete	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Bobcat	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Brooms	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Bump Cutter	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cableways	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Chipper	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Compressor	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Finish Machine -laser Screed	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King		Conveyors	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Power Equipment Operators-					
King	Power Equipment Operators- Underground Sewer & Water	Cranes Friction: 200 tons and over	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Crusher	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Deck Engineer/deck Winches (power)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Derricks, On Building Work	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Dozers D-9 & Under	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Drilling Machine	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Gradechecker/stakeman	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>

King	Power Equipment Operators- Underground Sewer & Water	Guardrail Punch	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Locator	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Operator	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Loaders, Plant Feed	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Loaders: Elevating Type Belt	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Locomotives, All	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Material Transfer Device	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Motor Patrol Graders	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Pavement Breaker	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King			\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Power Equipment Operators- Underground Sewer & Water	Pile Driver (other Than Crane Mount)				
King	Power Equipment Operators- Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Posthole Digger, Mechanical	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Power Plant	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Pumps - Water	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Rigger And Bellman	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Rollagon	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Roller, Other Than Plant Mix	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Roto-mill, Roto-grinder	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Saws - Concrete	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Scrapers - Concrete & Carry All	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Service Engineers - Equipment	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Shotcrete/gunite Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water		\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons				
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Slipform Pavers	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Spreader, Topsider & Screedman	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Subgrader Trimmer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Bucket Elevators	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Transporters, All Track Or Truck Type	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Trenching Machines	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Mount Portable Conveyor	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Welder	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Wheel Tractors, Farmall Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Yo Yo Pay Dozer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$50.02	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Spray Person	\$47.43	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$50.02	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Tree Trimmer	\$44.64	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$33.67	<u>5A</u>	<u>4A</u>	
King	Refrigeration & Air Conditioning Mechanics	Journey Level	\$77.86	<u>6Z</u>	<u>1G</u>	
King	Residential Brick Mason	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Residential Carpenters	Journey Level	\$28.20		<u>1</u>	
King	Residential Cement Masons	Journey Level	\$22.64		<u>1</u>	
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King	Residential Drywall	Journey Level	\$42.86	<u>5D</u>	<u>4C</u>	
King	Residential Drywall Tapers	lourney Level	\$57.43	5P	1F	
King	Residential Electricians	Journey Level	\$30.44	<u></u>	1	
King	Residential Glaziers	Journey Level	\$41.05	7L	<u>–</u> 1H	
King	Residential Insulation	Journey Level	\$26.28	_	1	
	Applicators	,			_	
King	Residential Laborers	Journey Level	\$23.03		<u>1</u>	
King	Residential Marble Setters	Journey Level	\$24.09		<u>1</u>	
King	Residential Painters	Journey Level	\$24.46		<u>1</u>	
King	<u>Residential Plumbers &amp;</u> <u>Pipefitters</u>	Journey Level	\$34.69		<u>1</u>	
King	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$77.86	<u>6Z</u>	<u>1G</u>	
King	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$44.56	<u>7F</u>	<u>1R</u>	
King	Residential Soft Floor Layers	Journey Level	\$47.61	<u>5A</u>	<u>3J</u>	
King	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$46.58	<u>5C</u>	<u>2R</u>	
King	Residential Stone Masons	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Residential Terrazzo Workers	Journey Level	\$51.36	<u>5A</u>	<u>1M</u>	
King	Residential Terrazzo/Tile Finishers	Journey Level	\$21.46		<u>1</u>	
King	Residential Tile Setters	Journey Level	\$20.00		<u>1</u>	
King	Roofers	Journey Level	\$51.02	<u>5A</u>	<u>3H</u>	
King	Roofers	Using Irritable Bituminous Materials	\$54.02	<u>5A</u>	<u>3H</u>	
King	Sheet Metal Workers	Journey Level (Field or Shop)	\$78.17	<u>7F</u>	<u>1E</u>	
King	Shipbuilding & Ship Repair	Boilermaker	\$43.31	<u>7M</u>	<u>1H</u>	
King	Shipbuilding & Ship Repair	Carpenter	\$41.06	<u>7T</u>	<u>2B</u>	
King	Shipbuilding & Ship Repair	Electrician	\$42.07	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Heat & Frost Insulator	\$67.93	<u>5J</u>	<u>4H</u>	
King	Shipbuilding & Ship Repair	Laborer	\$41.99	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Machinist	\$42.00	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Operator	\$41.95	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Painter	\$42.00	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Pipefitter	\$41.96	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Rigger	\$42.05	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Sheet Metal	\$41.98	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Shipfitter	\$42.05	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Trucker	\$41.91	<u>7</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Warehouse	\$41.94	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Welder/Burner	\$42.05	<u>7T</u>	<u>4B</u>	
King	Sign Makers & Installers (Electrical)	Sign Installer	\$22.92		<u>1</u>	
King	Sign Makers & Installers (Electrical)	Sign Maker	\$21.36		<u>1</u>	
King	Sign Makers & Installers (Non- Electrical)	Sign Installer	\$27.28		1	
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King	Sign Makers & Installers (Non- Electrical)	Sign Maker	\$33.25		<u>1</u>	
King	Soft Floor Layers	Journey Level	\$47.61	<u>5A</u>	<u>3J</u>	
King	Solar Controls For Windows	Journey Level	\$12.44		<u>1</u>	
King	Sprinkler Fitters (Fire Protection)	Journey Level	\$75.64	<u>5C</u>	<u>1X</u>	
King	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		<u><u>1</u></u>	
King	Stone Masons	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Street And Parking Lot Sweeper Workers	Journey Level	\$19.09		<u>1</u>	
King	<u>Surveyors</u>	Assistant Construction Site Surveyor	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	<u>Surveyors</u>	Chainman	\$58.93	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	<u>Surveyors</u>	Construction Site Surveyor	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Telecommunication Technicians	Journey Level	\$22.76		<u>1</u>	
King	<u>Telephone Line Construction -</u> <u>Outside</u>	Cable Splicer	\$40.52	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$22.78	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Installer (Repairer)	\$38.87	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Special Aparatus Installer I	\$40.52	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Special Apparatus Installer II	\$39.73	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$40.52	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$37.74	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Telephone Lineperson	\$37.74	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television Groundperson	\$21.60	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television Lineperson/Installer	\$28.68	<u>5A</u>	<u>2B</u>	
King	<u>Telephone Line Construction -</u> <u>Outside</u>	Television System Technician	\$34.10	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television Technician	\$30.69	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Tree Trimmer	\$37.74	<u>5A</u>	<u>2B</u>	
King	Terrazzo Workers	Journey Level	\$51.36	<u>5A</u>	<u>1M</u>	
King	Tile Setters	Journey Level	\$51.36	<u>5A</u>	<u>1M</u>	
King	<u>Tile, Marble &amp; Terrazzo</u> <u>Finishers</u>	Finisher	\$42.19	<u>5A</u>	<u>1B</u>	
King	Traffic Control Stripers	Journey Level	\$45.43	<u>7A</u>	<u>1K</u>	
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King	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	\$52.70	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Asphalt Mix To 16 Yards (W. WA-Joint Council 28)	\$51.86	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Dump Truck & Trailer	\$52.70	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Dump Truck (W. WA-Joint Council 28)	\$51.86	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Other Trucks (W. WA-Joint Council 28)	\$52.70	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Transit Mixer	\$43.23		<u>1</u>	
King	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.71		<u>1</u>	
King	Well Drillers & Irrigation Pump Installers	Oiler	\$12.97		<u>1</u>	
King	Well Drillers & Irrigation Pump Installers	Well Driller	\$18.00		<u>1</u>	

## Washington State Department of Labor and Industries Policy Statement (Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.

