



**CITY OF SNOHOMISH
WASHINGTON**

**SPECIFICATIONS, PROPOSAL AND
CONTRACT DOCUMENTS**

FOR

**FAIRVIEW STREET STORMWATER IMPROVEMENT
PROJECT**

**ISSUED FOR BID
MAY 2015**

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**CITY OF SNOHOMISH
FAIRVIEW STREET STORM DRAINAGE IMPROVEMENT PROJECT
NOTICE OF CALL FOR BIDS**

NOTICE IS HEREBY GIVEN, that sealed bids shall be received and recorded by the City Clerk at City Hall, 116 Union Street, Snohomish, WA 98290, until 2:00 PM, Pacific Coast Time, Tuesday, June 2, 2015, and then publicly opened and read aloud.

The work of this contract provides for the construction of approximately 250 lineal feet of buried 12.75-inch O.D. fuse-welded HDPE storm drain pipe, 50 lineal feet of 12-inch ductile iron pipe, concrete pipe anchors, associated manholes, removal of structures and obstructions, clearing, grubbing, erosion control, traffic control, utility conflict resolution, miscellaneous surface restoration, and other related items, all as located within the City of Snohomish's corporate limits, easements, and public right-of-way, as shown on the drawings and specified in these technical provisions.

A pre-bid walk through will be held on-site at 10:00 AM on Wednesday, May 20, 2015. Park in the Maple Street right of way at 1316 Maple Avenue, Snohomish, WA 98290.

Project Title: **City of Snohomish Fairview Street Storm Drainage Improvement Project**

Engineer's Estimate Range: \$100,000 - \$150,000

Plans, specifications, addenda, and a plan holders list for this project are available on-line through Builders Exchange of Washington, Inc. at <http://www.bxwa.com>; 2607 Wetmore Avenue, Everett, WA 98201-2929, (425) 258-1303, Fax (425) 259-3832. Informational copies of any available maps, plans and specifications are on file for inspection online through the City's website at <http://www.ci.snohomish.wa.us/105/RFPs> and in the office of the City of Snohomish Public Works Engineering Department, located at 112 Union Avenue, Snohomish, WA 98290.

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check or surety bond in an amount equal to five percent (5%) of the grand total amount of such bid proposal. NO BID SHALL BE CONSIDERED UNLESS ACCOMPANIED BY SUCH BID PROPOSAL DEPOSIT. If the successful bidder does not enter into a contract and file a performance and payment bond and the required insurance certificates, with the City of Snohomish within ten (10) working days after Notice of Award of Bid, the amount of the bid deposit shall be forfeited to the City of Snohomish. Unsuccessful bidders' deposits will be returned upon City's execution of contract documents or rejection of all bids.

A one hundred percent (100%) Contractor's Performance and Payment Bond is required. The bond must be delivered to the Snohomish City Clerk within ten (10) working days after notification of the award to the successful bidder. The Bond must be approved by City officials before the contract award is final. A Contract is required and must be executed and returned to

the City of Snohomish within ten (10) working days after notification of award. Approval of the contract by City officials is required before the contract award is final.

A certificate of liability insurance with \$1,000,000 single event and \$3,000,000 aggregate limits for this project must be furnished to the City of Snohomish within ten (10) working days after Notice of Award of Bid. This insurance certificate shall also specifically name the City of Snohomish as an additional insured. The successful bidder may not commence work under this contract until all required insurance coverage has been approved by the City.

The City of Snohomish reserves the right to reject any or all bids, and to waive irregularities or informalities in the bid or in the opening. The City of Snohomish reserves the right to delete portions of the work.

No bidder may withdraw his bid after the hour set for the opening thereof, or before award of contract, unless said award is delayed for a period exceeding sixty (60) calendar days.

The bidder further agrees to begin work within ten (10) working days after Notice to Proceed has been issued by the City of Snohomish. The Contractor has thirty (30) working days to complete the construction of the project. Payment of liquidated damages will be made by the Contractor to the City in the amount specified in the Contract if the construction work is not physically completed within the allotted working days, in accordance with Section 1-08.9 of the Standard Specifications.

Bid package and technical related questions can be directed to Max Selin, P.E., Senior Utilities Engineer, at (360) 282-3196.

Dated this 14th day of May, 2015

City of Snohomish, Washington

BY:

Torchie Corey, City Clerk

INFORMATION FOR BIDDERS

BIDS will be received by the CITY OF SNOHOMISH (herein called the "OWNER") at the time and location set forth in the Call for Bids herein before and then at said office publicly opened and read aloud.

Each BID must be submitted in a sealed envelope addressed to the CITY OF SNOHOMISH, ATTN: CITY CLERK, 116 Union Ave., Snohomish, WA, 98290. Each sealed envelope containing a BID must be plainly marked on the outside as BID for **FAIRVIEW STREET STORM DRAINAGE IMPROVEMENT PROJECT**. The envelope should bear on the outside the name of the BIDDER, his address, his license number if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at the above address.

All BIDS must be made on the required PROPOSAL FORM. All blank spaces for BID prices must be filled in, in ink or typewritten, and the PROPOSAL FORM must be fully completed and executed when submitted. Only one copy of the PROPOSAL FORM is required.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within sixty (60) days after the actual date of the opening thereof.

Before submitting its proposal, the BIDDER shall examine the site of the work and review the drawings and specifications including ADDENDA and ascertain for themselves the work required and all of the physical conditions in relation thereto. Failure to take this precaution will not release the successful BIDDER from entering into contracts nor excuse the BIDDER from performing the work in strict accordance with the terms of the contract. No verbal statement made by any officer, agent, or employee of the OWNER, in relation to the physical conditions pertaining to the site of the work, will be binding on the OWNER during the gathering of information for proposal preparation by each BIDDER. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

Each BID must be accompanied by a BID deposit payable to the OWNER for five percent (5%) of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the deposits of all except the three lowest responsible BIDDERS. When the Agreement is executed, the deposits of the remaining unsuccessful BIDDERS will be returned.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance and payment bond within ten calendar days after the date on the NOTICE OF AWARD. The performance and payment bond in the amount of 100 percent of the CONTRACT PRICE, with a corporate surety approved by the OWNER, will be required for the faithful performance of the contract. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and bond forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may at his option consider the BIDDER in default; in which case the BID deposit accompanying the bid shall become the property of the OWNER.

The OWNER, within 10 days of receipt of acceptable bond and Agreement signed by the party to whom the Agreement was awarded, shall sign the Agreement within such period.

CONTRACTOR shall not commence work until a NOTICE TO PROCEED has been issued by the OWNER.

The OWNER may make such investigations as he deems necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER, in the OWNER'S discretion, that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID.

The low BIDDER must supply the names and addresses of major material suppliers and subcontractors when requested to do so by the OWNER.

The City of Snohomish reserves the right to delete portions of the work.

Bid Package and technical related questions can be directed to the Sr. Utilities Engineer, Max Selin, PE, at (360) 282-3196.

CITY OF SNOHOMISH - BID PROPOSAL

TO: City of Snohomish
Attn: City Clerk
116 Union Street
Snohomish, WA 98290

The bidder declares that he or she has carefully examined the contract documents for the project; that he or she has personally visited the sites; that he or she has satisfied himself or herself as to the quantities of work involved, including materials and the equipment and conditions of work involved, surveying necessary for the project, and including the fact that the description of the quantities of work and materials as included herein, is brief and intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the contract documents and that this proposal is made according to the contract documents, which are hereby made a part of this proposal. The City of Snohomish reserves the right to delete portions of the work.

The bidder declares that he or she has exercised his or her own judgment regarding the interpretations of the specifications contained within the construction documents and has utilized all data that he or she believes pertinent in arriving at his or her conclusions.

The bidder agrees to hold his or her bid proposal open for sixty (60) days after the receipt of bids by the City.

The bidder agrees that if this proposal is accepted, he or she will, within ten (10) working days after notification of acceptance, execute a contract in the form included in the construction documents with the City of Snohomish, and will, prior to the time of execution of the contract, deliver to the City of Snohomish a performance and payment bond and a Certificate of Insurance and as required therein, and will, furnish all machinery, tools, apparatus, and other means of construction, and do the work in the manner, in the time, and according to the methods specified in the contract documents.

The bidder further agrees, if awarded the contract, to begin work within ten (10) working days after the date of notice to proceed and to complete the construction within thirty (30) working days as described in Section 1-08.5 in the Special Provisions included herein.

In the event the bidder is awarded the contract and shall fail to complete the work within the time limit or extended time limit agreed upon as more particularly set forth in the contract documents, liquidated damages shall be paid to the owner per the specifications contained in the contract documents.

The bidder proposes to accept as full payment for the work proposed herein the amount computed under the provisions of the contract documents. This amount shall be based on actual quantities of material placed and work performed. Bidder agrees that the unit prices represent a true measure of the labor and material required to perform the work, including all allowances for overhead and profit for each type of work called for in these contract documents.

**BID PROPOSAL
FAIRVIEW STREET STORM DRAINAGE IMPROVEMENT PROJECT
CITY OF SNOHOMISH
NOTICE OF CALL FOR BIDS**

Note: Unit prices for all items, all extensions, and the total amount bid must be shown. 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 entered in ink.

BID SCHEDULE

ITEM	SPEC NO.	DESCRIPTION	QTY	UNITS	UNIT PRICE	AMOUNT
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PREPARATION

1	1-09	MOBILIZATION AND DEMOBILIZATION	1	LS		
2	1-07.15(1)	SPCC PLAN	1	LS		
3	2-02.5	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS		
4	1-05.4(2)	SURVEYING AND STAKING	1	LS		
5	2-01.5	CLEARING AND GRUBBING	1	LS		
6	8-01	TESC	1	LS		

GRADING

7	2-03	UNSUITABLE FOUNDATION EXCAVATION INCLUDING HAUL	10	CY		
8	2-03	FOUNDATION MATERIAL	50	CY		
9	2-03	OVER EXCAVATION INCLUDING HAUL	10	CY		

SURFACING AND PAVEMENT

11	5-04	ASPHALT PATCHING (6-INCH)	20	SY		
12	5-04	ASPHALT SAW CUT (6-INCH)	75	LF		
13	5-04	ASPHALT REMOVAL INCLUDING HAUL	20	SY		

CONCRETE

14	8-04	CONCRETE CURB AND GUTTER	50	LF		
15	8-04	CONCRETE SIDEWALK	12	SY		
16	7-04.5	CONCRETE ANCHOR BLOCK	2	EA		
17	8-04	CONCRETE DRIVEWAY	1	EA		

UTILITIES

18	7-04.5	12.75 IN. O.D. HDPE STORM SEWER PIPE,	260	LF		
19	7-04.5	12-INCH DI STORM DRAIN PIPE	45	LF		
20	7-08.5	TRENCH EXCAVATION SAFETY SYSTEMS	1	LS		
21	9-03.14(1)	IMPORT TRENCH BACKFILL	300	CY		
22	9-03	2-1/4" MINUS ROCK	100	TN		
23	9-03	1-1/4" MINUS ROCK	100	TN		
24	8-15.5	QUARRY SPALLS	50	TN		
25	4-04.5	5/8" MINUS CRUSHED SURFACING TOP COURSE	200	TN		
26	7-05.5	SADDLE MANHOLE - 60-INCH SADDLE WITH FRAME AND SOLID	1	EA		
27	7-05.5	CATCH BASIN TYPE 2 – 60 INCH WITH FRAME AND SOLID GASKETED LID	2	EA		
28	7-05	CONNECT TO EXISTING MANHOLE	1	EA		

TRAFFIC

29	1-10.4(1))	PROJECT TEMPORARY TRAFFIC CONTROL	1	LS		
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MISCELLANEOUS

30	1-07	RESTORATION, TRIMMING AND CLEANUP	1	LS		
31	1-04.4(1)	MINOR CHANGES	1	F.A.	\$5,000	\$5,000
					Subtotal Bid Items 1-31	
					8.8% WSST	
					Total Bid	

RECEIPT OF ADDENDA

Receipt of the following Addenda to the Contract Documents is hereby acknowledged

Addendum #	Date of Receipt	Signed Acknowledgement

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

BID PROPOSAL SIGNATURE SHEET

The undersigned bids for complete construction of the following project: **Fairview Street Storm Drainage Improvement Project** as described in the contract documents. The bidder proposes to accept as full payment for the work proposed herein; the amount computed under the provisions of the contract documents.

NOTE: The City reserves the right to accept or reject any and all bids as determined by the City.

TOTAL:

Total Bid Including Applicable Tax	\$
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Contractor (Firm Name)

Signature

Address

Name & Title (printed)

Fax
Phone & Fax Number

Date of Signing

Washington State Contractor's
Registration Number

Indicate whether contractor is partnership
corporation, or sole proprietorship

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check or surety bond in an amount equal to five percent (5%) of the bid proposal. **NO BID SHALL BE CONSIDERED UNLESS ACCOMPANIED BY SUCH BID PROPOSAL DEPOSIT.**

Bid proposal to be submitted in a sealed envelope marked "**BID ENCLOSED**" FOR Fairview Street Storm Drainage Improvement Project.

WASHINGTON STATE SALES TAX. The work on this contract is to be performed upon lands whose ownership obligates the Contractor to pay sales tax. The provisions of Section 1-07.2(2) apply.

COMPLETION TIME AND LIQUIDATED DAMAGES

It is understood and agreed that all work required to complete this Project and achieve the implied intent of the Plans and Specifications shall be completed within thirty (30) working days. Refer to Section 1-08.5 of the General Requirements.

It is further understood and agreed that the Owner may deduct liquidated damages from payments due or to become due the Contractor in the amount set forth in Section 1-08.9, Liquid Damages, for each working day in beyond the time allowed in the contract, as stipulated in the paragraph above, unless specified otherwise. Such deductions may be made for any delays, which cannot reasonably be shown to be beyond the Contractor's control.

The liquidated damages do not include and are in addition to damages from costs for engineering, administrative, and other costs incurred beyond contract completion date. The cost of additional office and field engineering, construction surveillance, and other costs beyond contract completion date shall be billed the contractor at standard billing rates for said services then in effect.

NON COLLUSION DECLARATION

The undersigned, being duly sworn, deposes and says that the Bid submitted herewith is a genuine and not a collusive or sham bid or made in the interest or on behalf of any person herein named and that the person, firm, association, joint venture, co-partnership, or corporation herein named, has 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 the preparation and submission of a bid for consideration in the award of a contract for the improvement described on the first page of this Proposal Form.

PREVAILING WAGES

The prevailing rate of wages shall be paid to all workers, laborer, or mechanics per Chapter 39.12 RCW. (See 2014 WSDOT/APWA Standard Specifications).

PROPOSAL FORM (continued)

BID DEPOSIT

A Bid Deposit in an amount of five percent (5%) of the Total Bid Amount(s) based upon the Lump Sum or Bid Schedule approximate quantities at the unit prices including applicable taxes and in the form indicated on the following pages.

Cash _____ IN THE AMOUNT OF \$ _____

Cashier's Check _____ \$ _____

Certified Check _____ \$ _____ Payable to the Owner

Bid Bond _____ IN THE AMOUNT OF 5% OF THE AMOUNT
BID

SURETY

If the Bidder is awarded a construction contract on this Bid, the Surety who provides the Contract Bond will be

_____.

Whose address is _____
Street

City	State	Zip Code
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BIDDER INFORMATION AND SIGNATURE

The party by whom this bid is submitted and by whom the contract will be entered into, in case the award is made to him, is:

Corporation/Partnership/Individual

Firm Name: _____

Doing business at

Address	City/State
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Which is the address to which all communications concerned with this bid and contract should be sent.

The name of the president, treasurer, and manager of the bidding corporation, or the names of all persons and parties interested in this bid as partners or principals are as follows

<u>Name/Title</u>	<u>Address</u>

IN WITNESS hereto, the undersigned agrees to the conditions of the BID, certifies that this BID has not been restricted, modified or conditioned, acknowledges receipt of addenda ____to ____, attests to the absence of collusion in the Non-Collusion Affidavit below, and agrees to be bound by its provisions, certifies and agrees concerning non-segregated facilities in the Non-Segregated facilities statement below, covenants, stipulates and agrees in accordance with the Anti-Discrimination Certification below, declares, accepts and understands in accordance with the Bidder's Declaration and Understanding below, agrees as to prevailing wages as below, agrees as to Washington State Sales tax as above, understands and agrees as to the completion of time and liquidated damages as below, and with the full authority of the firm or other business entity submitting this BID has set his hand this _____day of _____2015.

If Sole Proprietor or Partnership

Signature of Bidder

Title

If Corporation

Attest:

Name of Corporation

Secretary

By _____

Title _____

Sworn to before me this _____ day of

_____, _____.

Notary Public in and for the State
Of Washington residing at

- NOTE:
1. If the Bidder is a co-partnership, so state, giving the Name under which business is transacted.
 2. If the Bidder is a corporation, this Proposal must be Executed by the duly authorized officials and notarized.

DEPOSIT OR BID BOND FORM

DEPOSIT STATEMENT

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

SIGN HERE _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal,
and _____, as Surety, are
held firmly bound unto the _____, Washington, 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

_____,
Washington, according to the terms of the bid made by the Principal therefore, 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 so do, 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 _____, _____.

Principal

Surety

_____, _____
Received return of deposit in the sum of \$ _____

ANTI-DISCRIMINATION CERTIFICATE

CITY OF SNOHOMISH
STATE OF WASHINGTON
COUNTY OF SNOHOMISH

The bidder hereby covenants, stipulates and agrees that no person shall be discriminated against in the bidding of the service and/or materials hereunder and that the bidder shall not refuse to hire any person therefore because of such person's race, creed, color or national origin, unless based on a bona fide occupational qualification. Also, the bidder will in no matter discriminate against any person because of such person's race, creed, color or national origin. Any such discrimination shall be deemed a violation of this bid and shall render this bid subject to forfeiture.

Contractor's Signature

Subscribed and sworn to before me this _____ day of _____, 2015.

Notary Public in and for
The State of Washington,
Residing at

My commission expires _____

INDEMNIFICATION ADDENDUM

_____ (hereinafter called Contractor) agrees to defend, indemnify and hold the City of Snohomish (hereinafter called Owner) harmless from any and all claims, demands, losses and liabilities to or by third parties arising from, resulting from or connected with services performed or to be performed under this subcontract by Contractor or contractor's agents or employees to the fullest extent permitted by law and subject to the limitations provided below.

Contractor's duty to indemnify Owner shall not apply to liability for damages arising out of bodily injury to persons or damage to property caused by or resulting from the sole negligence of Owner or Owner's agents or employees.

Contractor's duty to indemnify Owner for liability for damages arising out of bodily injury to persons or damage to property caused by or resulting from the concurrent negligence of (a) Owner's agents or employees, and (b) Contractor or Contractor's agents or employees, shall apply only to the extent of negligence of Contractor or Contractor's agents or employees.

Contractor specifically and expressly waives any immunity that may be granted it under the Washington State Industrial Insurance Act, Title 51 RCW. Further, the indemnification obligation under this subcontract shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable to or for any third party under workers compensation acts, disability benefits acts, or other employee benefits acts; provided Contractor's waiver of immunity by the provisions of this paragraph extends only to claims against Contractor by Owner and does not include, or extend to, any claims by Contractor's employees directly against Contractor.

Contractor's duty to defend, indemnify and hold Owner harmless shall include as to all claims, demands, losses and liability to which is applies, Owner's personnel-related costs, reasonable attorney's fees, court costs and all other claim-related expenses.

THE UNDERSIGNED HEREBY CERTIFY THAT THIS ADDENDUM WAS
MUTUALLY NEGOTIATED.

Dated: _____ Dated: _____

Owner: CITY OF SNOHOMISH

Contractor:

By _____
Signature

By: _____
Signature

Title: _____

Title: _____

CERTIFICATION OF NONSEGREGATED FACILITIES

The bidder certifies that s/he does not maintain or provide for her/his employees any segregated facilities at any of her/his establishments, and that s/he does not permit her/his employees to perform their services at any locations, under her/his control, where segregated facilities are maintained. The bidder certifies further that s/he will not maintain or provide for her/his employees any segregated facilities at any of her/his establishments, and that s/he will not permit her/his employees to perform their services at any location under her/his control where segregated facilities are maintained. The bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause on any contract resulting from acceptance of this bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants, or other eating areas, time clocks, locker rooms or other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact because of habit, local custom or otherwise. The bidder agrees that except where s/he has obtained identical certification from proposed subcontractor prior to the award of subcontracts exceeding \$10,000, which are not exempt from the provisions of the Equal Opportunity clause, that s/he will retain such certifications in her/his files.

NOTE: The penalty for making false statements in offers is prescribed in 18 USC 1001.

Dated: _____, _____
(Name of Bidder)

By _____
Signature

Title _____

Official Address:

(City, State, Zip)

Must be included without alteration.

FAIRVIEW STREET STORM DRAINAGE IMPROVEMENT PROJECT**0-01.3(7) SURPLUS MATERIAL DISPOSAL AND/OR REMOVAL**

TYPE OF MATERIAL TO BE REMOVED FROM SITE	LOCATION OF STORAGE AND/OR DISPOSAL SITE (include name and phone number of owner and address of site)	PROPOSED METHOD OF DISPOSAL AND/OR REUSE

Note: Please refer to “Disposal of Surplus Material” in Section 2-03.3(7) of the Standard Specifications.

If a disposal site is rejected, the Contractor is responsible for locating a new disposal site that will meet the Owner’s criteria. Any associated costs incurred in finding a new or different disposal and/or storage site will be the responsibility of the Contractor and at no additional cost to the Owner.

CONTRACT

THIS AGREEMENT, made in 3 copies, each of which shall be deemed original, and entered into as of the date hereinafter affixed, by and between CITY OF SNOHOMISH, hereinafter called the Owner, and _____, HEREINAFTER called the Contractor,

WITNESSETH:

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

I. The Contractor shall do all work and furnish all labor, tools, materials and equipment for the construction of the **Fairview Street Storm Drainage Improvement Project** in accordance with and as described in the attached plans and specifications, including any Addenda which are by this reference incorporated herein and made a part hereof, and shall perform any alterations in or additions to the work provided under this contract and every part thereof.

If said work is not completed within the time specified, the Contractor agrees to pay to the Owner the sum set forth in Section 1-08.9 for each and every calendar day said work remains uncompleted after expiration of the specified time, as liquidated damages. The Contractor shall provide and bear the expense of all equipment, work, and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work provided for in this contract and every part thereof and shall guarantee said materials and work for a period of one year after completion of this contract, except such as are mentioned in the specifications to be furnished by CITY OF SNOHOMISH.

II. CITY OF SNOHOMISH hereby promises and agrees with the Contractor to employ and does employ the Contractor to provide the materials and to do and cause to be done the above-described work and to complete and finish the same according to the attached plans and specifications and the terms and conditions herein contained and hereby contracts to pay for the same according to the attached specifications and the

schedule of prices bid and hereto attached, at the time and in the manner and upon the conditions provided for in this contract.

III. The Contractor for himself and for his heirs, executors, administrators, successors and assigns does hereby agree to the full performance of all covenants herein contained upon the part of the Contractor.

IV. It is further provided that no liability shall attach to CITY OF SNOHOMISH by reason of entering into this contract, except as expressly provided herein.

V. The CITY OF SNOHOMISH is committed to transparency and accountability in its contracting and expenditures, and obtaining maximum taxpayer value for public works projects. Prior to final acceptance and release of retainage by the CITY OF SNOHOMISH, Contractor shall provide the CITY OF SNOHOMISH with a report listing the names and addresses of the subcontractors and suppliers receiving contract funds from the Project.

VI. This agreement consists of the following documents, all of which are incorporated by reference as if set forth in full herein, and are component parts hereof:

1. Legal, Procedural, Contract Documents, and Indemnification Addendum
2. Washington State Legal Requirements (RCW'S; WAC'S)
3. City of Snohomish Engineering Standards, Specifications and Details
4. Amendments to the Standard Specifications
5. 2014 Standard Specifications (WSDOT/APWA)
6. Special Provisions
7. Contract Drawings (Plans)

Countersigned:

This _____ day of _____, 2015.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first herein above written.

CITY OF SNOHOMISH (Owner)

By _____
Larry Bauman, City Manager

Approved as to form

By _____
Grant Weed, City Attorney

CONTRACTOR

By _____

Address:

Telephone Number:

Fax Number:

Acknowledgement of Waiver of Contractor's Industrial insurance immunity. See Standard Specifications, 1-07.14. (Initial acknowledgement)

Owner

Contractor

CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS: That whereas CITY OF SNOHOMISH has awarded to _____, hereinafter designated as the “Principal,” a contract for the construction of the Project designated City of Snohomish **Fairview Street Storm Drainage Improvement Project** all as hereto attached and made a part hereof, and whereas said principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract:

NOW, THEREFORE, we the principal and _____

(Surety)

a corporation, organized and existing under and by virtue of the laws of the State of _____, duly authorized to do business in the State of Washington, as surety, are held and firmly bound unto CITY OF SNOHOMISH, a municipal corporation of the State of Washington in the sum of: _____ (\$_____), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by those presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the above-bonded principal, his or its heirs, executors, administrators, successors, or assigns shall in all things stand to and abide by and well and truly keep and perform the covenants, conditions, and agreements in the said contract and shall faithfully perform all the provisions of such contract and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, at the time and in the manner therein specified, and shall pay all laborers, mechanics, subcontractors, and material men and all persons who shall supply such person or persons or subcontractors with provisions and supplies for the carrying on of such work on his or their part and shall indemnify and

save harmless CITY OF SNOHOMISH, their officers and agents and shall further save harmless and indemnify said CITY OF SNOHOMISH from any defect or defects in any of the workmanship entering into any part of the work or designated equipment covered by said contract which shall develop or be discovered within one (1) year after the final acceptance of such work, then this obligation shall become null and void; otherwise, it shall remain in full force and effect, provided that the liability hereunder for defects in materials and workmanship for a period of one (1) year after the acceptance of the work shall not exceed the sum of:

And the said surety, for the value received, hereby further stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on the bond, and it does hereby waive notice of any change, extension of time, alterations, or additions to the terms of the contract or the work or to the specifications.

IN WITNESS WHEREOF, the said principal and the said surety have caused this bond and three (3) counterparts thereof to be signed and sealed by their duly authorized officers this _____ day of _____, ____.

Principal

TWO WITNESSES: (If sole proprietor or Partnership)

By _____

ATTEST: (If Corporation)

Corporate Seal

By _____

Title _____

Surety

By _____

Its _____

Address of local office and agent of Surety
Company is: _____

APPROVED AS TO FORM

By _____
Grant Weed, Attorney for CITY OF SNOHOMISH

NOTE: THIS QUESTIONNAIRE MUST BE COMPLETED AND ATTACHED TO CERTIFICATE OF INSURANCE.

Insurance Coverage Questionnaire

For:

Project Title: **Fairview Street Storm Drainage Improvement Project**

Project Owner: **CITY OF SNOHOMISH**

Are the following coverage's and/or conditions in effect?

	Yes	No
The Policy form is ISO Commercial General Liability form GC-00 001 or GC 00 02 (Circle ONE). If no, attach a copy of the policy with required coverages clearly identified.		
The Owner, its officials, officers, employees and volunteers are additional insures as Respects (a) activities performed for the Owner by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, or (c) premises, owned, leased, or used by the Named Insured.		
Products Completed operation coverage.		
Cross Liability clause (or equivalent wording).		
Personal Injury Liability Coverage (with employee exclusion deleted)		
Broad Form Damage with X, C U Hazards included.		
Blanket Contractual Liability coverage applying to this contract or Contractual Liability Coverage applying to this contract		
Employers Liability – Stop Gap		
Written notice of cancellation to the City		

Deductibles

CITY OF SNOHOMISH

CONTRACTOR'S DECLARATION OF OPTION FOR MANAGEMENT
OF STATUTORY RETAINED PERCENTAGE

The owner shall withhold the retained percentage for this contract from time-to-time as such retained percentage accrues and in accordance with RCW 60.28.010, 020, and 050.

OPTION A. I hereby elect to have the retained percentage for this contract held in a fund by the owner until thirty (30) days following final acceptance of the work. (No interest will be earned on the retained percentage amount under this election).

CONTRACTOR:

Date: _____

OPTION B. I hereby elect to have the owner deposit the retained percentage for this contract, from time-to-time, as such retained percentage accrues and in accordance with RCW 60.28.010, 020, and 050.