2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.

3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.

4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.

5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.

6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

## WSDOT's Predetermined List for Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered nonstandard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		х
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		Х
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		Х
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		Х
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		x
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

8.	Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		x
9.	Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	x	
10.	Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	Х	
11.	Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	x	
12.	Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13.	Concrete PilingPrecast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec	x	
14.	Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15.	Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		x
16.	Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

17.	Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		Х
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		Х
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		x
22.	Vault Risers - For use with Valve Vaults and Utilities X Vaults.		x
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		Х
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		x
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	x	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	х	

**ITEM DESCRIPTION** 

YES

NO

## **ITEM DESCRIPTION**

YES NO

27.	Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28.	<ul> <li>12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures.</li> <li>Fabricator plant has annual approval of methods and materials to</li> <li>be used. Shop Drawing to be provided for approval prior to casting girders.</li> <li>See Std. Spec. Section 6-02.3(25)A</li> </ul>	x	
29.	Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	x	
30.	Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	x	
31.	Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	x	
32.	Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	x	
33.	Monument Case and Cover See Std. Plan.		Χ

ITEM DESCRIPTION
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34.	Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	x	
35.	Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	х	
36.	<ul> <li>Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys.</li> <li>See Std. Plans, and Contract Plans for details. The steel structure</li> <li>shall be galvanized after fabrication in accordance with AASHTO-M-111.</li> </ul>	x	
37.	Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		Х
38.	Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	х	
39.	Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Specia Provisions for pre-approved drawings.	x	
40.	Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	x	
41.	Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		Х

	ITEM DESCRIPTION	YES	NO
42.	<ul> <li>Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and aluminum</li> <li>sheeting.</li> <li>NOTE: *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed</li> </ul>	X	X
		Custom Message	Std Signing Message
43.	Cutting & bending reinforcing steel		Х
44.	Guardrail components	Х	Х
		Custom End Sec	Standard Sec
45.	Aggregates/Concrete mixes	Cove WAC 296	red by 3-127-018
46.	Asphalt	Cove WAC 296	red by 3-127-018
47.	Fiber fabrics		Х
48.	Electrical wiring/components		X
49.	treated or untreated timber pile		Х
50.	Girder pads (elastomeric bearing)	Х	
51.	Standard Dimension lumber		X
52.	Irrigation components		X

	ITEM DESCRIPTION	YES	NO
53.	Fencing materials		Х
54.	Guide Posts		Х
55.	Traffic Buttons		Х
56.	Ероху		Х
57.	Cribbing		Х
58.	Water distribution materials		Х
59.	Steel "H" piles		Х
60.	Steel pipe for concrete pile casings		Х
61.	Steel pile tips, standard		Х
62.	Steel pile tips, custom	Х	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW <u>39.12.010</u>

<sup>(</sup>The definition of "locality" in RCW <u>39.12.010</u>(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

# WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.

The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.

When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators Underground Sewer & Water
- Residential \*\*\* ALL ASSOCIATED RATES \*\*\*
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

## Washington State Department of Labor and Industries Policy Statements (Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

# WAC 296-127-018 Agency filings affecting this section

# Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

#### **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 fourten 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, tenhour 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. 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.
  - J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

# 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:**

5.

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 fourday, ten hour work week, and Saturday shall be paid at one and one half  $(1\frac{1}{2})$  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

- 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).
  - 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).

6.

- 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).

6

#### **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**

D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

8.

- 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'.

W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

# **APPENDIX B**

**Standard Plans and Details** 

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# List of Standard Details

# CITY OF SAMMAMISH STANDARD DETAILS

TRENCH - PAVEMENT RESTORATION DETAIL	FIG. 2-05A
HMA PAVEMENT OVERLAY FOR TRENCH REPAIR	FIG. 2-05B
CURBS	FIG. 3-08A
EXTRUDED CURB DETAIL	FIG. 3-08B
CHAIN LINK FENCE	FIG. 3-18
CHANNELIZATION - VEHICLE AND BICYCLES	FIG. 4-02
PAVEMENT MARKINGS	FIG. 4-03A
RAISED PAVEMENT MARKERS	FIG. 4-03B
STREET SIGN INSTALLATION	FIG. 4-06
BEVELED END PIPE SECTION	FIG. 7-01
TRASH RACK (DEBRIS CAGE) – PIPE END	FIG. 7-02
TRASH RACK (DEBRIS CAGE) – CONICAL	FIG. 7-03
CATCH BASIN TYPE 1-L	FIG. 7-05
CATCH BASIN TYPE 2 – 48", 54", 60", 72" & 96"	FIG. 7-07
CATCH BASIN - TYPE 2 DETAILS	FIG. 7-08
LOCKING MANHOLE COVER AND INSTALLATION	FIG. 7-13
FLOW RESTRICTOR (TEE)	FIG. 7-20
FROP-T SHEAR GATE DETAIL	FIG. 7-21
CONTROL STRUCTURE – 54" DIAMETER	FIG. 7-25

## WSDOT STANDARD DETAILS

BEAM GUARDRAIL TYPE 31	C-20.10-04
BEAM GUARDRAIL TYPE 31 COMPONENTS	C-20.11-00
BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	
(POSTED SPEED 45 MPH AND BELOW	C-22.45-03
HIGH VISIBILITY SILT FENCE	I-30.17-00
STORM DRAIN INLET PROTECTION	I-40.20-00
CHECK DAMS ON CHANNELS	I-50.20-01

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REV. NO. X
















FRAME AND GRATE SEE STD DWGS 7-16 & 7-18 FOR DETAILS	NOTES: 1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 (AASHTO M 199) & C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE WSDOT/APWA STANDARD SPECIFICATIONS.
RISER SECTION	<ol> <li>AS AN ACCEPTABLE ALTERNATIVE TO REBAR, WELDED WIRE FABRIC HAVING A MIN. AREA OF 0.12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A497 (AASHTO M 221). WIRE FABRIC COMPLY TO ASTM A497 (AASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN KNOCKOUTS.</li> </ol>
A A A A A A A A A A A A A A A A A A A	3. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.
1 #3 BAR HOOP FOR 6"	<ol> <li>PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.</li> </ol>
2 #3 BAR HOOP FOR 12"	<ol><li>KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAM. PLUS CATCH BASIN WALL THICKNESS.</li></ol>
6" REDUCING SECTION	<ol><li>ROUND KNOCKOUTS MAY BE ON ALL 4 SIDES, WITH MAX. DIAM. OF 26". KNOCKOUTS MAY BE EITHER ROUND OR "D" SHAPE.</li></ol>
A A A A A A A A A A A A A A A A A A A	7. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
	8. THE TAPER ON THE SIDES OF THE PRECAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2"/FT.
	9. CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH WSDOT/APWA STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL
PRECAST BASE SECTION	SPECIFICATION A-A-60005. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
	10. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE
#3 BAR EACH CORNER	11. FOR CATCH BASINS IN PARKING LOTS DEPARTMENT OF PUBLIC WORKS
#3 BAR	12 FIGE OF RISER OR BRICK SHALL NOT RE 12 FIGE OF RISER OR BRICK SHALL NOT RE
	MORE THAN 2" FROM VERTICAL EDGE OF APPROVED BY CATCH RASIN MAI I DATE DATE
4" #3 BAR 4"	AY CKD DWN CKD DATE FILE XXX XXX AUG-XX-2015 FIGO7-O5

NOTES: 1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTMC478 (AASHTO M199) AND ASTM C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE WSDOT/APWA STANDARD SPECIFICATIONS.	<ol> <li>HANDHOLDS IN ADJUSTMENT SECTION SHALL HAVE 3" MIN. CLEARANCE. STEPS IN CATCH BASIN SHALL HAVE 6" MIN. CLEARANCE. SEE STD DWG 7-08, CATCH BASIN DETAILS. HANDHOLDS SHALL BE PLACED IN ALTERNATING GRADE RINGS OR LEVELING BRICK COURSE WITH A MIN. OF ONE HANDHOLD BETWEEN THE LAST STEP AND TOP OF THE MANHOLE.</li> </ol>	<ol> <li>ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000. ALL PRECAST CONCRETE SHALL BE CLASS 4000.</li> </ol>	<ol> <li>PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE WALL THICKNESS OF 2" MIN. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT. PIPES SHALL BE INSTALLED ONLY IN FACTORY KNOCKOUTS UNLESS OTHERWISE APPROVED BY THE ENGINEER.</li> </ol>	<ol> <li>KNOCKOUT OR CUTOUT HOLE SIZE SHALL EQUAL PIPE OUTER DIAM. PLUS CATCH BASIN WALL THICKNESS. MAX. HOLE SIZE SHALL BE 36" FOR 48" CATCH BASIN, 42" FOR 54" C.B., 48" FOR 60" C.B., 60" FOR 72" C.B., 94" FOR 96" C.B. MIN. DISTANCE BETWEEN HOLES SHALL BE 8" FOR 48", 54", AND 60" C.B.; 12" FOR 72" AND 96" C.B.</li> </ol>	<ol> <li>CATCH BASIN FRAMES AND GRATES OR COVERS SHALL BE IN ACCORDANCE WITH STD DWGS 7-16, 7-18, &amp; 7-19 AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION A-4-60005. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.</li> </ol>	7. ALL BASE REINFORCING STEEL SHALL HAVE A MIN. YIELD STRENGTH OF 60,000 PSI AND BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MIN. CLEARANCE.	8. MIN. SOIL BEARING VALUE SHALL EQUAL 3,300 POUNDS PER SQUARE FOOT.	9. FOR DETAILS SHOWING LADDER, STEPS, HANDRAILS AND TOP SLABS, C (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	10. SEE THE WSDOT STANDARD SPECIFICATIONS SEC. 7-05.3 FOR JOINT 20 26109 26109 2610 2610 2610 2610 2610 2610 2610 2610	11. IF PIPE IS SMOOTH WALL PLASTIC, NOT CONCRETE, A SAND COLLAR			CITY OF SAMMAMISH		UAIUN BASIN TIFE Z - 10% E1% F0% 70% 70% 0.06%	40, 24, 00, 72 & 30	APPROVED BY CITY ENGINEER DATE	REV         DWN         CKD         DATE         FILE           XXX         XXX         XXX         AuG-XX-2015         FIG07-07	
& GRATE OR COVER. D DWGS 7-16, 19 FOR DFTAILS	IMENT SECTION ING BRICKS OR	KINGS UP LIUNAL).		R OR GROUT FILLED	KINTEGRAL RISER	5", 54" & 60" DIAM. 72" & 96" DIAM.	EE TABLE	Λ		STEEL	FOR PRECAST RASF &	TEGRAL RISER	IAM. SQ. IN./FT.	48" 0.15	54" 0.19	60" 0.25	72" 0.24	96" 0.29	
FRAME SEE ST 7-18 7-		GRAUE 6" MAX.	12" YP.	MORTAF	BASE 8	2' FOR	: BASE	OUNDATIONS	T BASE ONLY.	REINFORCING	FOR EPARATE	BASES	M. SQ. IN./FT. D	3" 0.23	t" 0.19	)" 0.25	2" 0.35	5" 0.39	
HANDHOLDS	TOP SLAB 6" MIN. 3	1 20" X 24" OR	- 24" DIAM.	TZ 48" DIAM 6"	MORTAR 2' 72" DIAM 8" 5" 72" DIAM 8" 5"		MIN. SEPARATE CAST IN PLACE	*FOR SEPARATE GRAVEL BACKFILL FOR F CAST-IN-PLACE & MIN COMPACTEI	ONLY PRECAS		PRECAST BASE JOINT SI		DIA	48	54	90	72	96	





VD SLOPES: PER PLANS.	ACITY: NOT LESS THAN COMBINED INLETS.	HOWN OR NOTED, UNITS SHALL BE CONSTRUCTED IN E WITH THE REQUIREMENTS FOR CATCH BASIN TYPE 2, 54" MIN.	RTS AND RESTRICTOR/SEPARATOR SHALL BE OF SAME ND BE ANCHORED AT 3' MAX. SPACING BY 5/8" DIAM. STAINLESS NSION BOLTS OR EMBEDDED 2" IN WALL.	:TOR/SEPARATOR SHALL BE FABRICATED FROM .060" JR .064" ALUMINIZED STEEL.	.L BE CONNECTED TO CULVERT OR SEWER PIPE WITH A OUPLING BAND FOR CORRUGATED METAL PIPE, OR GROUTED .L OF CONCRETE PIPE.	L RISER STEM OF THE RESTICTOR/SEPARATOR SHALL BE THE AS THE HORIZONTAL OUTLET PIPE, WITH AN 8" MIN. DIAM.	ADDER OR STEPS OFFSET SO THAT: CALENT W. ZACHAN GATE IS VISIBLE FROM TOP. CALENT W. ZACHAN W SPACE IS CLEAR OF RISER		STATES 10 A CHARACTER AND A CH	USTONAL ENUS	Ð	CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS	FLOW RESTRICTOR (TEE)	APPROVED BY CITY ENGINEER DATE DATE DATE	XXX CKU AUG-XX-2015 FIGD7-20 XXX
NOTES: 1. PIPE SIZES A	ROUND SOLID COVER MARKED 2. OUTLET CAP	FRAME & LADDER OR STEPS DIAM. OFFSET, SEE NOTE 8. FRAME DIAM.	& COVER ELEV. PER PLAN. 4. PIPE SUPPOI STEPS OR LADDER. MATERIAL, A STEEL EXPAI SEE STD DWG 7-08.	CLEANOUT GATE: SHEAR GATE. 5. THE RESTRIC SEE STD DWG 7-21. ALUMINUM, C	INLET PIPE OR PIPES 6. OUTLET SHA	7. THE VERTICA SAME DIAM.	8. FRAME AND I A. CLEANOU B. CLIMB DOV	AND CLEA C. FRAME IS	9. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE: OUTLET PIPE	TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4".	10. MULTI-ORIFICE ELBOWS MAY BE LOCAT AS SHOWN OR ALL ON ONE SIDE OF RIS	TO ASSURE LADDER CLEARANCE.	AIN. 11. 6" MIN. DEPENDING ON DESIGN SPECIFICATION.		NEV
SEE	16"MAX.	6ª MIN.					S4" 54"	CATCH BASIN TYPE 2	DIAM. AS REQUIRED SEE STD DWG 7-07.	ATER-2' MIN. IG			21	PLAN	
		24	OVERFLOW ELEV. 10 PROVIDE DETENTION & OIL	PIPE SUPPORT(S): 3" X.090"	OUTLET PIPE	RESTRICTOR PLATE WITH	ORIFICE AS SPECIFIED NOT NEEDED IF ONLY FOR OIL POLLUTION CONTROL.				{		MAX.	AS SPECIFIED AS SPECIFIED ELBOW DETAIL	









I









## APPENDIX C

**Geotechnical Memorandum** 

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# HWA GEOSCIENCES INC.