I hereby designate _____
as the depository for said funds which shall be deposited in an interest earning account subject to joint control by owner and the contractor. All interest earned on said deposits shall belong to the contractor. (If contractor fails to designate the depository then the owner designates)

I hereby further agree to be fully responsible for payment of all costs of fees incurred as a result of establishing said depository account and depositing the retained percentage as authorized by statute. The owner shall not be liable in any way for any costs or fees in connection therewith.

CONTRACTOR:

Date: _____

ATTN: FINANCE DEPARTMENT *This form is for selection of retainage option ONLY. **OPTION B** must have a signed Escrow Instruction/Agreement on file prior to processing retainage payment to the bank. Signed Agreement will be secured by the Purchasing Division.*

CITY OF SNOHOMISH

**PUBLIC WORKS PROJECT - RETAINED PERCENTAGE ESCROW
AGREEMENT**

Escrow No. _____

City of Snohomish
116 Union Street
Snohomish, WA 98290

Contractor: _____

Address: _____

Project Title: _____

TO: Escrow Bank or Trust Co:

The undersigned, _____, herein referred to as the Contractor, has directed the City of Snohomish to deliver to you its warrants which shall be payable to you and the Contractor jointly. Such warrants are to be held and disposed of by you in accordance with the following instructions and upon the terms and conditions hereinafter set forth.

INSTRUCTIONS

1. Warrants or checks made payable to you and the contractor jointly upon delivery to you shall be endorsed by you and forwarded for collection. The moneys will then be used by you to purchase, as directed by the Contractor, bonds or other securities chosen by the Contractor and approved by the City of Snohomish. Attached is a list of such bonds, or other securities approved by the City of Snohomish. Other bonds or securities, except stocks may be selected by the Contractor, subject to express written approval of the City of Snohomish. Purchase of such bonds or other securities shall be in a form which shall allow you alone to reconvert such bonds or other securities into money if you are required to do so by the City of Snohomish as provided in paragraph 4 of this Escrow Agreement.

2. When and as interest on the securities held by you pursuant to this agreement accrues and is paid, you shall collect such interest and forward it to the Contractor at its address designated below unless otherwise directed by the Contractor.

3. You are not authorized to deliver to the Contractor all or any part of the securities held by you pursuant to this agreement (or any moneys derived from the sale of such securities, or the negotiation of the City of Snohomish's warrants) except in accordance with written instructions from the City of Snohomish. Compliance with such instructions shall relieve you of any further liability related thereto. The estimated completion date on the contract underlying this Escrow Agreement is

4. In the event the City of Snohomish orders you to do so in writing, you shall, within thirty-five (35) days of receipt of such order, reconvert into money the securities held by you pursuant to this agreement and return such money together with any other moneys held by you hereunder, to the City of Snohomish. Written release will be issued by the City Treasurer. For further information contact the City Treasurer at (360) 568-3115.

5. The Contractor agrees to pay you as compensation for your services hereunder as follows:

Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any property placed with you pursuant to this agreement until and unless the City of Snohomish directs the release to the Contractor of the securities and moneys held hereunder whereupon you shall be granted a first lien upon such property released and shall be entitled to reimburse yourself from such property for the entire amount of your fees as provided for herein above. In the event that you are made a party to any litigation with respect to the property held by you hereunder, or in the event that the conditions of this escrow are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this escrow or any modifications hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorneys fees occasioned by such default, delay, controversy or litigation.

6. This agreement shall not be binding until executed by the Contractor and the City of Snohomish and accepted by you.

7. This instrument contains the entire agreement between you, the Contractor and the City of Snohomish with respect to this escrow and you are not a party to nor bound by any instrument or agreement other than this; you shall not be required to take notice of any default or any other matter nor be bound by nor required to give notice or demand, nor required to take any action whatever except as herein expressly provided; you shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.

8. The foregoing provisions shall be binding upon the assigns, successors, personal representatives and heirs of the parties hereto.

9. The Contractor's Federal Income Tax Identification number is _____.

The undersigned have read and hereby approve the instructions as given above governing the administration of this escrow and do hereby execute this agreement on this _____ day of _____, 2015.

CONTRACTOR

CITY OF SNOHOMISH

Signature

City Manager

Title: _____

ATTEST:

City Clerk

The above escrow instructions received and accepted this _____ day of _____, 2015.

ESCROW BANK OR TRUST CO:

Signature

Title: _____

Securities Authorized by City of Snohomish - Select only one:

1. Bills, certificates, notes or bonds of the United States;
2. Other obligations of the United States or its agencies;
3. Obligations of any corporation wholly-owned by the government of the United States;
4. Indebtedness of the Federal National Mortgage Association; and
5. Time deposits in commercial banks.

PLEASE RETURN THIS SIGNED AGREEMENT TO:

City of Snohomish
Attn: City Treasurer
116 Union Street
Snohomish, WA 98290

RETAINAGE RELEASE REQUIREMENTS

The following are the documents required to be on file with the City of Snohomish prior to release of retainage to the Contractor.

No.	Document	Generated by	Contact	Date Received by City
1.	Contractor's Notification to City of Completion of Contract Work	Contractor	City Engineer	
2	Recommendation of Project Acceptance	City / Project Engineer	City Engineer	
3	Final Project Acceptance	City / Council	City Engineer	
4	Intent to Pay Prevailing Wages	Contractor	Dept. of Labor & Industries	
5	Notification of Completion to Department of Revenue	City / City Treasurer	Dept. of Revenue Excise Tax Division	
6	Affidavit of Wages Paid	Contractor	Dept. of Labor & Industries	
7	Certificate of Payment State Excise Tax by Public Works Contractor	State	Dept of Revenue Excise Tax Division	
8	Release Regarding Industrial Insurance	City	City Engineer	
9	Certification of Payment of Contributions	State	Dept. of Employment Security	
10	Receipt for Payment in full or Release of Lien signed by Lien Claimant and filed with City	Contractor	All claims against retainage or payment Bond filed with the City	
11	All warranty documents to include Performance Bond	Contractor	Project Engineer	
12	Contractor's Record Drawings	Contractor	City Engineer	

SECTION I

AMENDMENTS TO THE STANDARD SPECIFICATIONS

1 **INTRO.AP1**

2 **INTRODUCTION**

3 The following Amendments and Special Provisions shall be used in conjunction with the
4 2014 Standard Specifications for Road, Bridge, and Municipal Construction.

5
6 **AMENDMENTS TO THE STANDARD SPECIFICATIONS**
7

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

15
16 **1-01.AP1**

17 **Section 1-01, Definitions and Terms**
18 **August 4, 2014**

19 **1-01.3 Definitions**

20 The definition for “**Engineer**” is revised to read:

21
22 The Contracting Agency’s representative who directly supervises the engineering and
23 administration of a construction Contract.

24
25 The definition for “**Inspector**” is revised to read:

26
27 The Engineer’s representative who inspects Contract performance in detail.

28
29 The definition for “**Project Engineer**” is revised to read:

30
31 Same as Engineer.

32
33 The definition for “**Working Drawings**” is revised to read:

34
35 Drawings, plans, diagrams, or any other supplementary data or calculations, including a
36 schedule of submittal dates for Working Drawings where specified, which the Contractor
37 must submit to the Engineer.

38
39 **1-02.AP1**

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

42 **1-02.8(1) Noncollusion Declaration**

43 The third paragraph is revised to read:
44

1 Therefore, by including the Non-collusion Declaration as part of the signed bid Proposal,
2 the Bidder is deemed to have certified and agreed to the requirements of the
3 Declaration.
4

5 **1-03.AP1**

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

8 **1-03.3 Execution of Contract**

9 The first paragraph is revised to read:

10

11 Within 20 calendar days after the Award date, the successful Bidder shall return the
12 signed Contracting Agency-prepared Contract, an insurance certification as required by
13 Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4, and
14 shall be registered as a contractor in the state of Washington.
15

16 **1-03.4 Contract Bond**

17 The last word of item 3 is deleted.

18

19 Item 4 is renumbered to 5.

20

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

22

23 4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the
24 project under titles 50, 51, and 82 RCW; and
25

26 **1-03.5 Failure to Execute Contract**

27 The first sentence is revised to read:

28

29 Failure to return the insurance certification and bond with the signed Contract as
30 required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's
31 Business Enterprise information if required in the Contract, or failure or refusal to sign
32 the Contract, or failure to register as a contractor in the state of Washington shall result
33 in forfeiture of the proposal bond or deposit of this Bidder.
34

35 **1-04.AP1**

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

38 **1-04.4 Changes**

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

40

41 A. When the character of the Work as altered differs materially in kind or nature from
42 that involved or included in the original proposed construction; or
43

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

The last two paragraphs are deleted.

This section is supplemented with the following new subsections:

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

1-04.4(2)A General

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

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

The VECP shall meet all of the following:

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

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

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

1-04.4(2)B VECP Savings

1-04.4(2)B1 Proposal Savings

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

1. $(\text{gross cost of deleted work}) - (\text{gross cost of added work}) = (\text{gross savings})$
2. $(\text{gross savings}) - (\text{Contractor's engineering costs}) - (\text{Contracting Agency's costs}) = (\text{net savings})$

1
2 3. $(\text{net savings}) / 2 = (\text{incentive pay})$
3

4 The Contracting Agency's costs shall be the actual consultant costs billed to
5 the Contracting Agency and in-house costs. Costs for personnel assigned to
6 the Engineer's office shall not be included.
7

8 **1-04.4(2)B2 Added Costs to Achieve Time Savings**

9 The cost to achieve the time savings shall be calculated as follows:
10

- 11 1. $(\text{cost of added work}) + (\text{Contractor's engineering costs} - \text{Contracting}$
12 $\text{Agency's engineering costs}) = (\text{cost to achieve time savings})$
13
14 2. $(\text{cost to achieve time savings}) / 2 = (\text{Contracting Agency's share of}$
15 $\text{added cost})$
16

17 If the timesaving proposal also involves deleting work and, as a result, creates
18 a savings for the Contracting Agency, then the Contractor shall also receive
19 one-half of the savings realized through the deletion.
20

21 **1-04.4(2)C VECP Approval**
22

23 **1-04.4(2)C1 Concept Approval**

24 The Contractor shall submit a written proposal to the Engineer for
25 consideration. The proposal shall contain the following information:
26

- 27 1. An explanation outlining the benefit provided by the change(s).
28
29 2. A narrative description of the proposed change(s). If applicable, the
30 discussion shall include a demonstration of functional equivalency or a
31 description of how the proposal meets the original contract scope of
32 work.
33
34 3. A cost discussion estimating any net savings. Savings estimates will
35 generally follow the outline below under the section, "Proposal
36 Savings".
37
38 4. A statement providing the Contracting Agency with the right to use all
39 or any part of the proposal on future projects without future obligation
40 or compensation.
41
42 5. A statement acknowledging and agreeing that the Engineer's decision
43 to accept or reject all or part of the proposal is final and not subject to
44 arbitration under the arbitration clause or otherwise be subject to
45 claims or disputes.
46
47 6. A statement giving the dates the Engineer must make a decision to
48 accept or reject the conceptual proposal, the date that approval to
49 proceed must be received, and the date the work must begin in order
50 to not delay the contract. If the Contracting Agency does not approve
51 the VECP by the date specified by the Contractor in their proposal the
52 VECP will be deemed rejected.

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

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

1-04.4(2)C2 Formal Approval

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

1. Deleted Work – Include the calculated quantities of unit price Work to be deleted. Include the proposed partial prices for portions of lump sum Work deleted. For deletion of force account items include the time and material estimates.
2. Added Work – Include the calculated quantities of unit price Work to be added, either by original unit Contract prices or by new, negotiated unit prices. For new items of Work include the quantities and proposed prices.
3. Contractor's Engineering Costs – Submit the labor costs for the engineering to develop the proposal; costs for Contractor employees utilized in contract operations on a regular basis shall not be included.
4. Schedule Analysis – If the VECP is related to time savings, the Contractor shall submit a partial progress schedule showing the changed Work. The submittal shall also include a discussion comparing the partial progress schedule with the approved progress schedule for the project.
5. Working Drawings – Type 3 Working Drawings shall be submitted; those drawings which require engineering shall be a Type 3E.

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

1. The Contractor accepts design risk of all features, both temporary and permanent, of the changed Work.
2. The Contractor accepts risk of constructability of the changed Work.
3. The Contractor provides the Contracting Agency with the right to use all or any part of the proposal on future projects without further obligation or compensation.

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

1. Deleted Work.
2. Added Work.
3. The Contractor's engineering costs, reimbursed at 100 percent of the Contractor's cost.
4. Incentive payment to the Contractor.

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

3. The Contracting Agency's share of added cost to achieve time savings.
4. The Contractor's share of savings from deleted Work.

1-04.4(2)C3 Authority to Proceed with Changed Work

The authority for the Contractor to proceed with the VECP Work will be provided by one of the following options:

1. Execution of the VECP change order, or
2. At the Contractor's request the Contracting Agency may provide approval by letter from the Engineer for the Work to proceed prior to execution of a change order. All of the risk for proceeding with the VECP shall be the responsibility of the Contractor. Additionally, the following criteria are required to have been met:
 - a) Concept approval has been granted by the Contracting Agency.
 - b) All design reviews and approvals have been completed, including plans and specifications.
 - c) The Contractor has guaranteed, in writing, the minimum savings to the Contracting Agency.

1-05.AP1

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

1-05.1 Authority of the Engineer

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

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

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

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

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

1-05.2 Authority of Assistants and Inspectors

The first paragraph is revised to read:

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

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

1-05.3 Plans and Working Drawings

This section's title is revised to read:

Working Drawings

This section is revised to read:

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

Working Drawings will be classified under the following categories:

1. **Type 1** – Submitted for Contracting Agency information. Submittal must be received by the Contracting Agency a minimum of 7 calendar days before work represented by the submittal begins.
2. **Type 2** – Submitted for Contracting Agency review and comment. Unless otherwise stated in the Contract, the Engineer will require up to 20 calendar days from the date the Working Drawing is received until it is returned to the Contractor. The Contractor shall not proceed with the Work represented by the Working Drawing until comments from the Engineer have been addressed.
3. **Type 2E** – Same as a Type 2 Working Drawing with Engineering as described below.
4. **Type 3** – Submitted for Contracting Agency review and approval. Unless otherwise stated in the Contract, the Engineer will require up to 30 calendar days from the date the Working Drawing is received until it is returned to the Contractor. The Contractor shall obtain the Engineer's written approval before proceeding with the Work represented by the Working Drawing.