Geotechnical & Pavement Engineering • Hydrogeology • Geoenvironmental • Inspection & Testing

September 8, 2017 HWA Project No. 2017-024-21

David Evans and Associates, Inc. 14432 SE Eastgate Way, Suite 400 Bellevue, Washington 98007

Attention: Scott Soiseth, P.E.

## SUBJECT: GEOTECHNICAL REPORT FOR SLIDE REPAIR Louis Thompson Road SE Sammamish, Washington

Dear Scott:

This report presents geotechnical recommendations, including soldier pile wall design parameters for the Louis Thompson Road landslide repair in Sammamish, Washington. We have incorporated comments from the design team teleconference on August 24, 2017 into our draft report dated August 8, 2017.

#### **PROJECT SCOPE AND AUTHORIZATION**

Our scope of work was performed in general accordance with our proposal letter dated February 10, 2017. Written authorization to proceed was provided by Scott Soiseth in a subconsultant agreement executed June 7, 2017. Our work thus far consisted of geologic reconnaissance of the slope below the existing soldier pile wall, advancing two borings to depths of approximately 100 feet, probing and hand holing along two field-generated profiles of the slope at the steepest eroded portions, performing engineering analyses for soldier pile wall design, and preparation of this report.

## **PROJECT BACKGROUND**

The slide is located on the southwest side of Louis Thompson Road just west of the intersection with 210th Place SE (see Vicinity Map, Figure 1). At this location, a steep-sided ravine along the west side of the road extends down approximately 30 to 50 vertical feet to a seasonal creek. The headwaters of the creek originate from a culvert which crosses beneath Louis Thompson Road about 100 feet southeast of the slide area. The creek flows northwest, approximately paralleling the road before flowing west toward Lake Sammamish. An existing soldier pile and lagging wall extending for about 225 feet along the top of the slope retains roadway fill through the slide area.

Erosion of the creek bed during periods of heavy rainfall has steepened the ravine, creating unstable conditions near the roadway. The existing 4- to 7-foot high soldier pile wall appears to retain fill placed during road construction. We understand storm

21312 30th Drive SE Suite 110 Bothell, WA 98021.7010

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water flowing over the retaining wall and down the slope from a blocked culvert on the east side of 210<sup>th</sup> Place SE triggered the initial sliding in late 2015. Sliding has undermined two portions of the wall's lagging, resulting in loss of soil behind one portion of the wall, damaging the guardrail and reducing the stability of the wall. Continued future deepening of the stream bed in the ravine and erosion and sloughing of loose soils in the slide area are likely to result in failure of the existing wall and loss of the eastbound traffic lane.

#### FIELD INVESTIGATION

We observed slope and surficial soil conditions in regards to the slide conditions and stream erosion issues. We obtained slope profiles using rod and transit at the two most deeply recessed portions of the slope where slides occurred. Depths of weathered soil on the slope (colluvium) were determined by hand probing with a <sup>1</sup>/<sub>2</sub>-inch diameter steel T-handled probe. The profile data was combined in our cross sections with survey data from top and bottom of the slope (provided by DEA) and subsurface conditions encountered in the boreholes. Our profiles are presented on Figures 3 and 4.

Two boreholes were drilled on June 27 through 29, 2017 by Holocene Drilling, Inc. of Puyallup, Washington under subcontract to HWA. The boreholes were drilled in the paved road shoulder behind the existing soldier pile wall (see Site and Exploration Plan, Figure 2).

The boreholes, designated BH-1 and BH-2, were drilled to depths of 100.5 and 96.5 feet, respectively, with a Mobile B-58 truck-mounted drill rig using a hollow-stem auger. Soil samples were collected at 2½- to 5-foot depth intervals per Standard Penetration Test (SPT) sampling methods, which consisted of using a 2-inch outside diameter, split-spoon sampler driven with a 140-pound hammer. During the test, each sample was obtained by driving the sampler up to 18 inches into the soil with the hammer free-falling 30 inches per stroke. The number of blows required for each 6 inches of penetration was recorded. The standard penetration resistance of the soil was calculated as the number of blows required for the final 12 inches of penetration. If a total of 50 blows was recorded within a single 6-inch interval, the test was terminated, and the blow count was recorded as 50 blows/number of inches of penetration. This resistance provides an indication of the relative density of granular soils and the relative consistency of cohesive soils.

All explorations were advanced under the full-time supervision and observation of an HWA engineering geologist. Soil samples obtained from the explorations were classified in the field and representative portions were placed in plastic bags. These soil samples were then taken to our Bothell, Washington, laboratory for further examination.

Pertinent information including soil sample depths, stratigraphy, soil engineering characteristics, and ground water occurrence was recorded and used to develop logs of each of the explorations. A legend of the terms and symbols used on the borehole logs is presented on Figure A-1, and the logs are presented on Figures A-2 and A-3.

The stratigraphic contacts shown on the borehole logs represent the approximate boundaries between soil types. Actual transitions may be more gradual. The ground water conditions

depicted are only for the specific dates and locations reported, and therefore, are not necessarily representative of other locations and times.

#### **GENERAL GEOLOGIC CONDITIONS**

The project is located within the Puget Lowland. The Puget Lowland has repeatedly been occupied by a portion of the continental glaciers that developed during the ice ages of the Quaternary period. During at least four periods, portions of the ice sheet advanced south from British Columbia into the lowlands of Western Washington. The southern extent of these glacial advances was near Olympia, Washington. Each major advance included numerous local advances and retreats, and each advance and retreat resulted in its own sequence of erosion and deposition of glacial lacustrine, outwash, till, and drift deposits. Between and following these glacial advances, sediments from the Olympic and Cascade Mountains accumulated in the Puget Lowland in lakes and valleys.

Geologic information for the project area was obtained from the *Geologic Map of the Issaquah Quadrangle, King County, Washington* (Booth and Minard, 1992). Per this map, near-surface deposits in the vicinity of the project alignment consist of soils associated with the Vashon Stade of the most recent glaciation (Fraser Glaciation). The geologic map indicates that the project area is underlain by glacial till and advance outwash, with the ravine having eroded through the till into the outwash.

#### **SUBSURFACE CONDITIONS**

Behind the existing soldier pile wall, boreholes BH-1 and BH-2 encountered approximately 2 to 4 feet of loose road embankment fill over medium dense, weathered till consisting of gravelly, sandy silt. Very dense Glacial Till was encountered at depths of 7 to 12 feet, over very dense gravelly sand (Advance Outwash) at depths of approximately 23 to 24 feet, to the full depths explored. Advance Outwash was also observed at the ravine bottom where it was exposed by stream channel erosion. Descriptions of the glacial soils are given below, and shown on the cross sections (Figures 3A and 3B). Drill advancement through the till and advance outwash was typically slow due to the very dense and gravelly soils, despite use of a heavy high-torque drill rig.

• **Glacial Till:** This unit consisted of very dense, olive brown, gravelly, sandy, SILT, gravelly, silty SAND and sandy, silty, GRAVEL. Locally, the upper portions of the till were weathered. Glacial till is the material which was deposited as a deforming bed along the sole of the glacial ice, as lodgment till. It consists of an unsorted mixture of clay, silt, sand and gravel, which is very dense, having been consolidated by the weight of greater than 3,000 feet of ice at this latitude. It is also known to contain scattered cobbles and boulders. This unit is locally referred to as "hardpan", because of its induration and an appearance like concrete. Generally, the till forms an impervious layer through which surface water cannot penetrate. Ground water is often perched on top of the till.

• Advance Outwash: Advance outwash consists of yellow brown to olive brown, clean to slightly silty, fine to medium SAND, with varying percentages of gravel. It was deposited in pro-glacial streams as the Vashon Stade ice advanced southward in Puget Sound. In general, the sediments are coarser at higher levels of the unit, because as the ice advanced, the streams deposited larger materials closer to the ice. Because these granular soils were overridden by the Vashon Stade ice, they are dense to very dense. They are quite permeable; however, they are not always water-bearing.

No free ground water was observed during drilling; however, wet cuttings were observed when drilling below 80 feet in borehole BH-1. Lenses of ground water seepage should be anticipated in excavations or drilled shafts. We expect ground water levels will vary depending on location, season, and the relative abundance of precipitation.

#### **CONCLUSIONS & RECOMMENDATIONS**

#### GENERAL

The existing soldier pile wall is partially undermined at two locations, and loss of soil behind it has occurred in one area. If not mitigated, the wall can fail with further slope erosion, even without further overflow of stormwater from the road. Over the long term, the slope below the roadway should be expected to erode until reaching an inclination as flat as 1<sup>3</sup>/<sub>4</sub>H:1V (Horizontal: Vertical) extending up from the streambed. Also, the streambed itself should be expected to deflate (scour) over time. Potential scour should be evaluated by others to establish a design base level for toe of slope.

Based on our study of the surface and subsurface conditions, there appears to be two basic options to stabilize the slide and prevent future damage to the roadway. Those options are:

- 1. Placing a culvert pipe in the stream bed at the bottom of the ravine, connecting it to the culvert pipe (which is the sole source of water to this portion of the stream), and partially filling the ravine to flatten its slopes and buttress the slide area; or
- 2. Construct a new soldier pile and lagging wall to support the slope.

Option #1 is relatively straightforward and would be much less expensive than option #2. We understand Option #1 would be difficult to permit. Option #2 has several potential variations as to:

- where to construct the wall,
- what size soldier piles to use,
- whether or not to use tiebacks, and
- how to construct the lagging.

We understand option #2 is likely to be easier to permit; and we have been directed to provide recommendations for design and construction of option #2.

Based on our subsurface exploration program and conversations with the design team, we recommend construction of a new soldier pile and lagging wall near the top of the slope; either between the soldier piles of the existing wall, or immediately down slope of the existing wall.

HWA GeoSciences Inc.

This location is best suited for constructability, as it can be more easily reached with construction equipment. Construction of a wall near the stream would likely require a temporary access road into the ravine for construction equipment, and would require a large volume of fill between the new wall and the top of the slope.

## SOLDIER PILE RETAINING WALL

We recommend that a new soldier pile wall be constructed at the top of the slope. For design purposes, we recommend assuming that future erosion will remove soils above a 1<sup>3</sup>/<sub>4</sub>H:1V (Horizontal:Vertical) line extending upslope from the bottom of the stream bed. We also recommend that future stream bed erosion be considered in establishing a design stream bed bottom elevation. For preliminary analyses, we have assumed the stream bed will scour to 3 feet below its existing level over the design life of the wall. Based on the profile in Figure 3, the estimated design wall height at that location would be about 14 feet. We expect the design wall height will vary with site geometry.

Based on the results of our reconnaissance of the existing slope, we recommend that the new wall parallel the existing wall for its full length. If necessary to shorten the length of the new wall, there appears to be less risk of future sliding at the southeast end of the existing wall, where the new wall could be about 40 feet shorter than the existing wall. Because of the presence of an older landslide and increased curvature and root distress in trees at the northwest end of the existing wall, we recommend that the new wall extend at least as far northwest as the existing wall.

We recommend that the wall be designed for an equivalent fluid pressure of 55 pounds per cubic foot. This assumes an at-rest condition where  $\phi = 40$  degrees,  $\gamma = 135$  pcf and  $k_0 = 0.36$ . Passive pressure against the embedded base of the soldier piles can be estimated using  $\phi = 40$  degrees,  $\gamma' = 72.6$  pcf, and  $k_p = 1.92$ . Assuming a wall friction of 20 degrees, these values result in a passive equivalent fluid pressure of 130 pcf.

In our opinion, support of the proposed soldier pile and lagging wall may require tiebacks.

Soldier piles should extend at least 12 feet below the 1<sup>3</sup>/<sub>4</sub>H:1V line that establishes the bottom of the free-standing design wall height. Deeper penetration may be needed to provide passive kickout resistance for lateral loads on the lower portion of the wall, and to provide capacity to resist the vertical component of tieback loads.

Earth pressure diagrams for tied back and cantilevered soldier pile walls are shown on Figure 5. Earth pressures and resistance factors for use in strength and service limit state design are provided. The at-rest pressure is greater than the active plus seismic earth pressures. Therefore, if the static loading cases (strength and service) are satisfied the wall will be adequate for the seismic (Extreme I) loading condition.

A nominal bearing pressure of 1,800 psf may be used to calculate the vertical capacity of soldier piles to resist the vertical component of tieback loads. This pressure would act over the surface area of the embedded portion of the concrete in which the soldier pile is embedded, below the design free-standing wall height. A resistance factor of 0.55 should be applied to the nominal bearing pressure for the strength limit state.

#### Soldier Piles & Lagging

A drawing illustrating a typical tied-back soldier pile and lagging wall is presented on Figure 6.

Tied-back soldier pile and lagging walls are typically constructed with 10- to 12-inch diameter H-piles spaced 6 to 8 feet apart along the wall alignment. Spacings will depend on the loads and tieback capacity. The piles are placed in vertical drilled holes and the holes are backfilled with lean concrete. Excavation is made on the downslope side of the wall and lagging is installed between the flanges of the piles as the excavation proceeds. Lean concrete must be chipped away to allow lagging installation.

Lagging can consist of treated timber (typically 4 x 12 timber beams), precast concrete panels or shotcrete. Where shotcrete is used, the shotcrete should be applied as the excavation is made, so that no more than 4 or 5 vertical feet of the exposed soil between piles is open at a time. Drainage mat and steel reinforcing should be placed between soldier piles before application of the shotcrete.