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

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

11
12 Working Drawings requiring Engineering, Type 2E and 3E, shall be prepared by (or
13 under the direction of) a Professional Engineer, licensed under Title 18 RCW, State of
14 Washington, and in accordance with WAC 196-23-020. Design calculations shall carry
15 the Professional Engineer's signature and seal, date of signature, and registration
16 number on the cover page. The cover page shall also include the Contract number,
17 Contract title and sequential index to calculation page numbers.

18
19 If more than the specified number of days is required for the Engineer's review of any
20 individual Working Drawing or resubmittal, an extension of time will be considered in
21 accordance with Section 1-08.8.

22
23 Review or approval of Working Drawings shall neither confer upon the Contracting
24 Agency nor relieve the Contractor of any responsibility for the accuracy of the drawings
25 or their conformity with the Contract. The Contractor shall bear all risk and all costs of
26 any Work delays caused by rejection or nonapproval of Working Drawings.

27
28 Unit Bid prices shall cover all costs of Working Drawings.

29
30 **1-07.AP1**

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

33 **1-07.2 State Taxes**

34 This section is revised to read:

35
36 The Washington State Department of Revenue has issued special rules on the state
37 sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The
38 Contracting Agency will not adjust its payment if the Contractor bases a Bid on a
39 misunderstood tax liability.

40
41 The Contracting Agency may deduct from its payments to the Contractor, retainage or
42 lien the bond, in the amount the Contractor owes the State Department of Revenue,
43 whether the amount owed relates to the Contract in question or not. Any amount so
44 deducted will be paid into the proper State fund on the contractor's behalf. For
45 additional information on tax rates and application refer to applicable RCWs, WACs or
46 the Department of Revenue's website.

47
48 **1-07.2(1) State Sales Tax: Work Performed on City, County, or Federally-**
49 **Owned Land**

50 This section including title is revised to read:

1
2 **1-07.2(1) State Sales Tax: WAC 458-20-171 – Use Tax**

3 For Work designated as Rule 171, **Use Tax**, the Contractor shall include for
4 compensation the amount of any taxes paid in the various unit Bid prices or other
5 Contract amounts. Typically, these taxes are collected on materials incorporated into
6 the project and items such as the purchase or rental of; tools, machinery, equipment, or
7 consumable supplies not integrated into the project.

8
9 The Summary of Quantities in the Contract Plans identifies those parts of the project
10 that are subject to **Use Tax** under Section 1-07.2(1).

11
12 **1-07.2(2) State Sales Tax: Work on State-Owned or Private Land**

13 This section including title is revised to read:

14
15 **1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax**

16 For Work designated as Rule 170, **Retail Sales Tax**, the Contractor shall collect from
17 the Contracting Agency, **Retail Sales Tax** on the full Contract price. The Contracting
18 Agency will automatically add this **Retail Sales Tax** to each payment to the Contractor
19 and for this reason; the Contractor shall not include the **Retail Sales Tax** in the unit Bid
20 prices or in any other Contract amount. However, the Contracting Agency will not
21 provide additional compensation to the Prime Contractor or Subcontractor for **Retail**
22 **Sales Taxes** paid by the Contractor in addition to the **Retail Sales Tax** on the total
23 contract amount. Typically, these taxes are collected on items such as the purchase or
24 rental of; tools, machinery, equipment, or consumable supplies not integrated into the
25 project. Such sales taxes shall be included in the unit Bid prices or in any other Contract
26 amounts.

27
28 The Summary of Quantities in the Contract Plans identifies those parts of the project
29 that are subject to **Retail Sales Tax** under Section 1-07.2(2).

30
31 **1-07.2(3) Services**

32 This section is revised to read:

33
34 Any contract wholly for professional or other applicable services is generally not subject
35 to **Retail Sales Tax** and therefore the Contractor shall not collect **Retail Sales Tax** from
36 the Contracting Agency on those Contracts. Any incidental taxes paid as part of
37 providing the services shall be included in the payments under the contract.

38
39 **1-07.23(1) Construction Under Traffic**

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

41
42 Accessibility to existing or temporary pedestrian push buttons shall not be impaired.

43
44 **1-08.AP1**

45 **Section 1-08, Prosecution and Progress**
46 **May 5, 2014**

47 **1-08.1 Subcontracting**

48 The eighth paragraph is revised to read:
49

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

11
12 The ninth paragraph is deleted.

13
14 **1-09.AP1**

15 **Section 1-09, Measurement and Payment**
16 **January 5, 2015**

17 **1-09.6 Force Account**

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

19
20 In the event that prior quotations are not obtained and the vendor is not a firm
21 independent from the Contractor or Subcontractor, then after-the-fact quotations may be
22 obtained by the Engineer from the open market in the vicinity and the lowest such
23 quotation may be used in place of submitted invoice.

24
25 **1-10.AP1**

26 **Section 1-10, Temporary Traffic Control**
27 **August 4, 2014**

28 **1-10.1(1) Materials**

29 The following material reference is deleted from this section:

30
31 Barrier Drums 9-35.8

32
33 **1-10.1(2) Description**

34 The first paragraph is revised to read:

35
36 The Contractor shall provide flaggers, and all other personnel required for labor for
37 traffic control activities and not otherwise specified as being furnished by the
38 Contracting Agency.

39
40 **1-10.2(1) General**

41 In the third paragraph, the first two sentences are revised to read:

42
43 The primary and alternate TCS shall be certified by one of the organizations listed in the
44 Special Provisions. Possession of a current Washington State TCS card and flagging
45 card by the primary and alternate TCS is mandatory.

46

1-10.2(1)B Traffic Control Supervisor

The first paragraph is revised to read:

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

The last paragraph is revised to read:

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

1-10.2(2) Traffic Control Plans

The first paragraph is revised to read:

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

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

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

1-10.2(3) Conformance to Established Standards

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

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

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

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

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

1-10.3(1) Traffic Control Labor

The first paragraph is revised to read:

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

1 **1-10.3(1)A Flaggers and Spotters**

2 This section's title is revised to read:

3

4 **Flaggers**

5

6 The first paragraph is revised to read:

7

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

12

13 The last paragraph is deleted.

14

15 **1-10.3(1)B Other Traffic Control Labor**

16 This section is revised to read:

17

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

21

22 **1-10.3(3)B Sequential Arrow Signs**

23 This section is supplemented with the following:

24

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

29

30 **1-10.3(3)C Portable Changeable Message Signs**

31 This section is revised to read:

32

33 Where shown on an approved traffic control plan or where ordered by the Engineer, the
34 Contractor shall provide, operate, and maintain portable changeable message signs
35 (PCMS). A PCMS shall be placed behind a barrier or guardrail whenever possible, but
36 shall at a minimum provide 4 ft. of lateral clearance to edge of travelled lane and be
37 delineated by channelization devices. The Contractor shall remove the PCMS from the
38 clear zone when not in use unless protected by barrier or guardrail.

39

40 **1-10.3(3)F Barrier Drums**

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

42

43 **1-10.3(3)F Vacant**

44

45 **1-10.3(3)K Portable Temporary Traffic Control Signal**

46 The fifth paragraph is revised to read:

47

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

51

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

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

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

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

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

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

This section is deleted and replaced with the following:

“Traffic Control Supervisor”, lump sum.

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

“Pedestrian Traffic Control”, lump sum.

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

“Flaggers”, per hour.

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

“Other Traffic Control Labor”, per hour.

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

“Construction Signs Class A”, per square foot.

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

“Sequential Arrow Sign”, per hour.

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

1
2 "Portable Changeable Message Sign", per hour.
3
4 The unit Contract price, when applied to the number of units measured for this item in
5 accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by
6 the Contractor in performing the Work for procuring all portable changeable message
7 signs required for the project and for transporting these signs to and from the project.
8
9 "Transportable Attenuator", per each.
10
11 The unit Contract price, when applied to the number of units measured for this item in
12 accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by
13 the Contractor in performing the Work described in Section 1-10.3(3)J except for costs
14 compensated separately under the items "Operation of Transportable Attenuator" and
15 "Repair Transportable Attenuator".
16
17 "Operation of Transportable Attenuator", per hour.
18
19 The unit Contract price, when applied to the number of units measured for this item in
20 accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by
21 the Contractor in performing the Work for operating transportable attenuators on the
22 project.
23
24 "Repair Transportable Attenuator", by force account.
25
26 All costs of repairing or replacing transportable attenuators that are damaged by the
27 motoring public while in use as shown on an approved Traffic Control Plan will be paid
28 for by force account as specified in Section 1-09.6. To provide a common Proposal for
29 all Bidders, the Contracting Agency has estimated the amount of force account for
30 "Repair Transportable Attenuator" and has entered the amount in the Proposal to
31 become a part of the total Bid by the Contractor. Transportable attenuators damaged
32 due to the Contractor's operation or damaged in any manner when not in use shall be
33 repaired or replaced by the Contractor at no expense to the Contracting Agency.
34
35 "Other Temporary Traffic Control", lump sum.
36
37 The lump sum Contract payment shall be full compensation for all costs incurred by the
38 Contractor in performing the Work defined in Section 1-10, and which costs are not
39 compensated by one of the above-listed items.
40
41 "Portable Temporary Traffic Control Signal", lump sum.
42
43 The lump sum Contract payment shall be full compensation for all costs incurred by the
44 Contractor in performing the Work as described in Section 1-10.3(3)K, including all
45 costs for traffic control during manual control, adjustment, malfunction, or failure of the
46 portable traffic control signals and during replacement of failed or malfunctioning
47 signals.
48

1 **2-01.AP2**

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

4 **2-01.3(1) Clearing**

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

6

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

10

11 **2-02.AP2**

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

14 **2-02.3(2) Removal of Bridges, Box Culverts, and Other Drainage Structures**

15 This section is supplemented with the following new subsections:

16

17 **2-02.3(2)A Bridge Removal**

18 **2-02.3(2)A1 Bridge Demolition Plan Submittal**

19 The Contractor shall submit a Type 2E Working Drawing consisting of a bridge
20 demolition plan, showing the method of removing the existing bridge(s), or portions
21 of bridges, as specified.

22

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

28

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

37

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

42

43 **2-02.3(2)A2 Removing Portions of Existing Concrete**

44 Care shall be taken in removing concrete to prevent overbreakage or damage to
45 portions of the existing Structure which are to remain. Before concrete removal
46 begins, a saw cut shall be made into the surface of the concrete at the perimeter of
47 the removal limits. The saw cut shall be 3/4-inch deep when the steel

1 reinforcement is to remain, and may be deeper when the steel reinforcement is
2 removed with the concrete.
3
4 Concrete shall be completely removed (exposing the deformed surface of the bar)
5 from existing steel reinforcing bars which extend from the existing members and
6 are specified to remain. Steel reinforcing bars that are not designated to remain
7 shall be cut a minimum of 1-inch behind the final surface. The void left by removal
8 of the steel reinforcing bar shall be filled with mortar conforming to Section 9-
9 20.4(2). The mortar shall match the color of the existing concrete surface as nearly
10 as practicable.
11
12 The Contractor shall roughen, clean, and saturate existing concrete surfaces,
13 against which fresh concrete will be placed, in accordance with Section 6-
14 02.3(12)B. When a portion of existing concrete is to be removed without
15 replacement, concrete shall be removed to a clean line with a smooth surface of
16 less than 1/16 inch profile.
17
18 **2-02.3(2)A3 Use of Explosives for Bridge Demolition**
19 Explosives shall not be used for bridge demolition, except as specifically allowed by
20 the Special Provisions.
21

22 **2-02.5 Payment**

23 This section is supplemented with the following new Bid items:

- 24
25 "Removing Existing Bridge____", lump sum.
26
27 "Removing Existing Structure____", lump sum.
28
29 "Removing Portion of Existing Bridge____", lump sum.
30
31 "Removing Portion of Existing Structure____", lump sum.
32

33 **2-03.AP2**

34 **Section 2-03, Roadway Excavation and Embankment** 35 **August 4, 2014**

36 **2-03.3(14) Embankment Construction**

37 The third paragraph is revised to read:

38
39 **Hillside Terraces** – The Contractor shall terrace the original ground or embankment
40 when the slope of the surface is 2H:1V or steeper unless otherwise directed by the
41 Engineer. The face of each terrace shall be a minimum of 1 foot and a maximum of 5
42 feet in height and shall be vertical or near vertical as required to remain stable during
43 material placement and compaction. The bench of the terrace shall slope outward to
44 drain and shall not be inclined steeper than 0.05 foot per foot. Terraces damaged
45 during work shall be reestablished. The Engineer may order the Contractor to place
46 gravel backfill, pipe drains or both to drain any seepage.
47

48 **2-03.3(14)L Embankment Widening for Guardrail**

49 The first sentence is revised to read:
50

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

3
4 The second sentence is deleted.

5
6 **2-09.AP2**

7 **Section 2-09, Structure Excavation**
8 **January 5, 2015**

9 **2-09.4 Measurement**

10 The seventh paragraph is revised to read:

11
12 For pipelines the lower limit in measuring structure excavation will be the foundation
13 level as shown in the Plans or as directed by the Engineer.

14
15 **2-12.AP2**

16 **Section 2-12, Construction Geosynthetic**
17 **January 5, 2015**

18 **2-12.3(4) Permanent Erosion Control and Ditch Lining**

19 In the fourth paragraph, "Section 9-13.2" is revised to read "Section 9-13.1(4)".

20
21 **3-04.AP3**

22 **Section 3-04, Acceptance of Aggregate**
23 **April 6, 2015**

24 **3-04.5 Payment**

25 In Table 1, the "Maximum Sublot Size (Tons)" value for the item HMA Aggregate is revised
26 to read "2000".

27
28 In Table 2, the row containing the item "HMA Aggregate" is revised to read:

29

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

30
31
32 **5-01.AP5**

33 **Section 5-01, Cement Concrete Pavement Rehabilitation**
34 **August 4, 2014**

35 **5-01.2 Materials**

36 The referenced section for the following item is revised to read:

37
38 Dowel Bars 9-07.5

39

1 **5-01.3(4) Replace Portland Cement Concrete Panel**

2 In the third paragraph, the last sentence is deleted.

3

4 The seventeenth paragraph (beginning with "The Contractor shall place a bond-breaking
5 material...") is deleted.

6

7 **5-02.AP5**

8 **Section 5-02, Bituminous Surface Treatment**

9 **August 4, 2014**

10 **5-02.3(11) Temporary Raised Pavement Markings**

11 This section's title is revised to read:

12

13 **Temporary Pavement Markings**

14

15 The word "raised" is deleted from this section.

16

17 **5-04.AP5**

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

19 **April 6, 2015**

20 **5-04.2 Materials**

21 The third through eighth paragraphs are deleted and replaced with the following:

22

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

27

28 If greater than 20 percent RAP by total weight of HMA or any amount of RAS is utilized
29 in the production of HMA, the Contractor shall sample and test the RAP and RAS during
30 stockpile construction in accordance with WSDOT FOP for AASHTO T 308 for
31 determination of asphalt binder content and WSDOT FOP for WAQTC/AASHTO T 27/T
32 11 for gradation of the aggregates. The RAP shall be sampled and tested at a
33 frequency of one sample for every 1,000 tons produced and not less than ten samples
34 per project. The RAS shall be sampled and tested at a frequency of one sample for
35 every 100 tons produced and not less than ten samples per project. The asphalt content
36 and gradation test data shall be reported to the Contracting Agency prior to or when
37 submitting the mix design for approval on the QPL. If utilized, the amount of RAS shall
38 not exceed 5-percent of the total weight of the HMA. The Contractor shall include the
39 RAP and RAS as part of the mix design as defined in these Specifications.