A drainage mat such as Miradrain 6200 should be placed behind the lagging between all soldier piles to facilitate drainage and prevent hydrostatic pressures from acting on the wall. The drainage mats should be placed such that flow of intercepted water is continuous to the bottom of the wall. The water flowing down the drainage mat should be collected in a pipe and conveyed via tightline to the stream bed.

#### Tiebacks

Tiebacks are installed in more-or-less horizontal rows as the excavation is stepped downward. The rows can be constructed roughly parallel to the top of the wall. Tiebacks are typically installed by cutting into the slope to form a bench at the appropriate level to work from. The tiebacks should be angled downward 20 to 30 degrees below horizontal. Although the full length of the tieback is grouted, a bond breaker such as a grease coating protected by plastic sheathing is used in the no-load zone. This forces the tieback to develop its capacity in the soils behind the no-load zone.

For design purposes, we recommend the nominal pullout capacity of the tieback be estimated based on 1,500 pounds per square foot of anchor surface area. A resistance factor of 0.65 should be applied to the nominal pullout capacity for the strength limit state. Verification anchors should be installed prior to beginning installation of the production anchors. The verification anchors should be load tested to at least 150 percent of the tieback's factored design load and held for at least one hour to verify the anchor design, installation methods, equipment and materials. Each production tieback should be proof loaded to at least 100 percent of its factored design load, held for at least 10 minutes, and then locked off at its design capacity.

Actual tieback design, including grout mix design, anchor length, tendon design, and drilling and grouting methods should be designed by the contractor. The contractor should then be responsible for achieving the design capacity of each anchor.

#### **Constructability Issues**

The glacial till and advance outwash soils were drilled successfully with 8½-inch O.D. hollow stem auger; however, drill advancement was typically much slower than anticipated for these soil units. The presence of cobbles or boulders embedded in the very dense soil should be expected.

We did not observe artesian ground water conditions in the borings. However, perched ground water should be anticipated locally, and the contractor should be prepared to tremie concrete in soldier pile shafts that accumulate more than 1 foot of water.

## STRUCTURAL FILL AND COMPACTION

Any space behind the lagging should be backfilled with clean 3/8-inch pea gravel. The pea gravel should be compacted with a concrete hose vibrator.

Backfill placed in front of the proposed wall where excavation is required for lagging installation and the upper two feet of fill placed behind the new retaining wall should consist of 1<sup>1</sup>/<sub>4</sub> inch minus crushed ledge rock (100% fractured faces). It should be compacted to a dense and unyielding condition.

#### **ADDITIONAL CONSIDERATIONS**

A curb should be placed along the edge of the roadway to prevent surface runoff from flowing onto the slope. We recommend the curb be at least 6 inches high.

## **CONDITIONS AND LIMITATIONS**

We have prepared this report for David Evans & Associates, Inc. and the City of Sammamish for use in design and construction of this project. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented herein should not be construed as a warranty of the pavement and subsurface conditions. Experience has shown that pavement, soil, and ground water conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study of this nature. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, HWA should be notified for review of the recommendations of this report, and revision of such if necessary. If there is a substantial lapse of time between submission of this report and the start of construction, or if conditions change due to construction operations along the project alignment, it is recommended that this report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse.

This report is issued with the understanding that it is the responsibility of the owner, or the owners' representative, to ensure that the information and recommendations contained herein are brought to the attention of the appropriate design team personnel and incorporated into the project plans and specifications, and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field. HWA is available to monitor

construction to evaluate soil and ground water conditions as they are exposed and verify that construction is accomplished in accordance with the specifications.

Within the limitations of scope, schedule and budget, HWA attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, express or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or ground water at this site.

HWA does not practice or consult in the field of safety engineering. We do not direct the contractor's operations, and cannot be responsible for the safety of personnel other than our own on the site. As such, the safety of others is the responsibility of the contractor. The contractor should notify the owner if he considers any of the recommended actions presented herein unsafe.



We appreciate the opportunity to be of service. Should you have any questions regarding this report, or require additional services, please contact us.

Sincerely,

#### HWA GEOSCIENCES INC.



Ralph N. Boirum, P.E. Geotechnical Engineer, Principal



Brad W. Thurber, L.G., L.E.G. Senior Engineering Geologist

#### Attachments:

Figure 1	Vicinity Map
Figure 2	Site and Exploration Plan
Figure 3	Cross Section A-A'
Figure 4	Cross Section B-B'
Figure 5	Earth Pressure Diagrams
Figure 6	Typical Soldier Pile Wall with Tiebacks
Appendix A	Borehole Logs BH-1 and BH-2
Appendix B	Laboratory Data

#### **References:**

Booth, D.B. and J.P. Minard, 1992, *Geologic Map of the Issaqual* 7.5' *Quadrangle, King County, Washington:* USGS Miscellaneous Field Studies Map MF-2206.











#### DESIGN PROFILE

NOT TO SCALE

#### General

- 1. All pressures shown are in units of pounds per square foot (psf). Wall heights are in units of feet.
- 2. At-rest earth pressure shown should be applied across the pile spacing above the base of the wall and applied over one pile diameter below the lagging. Passive earth pressure below the base of the wall should be applied over two pile diameters.
- 3. Loading for the strength limit state should use the greater of the active earth pressure times the load factor or the nominal at-rest pressure. For the soil parameters provided the nominal at-rest pressure controls.
- 4. Wall deflections computed for the service limit state should assume at-rest pressures are applied to the wall.
- 5. Earth pressures shown assume erosion will occur between the stream and the wall down to varying elevations. These elevations are determined assuming a 1.75H:1V line that establishes the bottom of the free-standing design wall-height. This is the elevation where passive earth pressures are assumed to begin.
- 6. The earth pressures account for a traffic surcharge load of 250 psf.
- 7. All earth pressures assume a level back slope.
- 8. The worst-case scenario for water level at the site assumes the soil below the wall is saturated. Therefore, the buoyant unit weight of the material on the passive side of the wall was used to determine passive resistance.
- 9. The active pressure for the seismic case is less than the at-rest earth pressure. Therefore, if the static loading cases (strength and service) are satisfied the wall will be adequate for the seismic (Extreme I) loading condition.
- 10. For strength limit state design, a resistance factor ( $\varphi$ ) of 0.75 should be applied to the passive earth pressures shown. For service limit state design, a resistance factor ( $\varphi$ ) of 1.0 should be used.



#### CANTILEVERED SOLDIER PILE WALL

NOT TO SCALE

#### **Cantilevered Soldier Pile Wall**

1. Depth of embedment should be calculated using the pressure distributions shown.

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Louis Thompson Rd Slide Repair Sammamish, Washington

139(D)

PASSIVE EARTH PRESSURES

S/2017 PROJECTS/2017-024-21 LOUIS THOMPSON ROAD SE SLIDE REPAIR/CAD 2017-024/HWA 2017-024 EP.DWG <Fig X> Plotted: 9/8/2017 3:23 PM

NOT TO SCALE

AT REST EARTH PRESSURES

20 - 30'

48.6(H) H/3

#### Soldier Pile Wall with One Row of Tiebacks

48.6(H)+26.1(D)

TRAFFIC SURCHARGE

- 3. The allowable capacity of the tieback should be estimated based on 1,000 psf of anchor surface area beyond the no-load zone.
- 4. Actual tieback design, including grout mix design, anchor length, tendon design, and drilling and grouting methods should be designed by the contractor. The contractor should then be responsible for achieving the design capacity of each anchor.
- 5. Depth of soldier pile embedment should be at least 12 feet below the 1.75H:1V line that establishes the bottom of the free-standing design wall height.

1. The tiebacks should be angled downward 20 to 30 degrees from the horizontal.

SOLDIER PILE WALL WITH

ONE ROW OF TIEBACKS

2. Although the full length of the tieback is grouted, a bond breaker such as a grease coating protected by plastic sheathing should be used in the no-load zone.



S:\2017 PROJECTS\2017-024-21 LOUIS THOMPSON ROAD SE SLIDE REPAIR\CAD 2017-024\SOIL NAIL WALL 1.DWG <Layout1> Plotted: 8/8/2017 2:05 PM

# **APPENDIX A**

**EXPLORATION LOGS**
### RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N-VALUE

	COHESIONLESS SO	DILS		COHESIVE SOIL	S
Density	N (blows/ft)	Approximate Relative Density(%)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	0 - 15	Very Soft	0 to 2	<250
Loose	4 to 10	15 - 35	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	35 - 65	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	65 - 85	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	85 - 100	Very Stiff	15 to 30	2000 - 4000
			Hard	over 30	>4000

#### USCS SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			0	GROUP DESCRIPTIONS		
Coarse Grained	Gravel and Gravelly Soils	Clean Gravel (little or no fines)	GW	Well-graded GRAVEL		
Soils	More than 50% of Coarse Fraction Retained	Gravel with Fines (appreciable	GM GM	Silty GRAVEL		
	on No. 4 Sieve	amount of fines)	GC	Clayey GRAVEL		
More than 50% Retained on No. 200 Sieve Size	Sand and Sandy Soils	Clean Sand (little or no fines)	SW SP	Well-graded SAND Poorly-graded SAND		
	50% or More of Coarse Fraction Passing No. 4 Sieve	Sand with Fines (appreciable amount of fines)	SM	Silty SAND		
			sc //	Clayey SAND		
Fine Grained Soils	Silt and Clay	Liquid Limit Less than 50%	ML	SILT		
			CL	Lean CLAY		
			OL	Organic SILT/Organic CLAY		
50% or More Passing No. 200 Sieve Size	Silt and Clav	Liquid Limit 50% or More	МН	Elastic SILT		
			СН	Fat CLAY		
			он	Organic SILT/Organic CLAY		
	Highly Organic Soils		PT	PEAT		

#### TEST SYMBOLS

	%F	Percent Fines	
	AL	Atterberg Limits:	PL = Plastic Limit LL = Liquid Limit
	CBR	California Bearing R	atio
	CN	Consolidation	
	DD	Dry Density (pcf)	
	DS	Direct Shear	
	GS	Grain Size Distributi	on
	К	Permeability	
	MD	Moisture/Density Re	lationship (Proctor)
	MR	Resilient Modulus	
	PID	Photoionization Dev	ice Reading
	PP	Pocket Penetromete Approx. Compr	er essive Strength (tsf)
	SG	Specific Gravity	
	тс	Triaxial Compressio	n
	ΤV	Torvane Approx. Shear	Strength (tsf)
	UC	Unconfined Compre	ssion
		SAMPLE TYPE	SYMBOLS
	М	2.0" OD Split Spoon	(SPT)
		(140 lb. hammer wit	h 30 in. drop)
	$\bot$	Shelby Tube	
		3-1/4" OD Split Spor	on with Brass Rings
	$\bigcirc$	Small Bag Sample	
		Large Bag (Bulk) Sa	mple
	Ш	Core Run	
	Ζ	Non-standard Penet (3.0" OD split spoon	ration Test )
	C	GROUNDWATE	R SYMBOLS
7	<b>⊻</b>	Groundwater Level (r time of drilling)	neasured at
1	Ţ	Groundwater Level (r	measured in well or

### COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE	
Boulders	Larger than 12 in	-
Cobbles	3 in to 12 in	
Gravel Coarse gravel Fine gravel	3 in to No 4 (4.5mm) 3 in to 3/4 in 3/4 in to No 4 (4.5mm)	
Sand Coarse sand Medium sand Fine sand	No. 4 (4.5 mm) to No. 200 (0.074 mm) No. 4 (4.5 mm) to No. 10 (2.0 mm) No. 10 (2.0 mm) to No. 40 (0.42 mm) No. 40 (0.42 mm) to No. 200 (0.074 mm)	
Silt and Clay	Smaller than No. 200 (0.074mm)	

COMPONENT PROPORTIONS		
RANGE	DESCRIPTIVE TERMS	

PROPORTION RANGE	DESCRIPTIVE TERMS	
< 5%	Clean	
5 - 12%	Slightly (Clayey, Silty, Sandy)	
12 - 30%	Clayey, Silty, Sandy, Gravelly	
30 - 50%	Very (Clayey, Silty, Sandy, Gravelly)	
Components are arranged in order of increasing quantities.		

NOTES: Soil classifications presented on exploration logs are based on visual and laboratory observation. Soil descriptions are presented in the following general order:

Density/consistency, color, modifier (if any) GROUP NAME, additions to group name (if any), moisture content. Proportion, gradation, and angularity of constituents, additional comments. (GEOLOGIC INTERPRETATION)

Please refer to the discussion in the report text as well as the exploration logs for a more complete description of subsurface conditions.



Louis Thompson Road SE Slide Repair Sammamish, Washington

#### MOISTURE CONTENT

open hole after water level stabilized)



FIGURE:

### LEGEND OF TERMS AND SYMBOLS USED ON EXPLORATION LOGS

PROJECT NO.: 2017-024-21

A-1



PROJECT NO.: 2017-024-21

A-2



PROJECT NO.: 2017-024-21

A-2



PROJECT NO.: 2017-024-21

A-2



PROJECT NO.: 2017-024-21

A-3



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PAGE: 2 of 3

FIGURE:

2017-024-21

PROJECT NO .:

A-3

BORING-DSM 2017-024-21.GPJ 7/19/17



A-3

## **APPENDIX B**

## LABORATORY DATA



Sammamish, Washington

PROJECT NO.: 2017-024-21 B-1 FIGURE:

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PROJECT NO.: 2017-024-21 FIGURE: B-2

## HWA GEOSCIENCES INC. Geotechnical & Pavement Engineering • Hydrogeology • Geoenvironmental • Inspection & Testing

### **TECHNICAL MEMORANDUM**

TO: Nathan Wong, P.E. / David Evans & Associates

PREPARED BY: Brad Thurber, L.E.G.; Ralph Boirum, P.E. / HWA GeoSciences Inc.

SUBJECT: Suitability of Storm Water Infiltration at Biofiltration Cell Locations Louis Thompson Road Sammamish, Washington **PROJECT NO.:** 2017-024-21

DATE: December 21, 2017

Per your request, HWA evaluated the feasibility of infiltration along the north side of Louis Thompson Road between 210th Place SE and 211th Place SE. We understand construction of two biofiltration cells is being considered in the existing roadside ditch, to provide storm water quality treatment and some degree of detention or infiltration. The purpose of our work was to evaluate the soil conditions at the proposed cell locations and evaluate the potential for infiltration of storm water.