40

41 The grade of asphalt binder shall be as required by the Contract. Blending of asphalt
42 binder from different sources is not permitted. For HMA with greater than 20 percent
43 RAP by total weight of HMA or any amount of RAS, the final blended asphalt binder
44 (after inclusion of RAP, RAS, new asphalt binder and recycling agent) shall be the
45 grade as required by the Contract and comply with the requirements of Section 9-
46 02.1(4).

47

1 The Contractor may only use warm mix asphalt (WMA) processes in the production of
2 HMA with 20 percent or less RAP by total weight of HMA and no RAS. The Contractor
3 shall submit to the Engineer for approval the process that is proposed and how it will be
4 used in the manufacture of HMA.

5
6 When the Contracting Agency provides aggregates or provides a source for the
7 production of aggregates, the Contract Provisions will establish the approximate
8 percentage of asphalt binder required in the mixture for each class of HMA.

9
10 Production of aggregates shall comply with the requirements of Section 3-01.

11
12 Preparation of stockpile site, the stockpiling of aggregates, and the removal of
13 aggregates from stockpiles shall comply with the requirements of Section 3-02.

14 15 **5-04.3(1) Hot Mix Asphalt Mixing Plant**

16 The first paragraph is supplemented with the following:

- 17
18 6. **Equipment for Processing RAP and RAS.** When producing HMA for mix designs
19 with greater than 20 percent RAP by total weight of HMA or any amount of RAS the
20 HMA plant shall be equipped with screens or a lump breaker to eliminate oversize
21 RAP/RAS particles from entering the pug mill or drum mixer.

22 23 **5-04.3(3)A Material Transfer Device/Vehicle**

24 The first paragraph is supplemented with the following new sentence:

25
26 At the Contractor's request the Engineer may approve paving without an MTD/V; the
27 Engineer will determine if an equitable adjustment in cost or time is due.

28
29 In the last sentence of the second paragraph, "Project Engineer" is revised to read
30 "Engineer".

31 32 **5-04.3(5)A Preparation of Existing Surfaces**

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

34
35 Unless otherwise approved by the Engineer, the tack coat shall be CSS-1 or CSS-1h
36 emulsified asphalt.

37 38 **5-04.3(7) Preparation of Aggregates**

39 This section is revised to read:

40
41 The aggregates, RAP and RAS shall be stockpiled according to the requirements of
42 Section 3-02. Sufficient storage space shall be provided for each size of aggregate,
43 RAP and RAS. The Contractor may uniformly blend fine aggregate or RAP with the
44 RAS as a method of preventing the agglomeration of RAS particles. The aggregates,
45 RAP and RAS shall be removed from stockpile(s) in a manner to ensure minimal
46 segregation when being moved to the HMA plant for processing into the final mixture.
47 Different aggregate sizes shall be kept separated until they have been delivered to the
48 HMA plant.

49 50 **5-04.3(7)A1 General**

51 This section is revised to read:

1 An approved mix design, listed on the Qualified Products List (QPL), is required for all
2 HMA paving. The Contractor shall develop a mix design prior to the initial production of
3 HMA and no more than 3 months prior to submitting for QPL evaluation. The mix design
4 shall be developed in accordance with WSDOT Standard Operating Procedure 732 and
5 meet the requirements of Sections 9-03.8(2) and 9-03.8(6).
6

7 Mix designs shall be submitted by the Contractor to the WSDOT State Materials
8 Laboratory on WSDOT Form 350-042EF. If the mix design is approved it will be listed
9 on the QPL for up to 24 consecutive months. Mix designs not listed on the QPL or past
10 the 24 month approved period shall not be used. After a mix design has been on the
11 QPL for 12 months the listing will be extended provided the Contractor submits a
12 certification letter to the Qualified Products Engineer verifying that the aggregate and
13 asphalt binder have not changed. The Contractor may submit the certification one
14 month prior to expiration of the mix design approval. Within 7 calendar days of receipt of
15 the Contractor's certification the QPL will be updated. The maximum duration for
16 approval of a mix design and listing on the QPL will be 24 months from the date of initial
17 approval or as approved by the Engineer.
18

19 Changes to the job mix formula of a mix design may require the development of a new
20 mix design and resubmittal for QPL approval. Mix designs that require resubmittal for
21 QPL approval must be approved prior to use.
22

23 Changes to aggregate that may require a new mix design include the source of material
24 or a change in the percentage of material from a stockpile greater than 5 percent.
25 Changes to the percentage of material from a stockpile will be calculated exclusive of
26 the RAP content. The Contractor may vary the RAP percentage in accordance with
27 Section 5-04.2.
28

29 Changes to asphalt binder that may require a new mix design include the source of the
30 crude petroleum supplied to the refinery, the refining process, and additives or modifiers
31 in the asphalt binder.
32

33 The Contractor shall include the brand and type of anti-stripping additive in the mix
34 design submittal and provide certification from the asphalt binder manufacture that the
35 anti-stripping additive is compatible with the crude source and formulation of asphalt
36 binder proposed in the mix design. All changes to anti-strip require the submittal of a
37 new mix design for approval.
38

39 Mix designs with 20 percent RAP or less by total weight of HMA and no RAS will be
40 completed without the inclusion of the RAP. For HMA mix designs with greater than 20
41 percent RAP by total weight of HMA or any amount of RAS the Contractor shall develop
42 a mix design including RAP, RAS, recycling agent and new asphalt binder. Asphalt
43 binder contributed from RAS shall be determined in accordance with AASHTO PP 78.
44 The total quantity of asphalt binder from the RAP and RAS shall not exceed 40 percent
45 of the total asphalt binder content of the HMA.
46

47 Once the RAP and RAS stockpiles have been constructed the Contractor shall extract,
48 recover and test the asphalt residue from the RAP and RAS stockpiles to determine the
49 percent of recycling agent and/or grade of new asphalt binder needed to meet the grade
50 of asphalt binder required by the contract. The asphalt extraction testing shall be
51 performed in accordance with AASHTO T 164 or ASTM D 2172 using reagent grade
52 trichloroethylene. The asphalt recovery shall be performed in accordance with AASHTO

R 59 or ASTM D 1856. The recovered asphalt residue shall be tested in accordance with AASHTO R 29 to determine the asphalt binder grade in accordance with Section 9-02.1(4). Once the recovered asphalt binder grade is determined the percent of recycling agent and/or grade of new asphalt binder shall be determined in accordance with ASTM D 4887. The final blend of recycling agent, recovered and new asphalt shall be tested in accordance with AASHTO R 29 to confirm that it meets the grade of asphalt binder required by the contract in accordance with Section 9-02.1(4). All recovered and blended asphalt binder test data shall be reported to the Contracting Agency prior to submitting the mix design for approval on the QPL.

5-04.3(7)A2 Statistical or Nonstatistical Evaluation

This section is revised to read:

The Contractor shall submit WSDOT Form 350-041EF to the Engineer for approval to use a mix design from the QPL. The Contractor may include changes to the job mix formula that have been approved on other contracts. The request to use a mix design from the QPL may be rejected if production of the HMA from another contract is not in compliance with Section 5-04.3(11)D.

The Contractor shall submit representative samples of the materials that are to be used in the HMA production to the State Materials Laboratory in Tumwater. For HMA mix designs with 20 percent RAP or less by total weight of HMA and no RAS, the Contractor shall submit representative samples of the mineral materials that are to be used in the HMA production; the submittal of RAP samples is not required for these mix designs. For HMA mix designs with greater than 20 percent RAP by total weight of HMA or any amount of RAS the Contractor shall submit representative samples of the mineral materials, RAP, RAS and 100 grams of recovered asphalt residue from the RAP and RAS that are to be used in the HMA production. The Contracting Agency will use these samples to evaluate the mix design for approval on the QPL in accordance with WSDOT Standard Practice QC-8.

5-04.3(7)A3 Commercial Evaluation

This section is revised to read:

Approval of a Commercial Evaluation mix design for listing on the QPL will be based on a review of the Contractor's submittal of WSDOT Form 350-042 for conformance to the requirements of Section 9-03.8(2). Testing of the HMA by the Contracting Agency for mix design approval is not required. Mix designs for HMA with greater than 20 percent RAP by total weight of HMA or any amount of RAS may be evaluated in accordance with Section 5-04.3(7)A2.

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.

5-04.3(8) Mixing

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

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.

The last paragraph is supplemented with the following new sentence:

After the required amount of mineral materials, RAP, RAS, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, RAP and RAS is ensured.

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

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

The sublots shall be approximately uniform in size with a maximum sublot size based on original Plan quantity tons as specified in the following table.

This section is supplemented with the following new table:

HMA Original Plan Quantity (tons)	Sublot Size (tons)
<20,000	1,000
20,000 to 30,000	1,500
>30,000	2,000

5-04.3(8)A7 Test Section – HMA Mixtures

This section is revised to read:

For each class of HMA accepted by statistical evaluation with 20 percent RAP or less by total weight of HMA and no RAS, the Contractor may request a single test section to determine whether the mixture meets the requirements of Section 9-03.8(2) and 9-03.8(6). For each HMA mix design accepted by statistical evaluation with greater than 20 percent RAP by weight of HMA or any amount of RAS, the Contractor shall construct a test section to determine whether the mixture meets the requirements of Sections 9-03.8(2) and 9-03.8(6). Test sections shall be constructed at the beginning of paving and will be at least 600 tons and a maximum of 1,000 tons or as approved by the Engineer. For a test section to be acceptable the pay factor (PF) for gradation, asphalt binder and Va shall be 0.95 or greater for each constituent and the remaining test requirements in Section 9-03.8(2) (dust/asphalt ratio, sand equivalent, uncompacted void and fracture) shall conform to the requirements of that section. No further wearing or leveling HMA will be paved on any of the four calendar days following construction of the test section. The mixture in the test section will be evaluated as a lot with a minimum of three sublots required. If more than one test section is required, each test section shall be a separate lot.

5-04.3(10)A General

In the first paragraph, “checking” and “cracking” are deleted.

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

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

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

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

5-04.3(10)B1 General

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

The first paragraph is revised to read:

HMA mixture accepted by statistical or nonstatistical evaluation that is used in traffic lanes, including lanes for ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a minimum of 91 percent of the maximum density. The percent of maximum density shall be determined by WSDOT FOP for AASHTO T 729 when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density. The specified level of density attained will be determined by the statistical evaluation of the density of the pavement.

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

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

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

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

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

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

Sublots will be uniform in size with a maximum subplot size based on original Plan quantity tons of HMA as specified in the table below.

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

HMA Original Plan Quantity (tons)	Sublot Size (tons)
<20,000	100
20,000 to 30,000	150
>30,000	200

5-04.3(10)B4 Test Results

The first paragraph is revised to read:

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

7
8 In the second paragraph, the first sentence is revised to read:
9

10 For a subplot that has been tested with a nuclear density gauge that did not meet the
11 minimum of 91 percent of the reference maximum density in a compaction lot with a
12 CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may
13 request that a core be used for determination of the relative density of the subplot.

14
15 In the second sentence of the second paragraph, "moisture-density" is revised to read
16 "density".

17
18 In the second paragraph, the fourth sentence is deleted.
19

20 **5-04.3(20) Anti-Stripping Additive**

21 This section is revised to read:

22
23 Anti-stripping additive shall be added to the liquid asphalt by the asphalt supplier prior to
24 shipment to the asphalt mixing plant. Anti-stripping additive shall be added in the
25 amount designated on the QPL for the mix design.

26 27 **5-04.4 Measurement**

28 The following new paragraph is inserted after the first paragraph:

29
30 Roadway cores will be measured per each for the number of cores taken.

31
32 The second to last paragraph is deleted.
33

34 **5-04.5 Payment**

35 The bid item "Removing Temporary Pavement Marking", per linear foot and paragraph
36 following bid item are deleted.

37
38 The following new bid item is inserted before the second to last paragraph:

39
40 "Roadway Core", per each.

41
42 The Contractor's costs for all other Work associated with the coring (e.g., traffic control)
43 shall be incidental and included within the unit Bid price per each and no additional
44 payments will be made.

45 46 **5-05.AP5**

47 **Section 5-05, Cement Concrete Pavement** 48 **April 6, 2015**

49 **5-05.3(1) Concrete Mix Design for Paving**

50 In item number 1, the first sentence of the third paragraph is revised to read:

Ground granulated blast furnace slag, if used, shall not exceed 30 percent by weight of the total cementitious material and shall conform to Section 9-23.10.

The second and third rows of the table in item number 3 are revised to read:

Coarse Aggregate	+ 30 Pounds	- 30 Pounds
Fine Aggregate	+ 30 Pounds	- 30 Pounds

5-05.4 Measurement

The fourth paragraph is supplemented with the following new sentence:

Tie bars with drill holes in cement concrete pavement placed under the Contract will not be measured.

5-05.5 Payment

The paragraph following the Bid item "Tie Bar with Drill Hole", per each is supplemented with the following new sentence:

All costs for tie bars with drill holes in cement concrete pavement placed under the Contract shall be included in the unit Contract price per cubic yard for "Cement Conc. Pavement".

6-01.AP6

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

6-01.6 Load Restrictions on Bridges Under Construction

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

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

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

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

6-01.9 Working Drawings

This section is revised to read:

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

6-01.10 Utilities Supported by or Attached to Bridges

In the second paragraph, "bridge structures" is revised to read "bridges".

6-01.14 Premolded Joint Filler

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

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

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6-02.AP6

Section 6-02, Concrete Structures
April 6, 2015

6-02.3(1) Classification of Structural Concrete

In paragraph two, item number 1 is revised to read:

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

Item number 3 is renumbered to 4.

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

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

6-02.3(2) Proportioning Materials

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

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

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

The fourth paragraph is revised to read:

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

6-02.3(2)A Contractor Mix Design

The first paragraph is revised to read:

The Contractor shall provide a mix design in writing to the Engineer for all classes of concrete specified in the Plans except for lean concrete and commercial concrete. No concrete shall be placed until the Engineer has reviewed the mix design. The required average 28-day compressive strength shall be selected in accordance with ACI 301, Chapter 4, Section 4.2.3.3. ACI 211.1 shall be used to determine proportions. All proposed concrete mixes except Class 4000D shall meet the requirements in Cementitious Requirement for Concrete in Section 6-02.3(2).

In the fourth paragraph, the fourth sentence is deleted.

In the sixth paragraph, the first sentence is deleted.

In the seventh paragraph, the last sentence is deleted.

1 The eighth paragraph is revised to read:

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

7 The following new sub-section is added:

8
9 **6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D**

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

- 12
- 13 1. Aggregate shall use combined gradation in accordance with Section 9-03.1(5)
14 with a nominal maximum aggregate size of 1-1/2 inches.
15
 - 16 2. Permeability shall be less than 2,000 coulombs at 56 days in accordance with
17 AASHTO T 277.
18
 - 19 3. Freeze-thaw durability shall be provided by one of the following methods:
20 a. The concrete shall maintain an air content between 4.5 and 7.5 percent.
21 b. The concrete shall maintain a minimum air content that achieves a
22 durability factor of 90 percent, minimum, after 300 cycles in accordance
23 with AASHTO T 161, Procedure A. This air content shall not be less than
24 3.0 percent. Test samples shall be obtained from concrete batches of a
25 minimum of 3.0 cubic yards.
26
 - 27 4. Scaling shall have a visual rating less than or equal to 2 after 50 cycles in
28 accordance with ASTM C 672.
29
 - 30 5. Shrinkage at 28 days shall be less than 320 micro strain in accordance with
31 AASHTO T 160.
32
 - 33 6. Modulus of elasticity shall be measured in accordance with ASTM C 469.
34
 - 35 7. Density shall be measured in accordance with ASTM C 138.
36

37 The Contractor shall submit the mix design in accordance with Section 6-02.3(2)A. The
38 submittal shall include test reports for all tests listed above that follow the reporting
39 requirements of the AASHTO/ASTM procedures. Samples for testing may be obtained
40 from either laboratory or concrete plant batches. If concrete plant batches are used, the
41 minimum batch size shall be 3.0 cubic yards. The Contractor shall submit the mix
42 design to the Engineer at least 30 calendar days prior to the placement of concrete in
43 the bridge deck.
44

45 **6-02.3(4)D Temperature and Time For Placement**

46 The first two sentences are revised to read:

47
48 Concrete temperatures shall remain between 55°F and 90°F while it is being placed,
49 except that Class 4000D concrete temperatures shall remain between 55°F and 75°F
50 during placement. Precast concrete that is heat cured in accordance with Section 6-
51 02.3(25)D shall remain between 50°F and 90°F while being placed.
52

1 **6-02.3(5)A General**

2 The first paragraph is revised to read:

3
4 Concrete for the following applications will be accepted based on a Certificate of
5 Compliance to be provided by the supplier as described in Section 6-02.3(5)B:

- 6
7 1. Lean concrete.
8
9 2. Commercial concrete.
10
11 3. Class 4000P concrete for Roadside Steel Sign Support Foundations.
12
13 4. Class 4000P concrete for Type II, III, and CCTV Signal Standard Foundations
14 that are 12'-0" or less in depth.
15
16 5. Class 4000P concrete for Type IV and V Strain Pole Foundations that are 12'-0"
17 or less in depth.
18
19 6. Class 4000P concrete for Steel Light Standard Foundations Types A & B.
20

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

22
23 Slip-form barrier concrete will be accepted based on conformance to the requirements
24 for temperature, air content and compressive strength at 28 days for sublots as tested
25 and determined by the Contracting Agency.
26

27 **6-02.3(5)B Certification of Compliance**

28 In the list within the first paragraph, "Fly ash (if used) brand and Type" is revised to read "Fly
29 ash (if used) brand and Class".
30

31 The first sentence of the second to last paragraph is deleted.
32

33 **6-02.3(5)G Sampling and Testing Frequency for Temperature, Consistency,
34 and Air Content**

35 In the fifth sentence of the second paragraph, "five truck loads" is revised to read "ten truck
36 loads".
37

38 The second paragraph is supplemented with the following:

39
40 If the remaining quantity to be placed is less than ten truck loads; then a sample shall
41 be randomly taken from one of the remaining truck loads.
42

43 In the last sentence of the third paragraph, "five truck loads" is revised to read "ten truck
44 loads".
45

46 **6-02.3(5)H Sampling and Testing for Compressive Strength and Initial Curing**

47 The second paragraph is revised to read:

48
49 The Contractor shall provide and maintain a sufficient number of cure boxes in
50 accordance with WSDOT FOP for AASHTO T 23 for curing concrete cylinders. The cure
51 boxes shall be readily accessible and no more than 500 feet from the point of
52 acceptance testing, unless otherwise approved by the Engineer. The Contractor shall

1 also provide, maintain and operate all necessary power sources and connections
2 needed to operate the cure boxes. The cure boxes shall be in-place and functioning at
3 the specified temperature for curing cylinders prior to concrete placement. Concrete
4 cylinders shall be cured in the cure boxes in accordance with WSDOT FOP for
5 AASHTO T 23. The cure boxes shall have working locks and the Contractor shall
6 provide the Engineer with one key to each of the locks. Once concrete cylinders are
7 placed in the cure box, the cure box shall not be disturbed until the cylinders have been
8 removed. The Contractor shall retain the cure box Temperature Measuring Device log
9 and provide it to the Engineer upon request.

10
11 The following new paragraph is inserted after the last paragraph:

12
13 All cure box costs shall be incidental to the associated item of work.

14
15 **6-02.3(6)A2 Cold Weather Protection**

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

17
18 This Specification applies when the weather forecast on the day of concrete placement
19 predicts air temperatures below 35°F at any time during the 7 days following placement.

20
21 The first sentence of the second paragraph is revised to read:

22
23 The temperature of the concrete shall be maintained above 50°F during the entire
24 curing period or 7 days, whichever is greater.

25
26 **6-02.3(10)A Preconstruction Meeting**

27 This section including title is revised to read:

28
29 **6-02.3(10)A Pre-Deck Pour Meeting**

30 A pre-deck pour meeting shall be held 5 to 10 working days before placing deck
31 concrete to discuss construction procedures, personnel, equipment to be used,
32 concrete sampling and testing and deck finishing and curing operations. Those
33 attending shall include, at a minimum, the superintendent, foremen in charge of placing
34 and finishing concrete, and representatives from the concrete supplier and the concrete
35 pump truck supplier.

36
37 If the project includes more than one bridge deck, and if the Contractor's key personnel
38 change between concreting operations, or at request of the Engineer, additional
39 conferences shall be held before each deck placement.

40
41 **6-02.3(10)D Concrete Placement, Finishing, and Texturing**

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

43
44 **6-02.3(10)D1 Test Slab Using Bridge Deck Concrete**

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

49
50 The test slab may be constructed on grade, shall have a minimum thickness of eight-
51 inches, shall have minimum plan dimensions of 10-feet along all four edges, and shall
52 be square or rectangular.

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

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

6-02.3(10)D2 Preparation for Concrete Placement

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

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

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

6-02.3(10)D3 Concrete Placement

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

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

1. Place it (without segregation) against concrete placed earlier, as near as possible to its final position, approximately to grade, and in shallow, closely spaced piles;
2. Consolidate it around reinforcing steel by using vibrators before strike-off by the finishing machine;
3. Not use vibrators to move concrete;
4. Not revibrate any concrete surface areas where workers have stopped prior to screeding;
5. Remove any concrete splashed onto reinforcing steel in adjacent segments before concreting them;

6. Maintain a slight excess of concrete in front of the screed across the entire width of the placement operation;
7. Operate the finishing machine to create a surface that is true and ready for final finish without overfinishing or bringing excessive amounts of mortar to the surface; and
8. Leave a thin, even film of mortar on the concrete surface after the last pass of the finishing machine pan.

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

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

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

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

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

If the test reveals depressions, the Contractor shall fill them with freshly mixed concrete, strike off, consolidate, and refinish them. High areas shall be cut down and refinished. Retesting and refinishing shall continue until a surface conforming to the requirements specified above is produced.

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

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

1 temperature and ambient temperature data to the Engineer in spreadsheet format within
2 14 calendar days from placing the bridge deck concrete.

3
4 The Contractor shall submit the type and model of maturity meter temperature
5 monitoring device, and the associated devices responsible for recording and
6 documenting the temperature and curing time, to the Engineer at least 14 calendar days
7 prior to the pre-concreting conference for the first bridge deck to be cast. The
8 placement and operation of the temperature monitoring devices and associated devices
9 will be an agenda item at the pre-concreting conference for the first bridge deck to be
10 cast.

11
12 **6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing**

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

16
17 The Contractor shall texture the bridge deck using diamond tipped saw blades
18 mounted on a power driven, self-propelled machine that is designed to texture
19 concrete surfaces. The grooving equipment shall provide grooves that are $1/8" \pm$
20 $1/64"$ wide, $3/16" \pm 1/16"$ deep, and spaced at $3/4" \pm 1/8"$. The bridge deck shall
21 not be textured with a metal tined comb.

22
23 The Contractor shall submit the type of grooving equipment to be used to the
24 Engineer for approval 30 calendar days prior to performing the work. The
25 Contractor shall demonstrate that the method and equipment for texturing the
26 bridge deck will not chip, spall or otherwise damage the deck. The Contractor shall
27 not begin texturing the bridge deck until receiving the Engineer's approval of the
28 Contractor's method and equipment.

29
30 Unless otherwise approved by the Engineer, the Contractor shall texture the
31 concrete bridge deck surface either in a longitudinal direction, parallel with
32 centerline or in a transverse direction, perpendicular with centerline. The
33 Contractor shall texture the bridge deck surface to within 3-inches minimum and
34 15-inches maximum of the edge of concrete at expansion joints, within 1-foot
35 minimum and 2-feet maximum of the curb line, and within 3-inches minimum and 9-
36 inches maximum of the perimeter of bridge drain assemblies.

37
38 The Contractor shall contain and collect all concrete dust and debris generated by
39 the bridge deck texturing process, and shall dispose of the collected concrete dust
40 and debris in accordance with Section 2-03.3(7)C.

41
42 If the Plans call for placement of a sidewalk or an HMA or concrete overlay on the
43 bridge deck, the Contractor shall produce the final finish of these areas by dragging a
44 strip of damp, seamless burlap lengthwise over the bridge deck or by brooming it lightly.
45 Approximately 3-feet of the drag shall contact the surface, with the least possible bow in
46 its leading edge. It shall be kept wet and free of hardened lumps of concrete. When the
47 burlap drag fails to produce the required finish, the Contractor shall replace it. When not
48 in use, it shall be lifted clear of the bridge deck.

49
50 After the bridge deck has cured, the surface shall conform to the surface smoothness
51 requirements specified in Section 6-02.3(10)D3.
52

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

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

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

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

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

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

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

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

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

The following new paragraph is inserted before the last paragraph:

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

6-02.3(11) Curing Concrete

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

1. Bridge sidewalks, roofs of cut and cover tunnels — curing compound covered by white, reflective type sheeting or continuous wet curing. Curing by either method shall be for at least 10 days.
2. Bridge decks — See Section 6-02.3(11)B.
3. Bridge approach slabs (Class 4000A concrete) - 2 coats of curing compound and continuous wet cure for at least 10-days.
4. Concrete barriers and rail bases – See Section 6-02.3(11)A.

1
2 5. All other concrete surfaces — continuous wet cure for at least three days.
3
4 In the second paragraph, the first sentence is replaced with the following three new
5 sentences:
6
7 During the continuous wet cure, the Contractor shall keep all exposed concrete surfaces
8 saturated with water. Formed concrete surfaces shall be kept in a continuous wet cure
9 by leaving the forms in place. If forms are removed during the continuous wet cure
10 period, the Contractor shall treat the concrete as an exposed concrete surface.
11
12 The third paragraph is revised to read:
13
14 When curing Class 4000A, two coats of curing compound that complies with Section 9-
15 23.2 shall be applied immediately (not to exceed 15 min.) after tining any portion of the
16 bridge approach slab. The continuous wet cure shall be established as soon as the
17 concrete has set enough to allow covering without damaging the finish.
18
19 In the fifth paragraph, the first sentence is revised to read:
20
21 If the Plans call for an asphalt overlay on the bridge approach slab, the Contractor shall
22 use the clear curing compound (Type 1, Class B), applying at least 1 gallon per 150
23 square feet to the concrete surface.
24
25 The eighth paragraph is deleted.
26
27 **6-02.3(11)A2 Slip-Form Barrier**
28 In the fourth paragraph, item number 1, “Type 1D” is revised to read “Type 1”.
29
30 **6-02.3(11)B Curing Bridge Decks**
31 This new section is supplemented with the following new sub-sections:
32
33 **6-02.3(11)B1 Equipment**
34 The Contractor shall maintain a wet sheen, without developing pooling or sheeting
35 water, using a fogging apparatus consisting of pressure washers with a minimum nozzle
36 output of 1,500 psi, or other means approved by the Engineer.
37
38 The Contractor shall submit a bridge deck curing plan to the Engineer a minimum 14
39 calendar days prior to the pre-concreting conference. The Contractor’s plan shall
40 describe the sequence and timing that will be used to fog the bridge deck, apply pre-
41 soaked burlap, install soaker hoses and cover the deck with white reflective sheeting.
42
43 **6-02.3(11)B2 Curing**
44 The fogging apparatus shall be in place and charged for fogging prior to beginning
45 concrete placement for the bridge deck.
46
47 The Contractor shall presoak all burlap to be used to cover the deck during curing.
48
49 Immediately after the finishing machine passes over finished concrete, the Contractor
50 shall implement the following tasks:
51

- 1 1. The Contractor shall fog the bridge deck while maintaining a wet sheen without
2 developing pooling or sheeting water.
- 3
- 4 2. The Contractor shall apply the presoaked burlap to the top surface to fully cover
5 the deck without damaging the finish, other than minor marring of the concrete
6 surface. The Contractor shall not apply curing compound.
- 7
- 8 3. The Contractor shall continue to keep the burlap wet by fog spraying until the
9 burlap is covered by soaker hoses and white reflective sheeting. The
10 Contractor shall place the soaker hoses and whiter reflective sheeting after the
11 concrete has achieved initial set. The Contractor shall charge the soaker hoses
12 frequently so as to keep the burlap covering the entire deck wet during the
13 course of curing.
- 14

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

20

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

23

24 **6-02.3(12)A Construction Joints in New Construction**

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

26

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

- 30
- 31 1. Grooves shall be ½ to 1 inch wide, ¼ to ½ inch deep, and spaced equally at
32 twice the width of the groove. Grooves shall terminate approximately 1 ½-
33 inches from the face of concrete.
- 34
- 35 2. Grooves shall be 1 to 2 inches wide, a minimum of ½-inch deep, and spaced a
36 maximum of three times the width of the groove. Grooves shall terminate
37 approximately 1 ½-inches from the face of concrete.
- 38

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

42

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

46

47 **6-02.3(12)B Construction Joints Between Existing and New Construction**

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

50

51 **6-02.3(13) Expansion Joints**

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

1
2 Joints made of a vulcanized, elastomeric compound (with neoprene as the only
3 polymer) shall be installed with a lubricant adhesive as recommended by the
4 manufacturer.