### Site Conditions

On December 8, 2017 two HWA geologists probed and excavated hand holes in and along the ditch to evaluate soil conditions. They also performed a reconnaissance of the steep slope of the nearby ravine located downslope of the road.

Utility markings indicate that a water main extends down the center of the ditch at the locations proposed for the biofiltration cells. We understand the water main was potholed in two locations with a vactor-truck and found to be as little as 26 inches below the ditch bottom. Also, we understand that a 4-inch gas main runs long the shoulder of the road at the edge of the ditch.

The ditch bottom was probed with a <sup>1</sup>/<sub>2</sub>-inch diameter, steel T-handled rod. The probing depths ranged from 2 to 6 inches in the proposed west cell, and 4 to 9 inches in the east cell. The limited depth that could be probed indicates that the soils are dense.

Two handholes were dug at each of the proposed cell locations- one in the bottom of the ditch and one at the top of the ditch 3 to 4 feet above the ditch bottom. The hand holes were excavated to depths of 12 to 24 inches. Soils encountered in the bottom of the ditch were presumed to be trench backfill, and consisted of dense, yellow-brown, silty, fine to coarse gravelly sand. 21312 30th Drive SE The ditch was dry at time of exploration, and no ground water was observed. There had been no rain since December 3rd.

Suite 110 Bothell, WA 98021.7010

Tel: 425.774.0106 Fax: 425.774.2714 www.hwageo.com December 21, 2017 HWA Project No. 2017-024-21

The handholes above the ditch's cut slope, approximately 3 to 4 feet above the ditch bottom, encountered 8 inches of loose, dark brown, silty, gravelly sand, moist (topsoil) over medium dense, orange-brown, silty, gravelly, fine to medium sand. The presumed trench backfill in the bottom of ditch appeared similar to the weathered soil in the ditch cut, indicating the trench had been backfilled with native material.

### **Slope Reconnaissance**

The ravine slopes downgradient from the ditch line were traversed to look for evidence of ground water seepage. We did not observe seepage on the slopes, nor signs of past seepage, from the ravine head end to the second culvert outfall west of the soldier pile wall. As reported previously, the slide which occurred at the soldier pile wall was due to overtopping of the wall by stormwater overflowing from a blocked culvert at 210<sup>th</sup> Place SE. Also, we did not observe potential perching layers in the two borings we conducted above the wall in June 2017, to the depths explored of around 100 feet.

### **Conclusions**

The results of our evaluation indicate that the native soils at the proposed biofiltration cell locations contain considerable silt and are sufficiently dense to be low in permeability. The infiltration rate of these soils is estimated to be less than 0.1 inches per hour. In our opinion, these soils will not allow significant infiltration of storm water. Since very little water will infiltrate through these soils, there is little risk that operation of the biofiltration cells would cause increased seepage and instability on nearby slopes.

The backfill in existing utility trenches, and pipe bedding materials along these utilities are likely to be much more permeable than the undisturbed native soils. Water from the biofiltration cells could flow along existing utility trenches, possibly causing undesirable seepage at locations down-gradient. As a result, it may be desirable to limit the potential for infiltration into existing trench backfill at the biofiltration cell locations.

### APPENDIX D

Puget Sound Clean Air Agency Asbestos Notice of Intent (This page left blank intentionally.)

# pscleanair.org Puget Sound Clean Air Agency

### **Puget Sound Clean Air Agency** 1904 3rd Ave Ste 105 Seattle WA 98101-3317 206.689.4058 • 1.800.552.3565 ext. 4058 fax 206-689-4073

Date Received:

Agency Use Only

Agency Use Only

**Asbestos Annual Notice of Intent** 

A. For Calendar Year:	_ Annual Noti	ce of Intent fee is \$1	1000 and is for <u>a calendar year only</u>	
B. Property owner:				
Mailing Address:			Contact Person:	
City:	State:	Zip:	Phone No.:	
C. Type of Material Anticipated to be Removed: <u>Total amount of asbestos-containing material</u> for all asbestos projects from each structure, vessel, or building in a calendar year <u>under this section is less than 260 linear feet</u> on pipes <u>and/or less than 160 square feet</u> on other components. Thermal System Insulation:  Boiler Insulation  Duct Insulation  Pipe Insulation  HVAC Gaskets  Valve Packing Other:				
Surfacing Materials: Fire Proofing Plaster/Acoustical Paints Taping Compounds Textured Coatings				
Miscellaneous Materials: Ceiling Tile Cement Board Cement Pipe Friable Flooring Friable Roofing				

D.	<b>List all site addresses</b> for each structure, vessel and building included in this notification, attaching additional information on separate sheets:
1.	
2.	
3.	
4.	
5.	
6.	
7.	

E. Training requirements: Asbestos work will be performed by: 🗌 Certified Asbestos Contractor; 📋 In house Staff; or 🗋 Both All asbestos project work shall be performed by persons trained and certified in accordance with the standards established by the Washington State Department of Labor and Industries, the federal Occupation Health & Safety Administration, or the United States Environmental Protection Agency, whichever has jurisdiction over the site where the work is performed.

F. I do hereby certify that the informand supplemental data described accurate and complete.	Agency Use Only		
Signature	Representing	Date	Reviewed By

### **Asbestos Annual Notice of Intent**

### General Requirements:

Annual Fee of \$1000, Check or Purchase Order, must be submitted with Notice.

A property owner may file one Annual Notice of Intent for asbestos projects to be conducted on one or more structures, vessels, or buildings during each calendar year <u>if all of the following conditions are met</u>:

- 1. The Notice is filed with the Agency <u>before commencing work on any asbestos project</u> <u>included in an annual notification</u>, and
- The total amount of asbestos-containing material for all asbestos projects from each structure, vessel, or building in a calendar year is less than 260 linear feet on pipes and/or less than 160 square feet on other components, and
- 3. The property owner submits quarterly written reports to the Control Officer on Agencyapproved forms\* within 15 days after the end of each calendar quarter.

\*Form 66-148 Asbestos Annual Quarterly Report is available on pscleanair.com

### Filing Instructions:

An Asbestos Annual Notice of Intent must be submitted on this form. Notices containing incomplete or incorrect information will be returned to the applicant. All structures, vessels, or buildings to be covered by the Annual notice must be listed on this form or attached to this form as supplemental information.

### Box A: For Calendar Year

Specify the current calendar year for which the annual is being submitted. Notices are not pro-rated from the date of submittal.

### **Box B: Property Owner**

Specify the property owner's name, complete mailing address (please print clearly, this will be the return mailing label), contact person, and the telephone number.

### Box C: Type of Material to be Removed

Check the appropriate boxes indicating the type(s) of asbestos-containing material that is typically involved in the asbestos project(s).

### Box D: List All Applicable Structures, Vessels or Buildings

List the site addresses, or specific location if no address is applicable, for all structures, buildings or vessels to be covered by the Asbestos Annual Notice of Intent. In addition, include any names, numbers or other designations that help identify the structures, buildings or vessels.

### **Box E: Training Requirements:**

Check the appropriate box indicating who will be performing the asbestos removal projects under this notification.

### Box F: Signature

Sign the Asbestos Annual Notice of Intent certifying the accuracy and completeness of the information provided on the form.