5
6 In the third paragraph, "injuring" is revised to read "damaging".

7
8 The following two new subsections are added:

9
10 **6-02.3(13)A Strip Seal Expansion Joint System**

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

- 14
- 15 1. Plan, elevation, and sections of the joint system and all components, with
16 dimensions and tolerances.
 - 17
 - 18 2. All material designations.
 - 19
 - 20 3. Manufacturer's written installation procedure.
 - 21
 - 22 4. Corrosion protection system used on the metal components.
 - 23
 - 24 5. Locations of welded shear studs, lifting mechanisms, temperature setting
25 devices, and construction adjustment devices.
 - 26
 - 27 6. Method of sealing the system to prevent leakage of water through the joint.

28
29 The strip seal shall be removable and replaceable.

30
31 The metal components shall conform to ASTM A 36, ASTM A 992, or ASTM A 572, and
32 shall be protected against corrosion by one of the following methods:

- 33
- 34 1. Zinc metallized in accordance with Section 6-07.3(14).
 - 35
 - 36 2. Hot-dip galvanized in accordance with AASHTO M 111.
 - 37
 - 38 3. Paint in accordance with Section 6-07.3(9). The color of the top coat shall be
39 Federal Standard 595 Color No. 26420. The surfaces embedded in concrete
40 shall be painted only with a shop primer coat of paint conforming to Section 9-
41 08.1(2)C.

42
43 The strip seal gland shall be continuous for the full length of the joint with no splices
44 permitted, unless otherwise shown in the Plans.

45
46 Other than items shown in the Plans, threaded studs used for construction adjustments
47 are the only items that may be welded to the steel shapes provided they are removed
48 by grinding after use, and the area repaired by application of an approved corrosion
49 protection system.

1 If the opening between the steel shapes is anticipated to be less than 1-1/2 inches at
2 the time of seal installation, the seal may be installed prior to encasement of the steel
3 shapes in concrete.
4

5 After the joint system is installed, the joint shall be flooded with water and inspected,
6 from below the joint, for leakage. If leakage is observed, the joint system shall be
7 repaired by the Contractor, as recommended by the manufacturer.
8

9 **6-02.3(13)B Compression Seal Expansion Joint System**

10 Compression seal glands shall be selected from the current Qualified Products List and
11 sized as shown in the Plans.
12

13 The compression seal expansion joint system shall be installed in accordance with the
14 manufacturer's written recommendations. The Contractor shall submit a Type 1 Working
15 Drawing consisting of the manufacturer's written installation procedure and repair
16 procedures if leakage testing fails.
17

18 After the joint system is installed, the joint area shall be flooded with water and
19 inspected, from below the joint, for leakage. If leakage is observed, the joint system
20 shall be repaired by the Contractor, as recommended by the manufacturer.
21

22 **6-02.3(14) Finishing Concrete Surfaces**

23 The last sentence of the first paragraph is revised to read:
24

25 The Contractor shall clean and refinish any stained or discolored surfaces.
26

27 The following new subsection is added:
28

29 **6-02.3(14)D General Requirements for Concrete Surface Finishes Produced by 30 Form Liners**

31 Horizontal and vertical joints shall be spliced in accordance with the manufacturer's
32 printed instructions. The Contractor shall submit a Type 1 Working Drawing consisting
33 of the manufacturer's joint splice instructions.
34

35 Horizontal splicing of ABS and plastic form liners to achieve the required height is not
36 permitted and there shall be no horizontal joints. The concrete formed with ABS and
37 plastic form liners shall be given a light sandblast to remove the glossy finish.
38

39 Side forms, traffic barrier forms, and pedestrian barrier forms using these form liners
40 may be removed after 24 hours provided the concrete mix used includes a water-
41 reducing admixture, and the concrete reaches 1,400 psi minimum compressive strength
42 before form removal. Concrete in load supporting forms utilizing these form liners shall
43 be cured in accordance with Section 6-02.3(17)N. Once the forms are removed, the
44 Contractor shall treat the joint areas by patching or light sandblasting as required by the
45 Engineer to ensure that the joints are not visible.
46

47 Form liners shall be cleaned, reconditioned, and repaired before each use. Form liners
48 with repairs, patches, or defects which, in the opinion of the Engineer, would result in
49 adverse effects to the concrete finish shall not be used.
50

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

1
2 All surfaces formed by the form liner shall also receive a Class 2 surface finish. Form
3 ties shall be a type that leaves a clean hole when removed. All spalls and form tie holes
4 shall be filled as specified for a Class 2 surface finish.
5

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

7 The first sentence (up until the colon) is revised to read:
8

9 The Contractor shall submit a Type 1 Working Drawing consisting of the pigmented
10 sealer manufacturer's written instructions covering, at a minimum, the following:
11

12 The second paragraph is deleted.
13

14 In the last sentence of the third paragraph, "approval" is revised to read "acceptance".
15

16 6-02.3(15) Date Numerals

17 The third sentence in the first paragraph is revised to read:
18

19 When an existing Structure is widened or when traffic barrier is placed on an existing
20 Structure, the date shall be for the year in which the original Structure was completed.
21

22 6-02.3(16) Plans for Falsework and Formwork

23 This section is revised to read:
24

25 The Contractor shall submit all plans for falsework and formwork as Type 2E Working
26 Drawings. Submittal is not required for footing or retaining wall formwork if the wall is 4
27 feet or less in height (excluding pedestal height).
28

29 The design of falsework and formwork shall be based on:
30

- 31 1. Applied loads and conditions which are no less severe than those described in
32 Section 6-02.3(17)A, Design Loads;
33
- 34 2. Allowable stresses and deflections which are no greater than those described in
35 Section 6-02.3(17)B, Allowable Stresses and Deflections;
36
- 37 3. Special loads and requirements no less severe than those described in
38 Section 6-02.3(17)C, Falsework and Formwork at Special Locations;
39
- 40 4. Conditions required by other Sections of 6-02.3(17), Falsework and Formwork.
41

42 The falsework and formwork plans shall be scale drawings showing the details of
43 proposed construction, including: sizes and properties of all members and components;
44 spacing of bents, posts, studs, wales, stringers, wedges and bracing; rates of concrete
45 placement, placement sequence, direction of placement, and location of construction
46 joints; identification of falsework devices and safe working loads as well as identification
47 of any bolts or threaded rods used with the devices including their diameter, length,
48 type, grade, and required torque. The falsework plans shall show the proximity of
49 falsework to utilities or any nearby Structures including underground Structures.
50 Formwork accessories shall be identified according to Section 6-02.3(17)H, Formwork
51 Accessories. All assumptions, dimensions, material properties, and other data used in
52 making the structural analysis shall be noted on the drawing.

1
2 The Contractor shall furnish associated design calculations to the Engineer as part of
3 the submittal. The design calculations shall show the stresses and deflections in load
4 supporting members. Construction details which may be shown in the form of sketches
5 on the calculation sheets shall be shown in the falsework or formwork drawings as well.
6 Falsework or formwork plans will be rejected in cases where it is necessary to refer to
7 the calculation sheets for information needed for complete understanding of the
8 falsework and formwork plans or how to construct the falsework and formwork.
9

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

- 11 1. The initials and dates of all participating design professionals.
- 12 2. Clear notation of all revisions including identification of who authorized the
- 13 revision, who made the revision, and the date of the revision.
- 14 3. The Contract number, Contract title, and sequential sheet number. These shall
- 15 also be on any related documents.
- 16 4. Identify where the falsework and formwork plan will be utilized by referencing
- 17 Contract Plan sheet number and related item or detail.
- 18
- 19
- 20
- 21
- 22

23 **6-02.3(16)A Nonpreapproved Falsework and Formwork Plans**

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

25 **6-02.3(16)A Vacant**

26 **6-02.3(16)B Preapproved Formwork Plans**

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

28 **6-02.3(16)B Pre-Contract Review of Falsework and Formwork Plans**

29 The Contractor may request pre-contract review of formwork plans for abutments,
30 wingwalls, diaphragms, retaining walls, columns, girders and beams, box culverts,
31 railings, and bulkheads. Plans for falsework supporting the bridge deck for interior
32 spans between precast prestressed concrete girders may also be submitted for pre-
33 contract review.
34

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

37 BridgeConstructionSupport@wsdot.wa.gov

38 The Bridge and Structures Office, Construction Support Engineer will return the
39 falsework or formwork plan to the Contractor with review notes, an effective date of
40 review, and any revisions needed prior to use. For each contract on which the pre-
41 reviewed falsework or formwork plans will be used, the Contractor shall submit a copy
42 to the Engineer. Construction shall not begin until the Engineer has given concurrence.
43

44 If the falsework or formwork being constructed has any deviations to the preapproved
45 falsework or formwork plan, the Contractor shall submit plan revisions for review and
46 approval in accordance with Section 6-02.3(16).
47
48
49
50
51
52

1 **6-02.3(17)A Design Loads**

2 The fifth paragraph is revised to read:

3
4 Live loads shall consist of a minimum uniform load of not less than 25 psf, applied over
5 the entire falsework plan area, plus the greater of:

- 6
7 1. Actual weights of the deck finishing equipment applied at the rails, or;
8
9 2. A minimum load of 75 pounds per linear foot applied at the edge of the bridge
10 deck.
11

12 **6-02.3(17)J Face Lumber, Studs, Wales, and Metal Forms**

13 The second and third to last paragraphs are deleted.
14

15 **6-02.3(17)K Concrete Forms on Steel Spans**

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

17
18 The Contractor shall fill the holes with fully torqued ASTM A 325 bolts in accordance
19 with Section 6-03.3(33).
20

21 **6-02.3(17)O Early Concrete Test Cylinder Breaks**

22 The third paragraph is revised to read:

23
24 The cylinders shall be cured in the field in accordance with WSDOT FOP for AASHTO T
25 23 Section 10.2 Field Curing.
26

27 **6-02.3(20) Grout for Anchor Bolts and Bridge Bearings**

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

29
30 Grout shall conform to Section 9-20.3(2) for anchor bolts and for bearing assemblies
31 with bearing plates. Grout shall conform to Section 9-20.3(3) for elastomeric bearing
32 pads and fabric pad bearings without bearing plates.
33

34 Grout shall be a workable mix with a viscosity that is suitable for the intended
35 application. The Contractor shall receive approval from the Engineer before using the
36 grout.
37

38 **6-02.3(24)C Placing and Fastening**

39 The twelfth paragraph is revised to read:

40
41 In bridge decks, a "mat" is two adjacent and perpendicular layers of reinforcing steel.
42 Top and bottom mats shall be supported adequately to hold both in their proper
43 positions. If No. 4 bars make up the lower layer of steel in a mat, it shall be blocked at
44 not more than 3-foot intervals (or 4-foot intervals for bars No. 5 and larger). Wire ties to
45 girder stirrups shall not be considered as blocking. To provide a rigid mat, the
46 Contractor shall add other supports and tie wires to the top mat as needed.
47

48 In the fourteenth paragraph, the description following "2½ inches between" is revised to
49 read:

50
51 Adjacent bars in a layer. Bridge deck and bridge approach slab bars and the top of the
52 slab.

In the fourteenth paragraph, the description following "2 inches between" is supplemented with the following new sentence:

Bars and the surface of concrete when not specified otherwise in this Section or in the Plans.

In the fourteenth paragraph, the first sentence in the description following "1½ inches between" is deleted.

The fifteenth paragraph is revised to read:

Except for top cover in bridge decks and bridge approach slabs, cover to ties and stirrups may be ½ inch less than the values specified for main bars but shall not be less than 1 inch.

In the sixteenth paragraph, the first item in the second subparagraph is revised to read:

The clearance to the top surface of bridge decks
and bridge approach slabs +¼ in/-0".

6-02.3(24)E Welding Reinforced Steel

This section is revised to read:

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

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

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

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

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

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

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

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

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

6-02.3(25) Prestressed Concrete Girders

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

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

6-02.3(25)I Fabrication Tolerances

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

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

For deck bulb tee girders and PCPS members with grouted shear keys:

Cambers shall be equalized when the differences in cambers between adjacent girders exceeds $\pm \frac{1}{4}$ inch

For deck bulb tee girders and PCPS members without grouted shear keys:

Cambers shall be equalized when the differences in cambers between adjacent girders exceeds $\pm \frac{1}{2}$ inch

For all other prestressed concrete girders:

$\pm \frac{1}{8}$ inch per 10 feet of girder length

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

This section, including title, is revised to read:

Deck Bulb Tee Girder Flange and PCPS Member Connection

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

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

1. Deflections shall be equalized per the Contractor's equalization plan.
2. Intermediate diaphragms shall be placed and weld ties shall be welded. Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.

- 1 3. The keyways shown in the Plans to receive grout shall be filled flush with the
2 surrounding surfaces using a grout conforming to Section 9-20.3(2).
3
4 4. Equalization equipment shall not be removed and other construction equipment
5 shall not be placed on the structure until intermediate diaphragms have attained
6 a minimum compressive strength of 2,500 psi and keyway grout has achieved a
7 minimum compressive strength of 4000 psi.
8
9 Deck bulb tee girders and PCPS members without grouted shear keys shall be
10 constructed in the following sequence:
11
12 1. Deflections shall be equalized per the Contractor's equalization plan.
13
14 2. Intermediate diaphragms shall be placed and weld ties shall be welded.
15 Welding ground shall be attached directly to the steel plates being welded when
16 welding the weld-ties.
17
18 3. Equalization equipment shall not be removed and other construction equipment
19 shall not be placed on the structure until intermediate diaphragms have attained
20 a minimum compressive strength of 2,500 psi.
21

22 **6-02.3(26)F Prestressing Reinforcement**

23 The last sentence in the fourth paragraph is revised to read:
24

25 If the prestressing reinforcement will not be stressed and grouted for more than 7
26 calendar days after it is placed in the ducts, the Contractor shall place an approved
27 corrosion inhibitor conforming to Federal Specification MIL-I-22110C in the ducts.
28

29 **6-02.3(28) Precast Concrete Panels**

30 In the first paragraph, the third sentence is revised to read:
31

32 WSDOT Certification will be granted at, and renewed during, the annual precast plant
33 review and approval process in accordance with WSDOT Materials Manual M 46-01.04
34 Standard Practice QC 7.
35

36 **6-02.4 Measurement**

37 The following three new paragraphs are inserted before the last paragraph:
38

39 Expansion joint system___seal - superstr. will be measured by the linear foot along its
40 completed line and slope.
41

42 Expansion joint modification will be measured by the linear foot of expansion joint
43 modified along its completed line and slope.
44

45 Prestressed concrete girder will be measured by the linear foot of girder specified in the
46 Proposal.
47

48 **6-02.5 Payment**

49 In the paragraph following the bid item "Commercial Concrete", per cubic yard the second
50 sentence is revised to read:
51

- 1 All costs in connection with concrete curing, producing concrete surface finish with form
2 liners, and furnishing and applying pigmented sealer to concrete surfaces as specified,
3 shall be included in the unit contract price per cubic yard for "Conc. Class ____".
4
- 5 The following new paragraph is inserted after the bid item "Superstructure (name bridge)",
6 lump sum:
7
- 8 All costs in connection with constructing, finishing and removing the bridge deck test
9 slab as specified in Section 6-02.3(10)D1 shall be included in the lump sum Contract
10 price for "Superstructure ____" or "Bridge Deck ____" for one bridge in each project, as
11 applicable.
12
- 13 In the paragraph following the bid item "Epoxy-Coated St. Reinf. Bar ____", per pound, the
14 first sentence is revised to read:
15
- 16 Payment for reinforcing steel shall include the cost of drilling holes in concrete for, and
17 setting, steel reinforcing bar dowels with epoxy bonding agent, and furnishing,
18 fabricating, placing, and splicing the reinforcement.
19
- 20 The bid item "Cure Box", lump sum and paragraph following bid item are deleted.
21
- 22 The following three new bid items are inserted before the bid item "Bridge Approach Slab",
23 per square yard:
24
- 25 "Expansion Joint System ____ - Superstr.", per linear foot.
26
- 27 "Expansion Joint Modification - ____", per linear foot.
28
- 29 "Prestressed Conc. Girder ____", per linear foot.
30

31 **6-03.AP6**

32 **Section 6-03, Steel Structures**
33 **April 6, 2015**

34 **6-03.2 Materials**

35 The first sentence in the fifth paragraph is revised to read:
36

37 The Contractor shall submit Type 1 Working Drawings describing the methods for
38 visibly marking the material so that it can be traced.
39

40 **6-03.3 Construction Requirements**

41 This section is revised to read:
42

43 Structural steel fabricators of plate and box girders, floorbeams, truss members,
44 stringers, cross frames, diaphragms, and laterals shall be certified under the AISC
45 Certification Program for Steel Bridge Fabricators, Advanced Bridges Category. When
46 fracture critical members are specified in the contract, structural steel fabricators shall
47 also meet the supplemental requirements F, Bridges with Fracture-Critical Members,
48 under the AISC Certification Program for Steel Bridge Fabricators.
49

1 **6-03.3(7) Shop Plans**

2 This section is revised to read:

3
4 The Contractor shall submit all shop detail plans for fabricating the steel as Type 2
5 Working Drawings.

6
7 If these plans will be submitted directly from the fabricator, the Contractor shall so notify
8 the Engineer in writing.

9
10 No material shall be fabricated until: (1) the Working Drawing review is complete, and
11 (2) the Engineer has accepted the materials source.

12
13 Before physical completion of the project, the Contractor shall furnish the Engineer one
14 set of reproducible copies of the as-built shop plans. The reproducible copies shall be
15 clear, suitable for microfilming, and on permanent sheets that measure no smaller than
16 11 by 17-inches. Alternatively, the shop drawings may be provided in an electronic
17 format with the concurrence of the Engineer.

18
19 **6-03.3(7)A Erection Methods**

20 The first paragraph is revised to read:

21
22 Before beginning to erect any steel Structure, the Contractor shall submit Type 2E
23 Working Drawings consisting of the erection plan and procedure describing the methods
24 the Contractor intends to use.

25
26 The second paragraph (up until the colon) is revised to read:

27
28 The erection plan and procedure shall provide complete details of the erection process
29 including, at a minimum, the following:

30
31 The third paragraph (up until the colon) is revised to read:

32
33 As part of the erection plan Working Drawings, the Contractor may submit details of an
34 engineered and fabricated lifting bracket bolted to the girder top flanges providing the
35 following requirements are satisfied:

36
37 In the third paragraph, the second sentence of item number 4 is revised to read:

38
39 Certification documentation from a previous project may be submitted;

40
41 The last sentence of the fourth paragraph is deleted.

42
43 The last paragraph is deleted.

44
45 **6-03.3(10) Straightening Bent Material**

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

47
48 A limited amount of localized heat may be applied only if carefully planned and
49 supervised, and only in accordance with the heat-straightening procedure Working
50 Drawing submittal.

51
52 The third paragraph is revised to read:

1
2 After straightening, the Contractor shall inspect the member for fractures using a
3 method proposed by the Contractor and accepted by the Contracting Agency.
4

5 The last paragraph is revised to read:
6

7 The procedure for heat straightening of universal mill (UM) plates by the mill or the
8 fabricator shall be submitted as a Type 2 Working Drawing.
9

10 **6-03.3(14) Edge Finishing**

11 In the first paragraph, the last sentence is revised to read:
12

13 Corners along exposed edges shall be broken by light grinding or another method
14 acceptable to the Engineer to achieve an approximate 1/16-inch chamfer or rounding.
15

16 In the fifth paragraph, the last sentence is revised to read:
17

18 The fabricator shall prevent excessive hardening of flange edges through preheating,
19 post heating, or control of the burning process as recommended by the steel
20 manufacturer.
21

22 The sixth paragraph is revised to read:
23

24 Hardness testing shall consist of testing thermal-cut edges with a portable hardness
25 tester. The hardness tester, and its operating test procedures, shall be submitted as a
26 Type 1 Working Drawing. The hardness tester shall be convertible to Rockwell C scale
27 values.
28

29 In the last paragraph, the last sentence is revised to read:
30

31 If thermal-cutting operations conform to procedures established by the steel
32 manufacturer, and hardness testing results are consistently within acceptable limits, the
33 Engineer may authorize a reduction in the testing frequency.
34

35 **6-03.3(15) Planing of Bearing Surfaces**

36 This section is supplemented with the following new paragraph:
37

38 Where mill to bear is specified in the Plans, the bearing end of the stiffener shall be
39 flush and square with the flange and shall have at least 75 percent of this area in
40 contact with the flange.
41

42 **6-03.3(25) Welding and Repair Welding**

43 In the first paragraph, the first sentence is revised to read:
44

45 Welding and repair welding of all steel bridges shall comply with the AASHTO/AWS
46 D1.5M/D1.5, latest edition, Bridge Welding Code.
47

48 In the second paragraph, the last sentence is revised to read:
49

50 No welding, including tack and temporary welds shall be done in the shop or field unless
51 the location of the welds is shown on the shop drawings reviewed and accepted by the
52 Engineer.

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

Welding procedures shall accompany the shop drawing Working Drawing submittal.

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

Welding shall not begin until completion of the shop plan Working Drawing review as required in Section 6-03.3(7).

In item number 1 of the ninth paragraph, "approves" is revised to read "concurs".

6-03.3(25)A3 Ultrasonic Inspection

The following new paragraph is inserted before the last paragraph:

A minimum of 30 percent of complete penetration vertical welds on steel column jackets thicker than 5/16-inch, within 1.50 column jacket diameter of the top and bottom of each column, shall be inspected. If any rejectable flaws are found, 100 percent of the weld within the specified limits shall be inspected. The largest column cross section diameter for tapered column jackets shall constitute one column jacket diameter.

6-03.3(25)A4 Magnetic Particle Inspection

Items number 3 and 4 are revised to read:

3. Complete penetration groove welds on plates $\frac{5}{16}$ -inch or thinner (excluding steel column jackets) shall be 100 percent tested by the magnetic particle method. Testing shall apply to both sides of the weld, if backing plate is not used. The ends of each complete penetration groove weld at plate edges shall be tested by the magnetic particle method.
4. A minimum of 30 percent of complete penetration vertical welds on steel column jackets $\frac{5}{16}$ -inch or thinner, within 1.50 column jacket diameters of the top and bottom of each column, shall be magnetic particle inspected. The largest column cross section diameter for tapered column jackets shall constitute one column jacket diameter.

The last paragraph is supplemented with the following new sentence:

If any rejectable flaws are found in any test length of item 4 above, 100 percent of the weld within the specified limits shall be inspected.

6-03.3(27) High Strength Bolt Holes

The last paragraph is revised to read:

The Contractor shall submit Type 2 Working Drawings consisting of a detailed outline of the procedures proposed to accomplish the work from initial drilling through shop assembly.

6-03.3(27)C Numerically Controlled Drilled Connections

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

1 The Contractor shall submit Type 1 Working Drawings consisting of a detailed outline of
2 proposed N/C procedures.

3
4 **6-03.3(29) Welded Shear Connectors**

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

6
7 Installation, production control, and inspection of welded shear connectors shall
8 conform to Chapter 7 of the AASHTO/AWS D1.5M/D1.5:2010 Bridge Welding Code. If
9 welded shear connectors are installed in the shop, installation shall be completed prior
10 to applying the shop primer coat in accordance with Section 6-07.3(9)G. If welded shear
11 connectors are installed in the field, the steel surface to be welded shall be prepared to
12 SSPC-SP 11, power tool cleaning, just prior to welding.

13
14 **6-03.3(33) Bolted Connections**

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

16
17 The Contractor shall submit Type 1 Working Drawings providing documentation of the
18 bolt tension calibrator, including brand, capacity, model, date of last calibration, and
19 manufacturer's instructions for use.

20
21 In the second sentence of the second paragraph, the word "approved" is deleted.

22
23 In item number 3 of the fifth paragraph, "approved" is revised to read "specified".

24
25 In the center column header of table 1, "AASHTO M 164" is revised to read "ASTM A 325".

26
27 In the column headings of table 3, "M 164" is revised to read "A 325".

28
29 In the tenth paragraph, item number 3, "approved" is revised to read "accepted" in the
30 second and third sentences of the first paragraph.

31
32 In the tenth paragraph, item number 3, the third paragraph is revised to read:

33
34 The Contractor shall submit Type 1 Working Drawings of the tension control bolt
35 assembly, including bolt capacities, type of bolt, nut, and washer lubricant, method of
36 packaging and protection of the lubricated bolt, installation equipment, calibration
37 equipment, and installation procedures.

38
39 In the first sentence of the last paragraph, "AASHTO M 164" is revised to read "ASTM A
40 325".

41
42 The second sentence of the last paragraph is revised to read:

43
44 Black ASTM A 325 bolts may be reused once if accepted by the Engineer.

45 In the last paragraph, the fourth sentence is revised to read:

46
47 Bolts to be reused shall be relubricated in accordance with the manufacturer's
48 recommendations.

49
50 **6-03.3(33)A Pre-Erection Testing**

51 In the fifth sentence of the first paragraph, "approved" is revised to read "accepted".

52

1 The third paragraph is revised to read:
2
3 The Contractor shall submit Type 1 Working Drawings consisting of the manufacturer's
4 detailed procedure for pre-erection (rotational capacity) testing of tension control bolt
5 assemblies.
6
7 **6-03.3(33)B Bolting Inspection**
8 In the last sentence of the first paragraph, "approved" is revised to read "specified".
9
10 The last paragraph is revised to read:
11
12 The Contractor shall submit Type 1 Working Drawings consisting of the manufacturer's
13 detailed procedure for routine observation to ensure proper use of the tension control
14 bolt assemblies.
15
16 **6-03.3(42) Surface Condition**
17 The first subparagraph is revised to read:
18
19 Painted steel surfaces shall be cleaned by methods required for the type of staining.
20 The Contractor shall submit a Type 1 Working Drawing of the cleaning method.
21
22 **6-04.AP6**

23 **Section 6-04, Timber Structures**
24 **January 5, 2015**

25 **6-04.3(3) Shop Details**
26 This section is revised to read:
27
28 The Contractor shall submit Type 2 Working Drawings consisting of shop detail plans
29 for all treated timber. These plans shall show dimensions for all cut, framed, or bored
30 timbers.
31
32 **6-05.AP6**

33 **Section 6-05, Piling**
34 **January 5, 2015**

35 **6-05.3(2) Ordering Piling**
36 The last paragraph is deleted.
37
38 **6-05.3(3)A Casting and Stressing**
39 In the second sentence of the first paragraph, "poured" is revised to read "cast".
40
41 **6-05.3(4) Manufacture of Steel Casings for Cast-In-Place Concrete Piles**
42 This section is revised to read:
43
44 The diameter of steel casings shall be as specified in the Contract. A full-penetration
45 groove weld between welded edges is required.
46

1 **6-05.3(5) Manufacture of Steel Piles**

2 This section is revised to read:

3
4 Steel piles shall be made of rolled steel H-pile sections, steel pipe piles, or of other
5 structural steel sections described in the Contract. A full-penetration groove weld
6 between welded edges is required.
7

8 **6-05.3(6) Splicing Steel Casings and Steel Piles**

9 This section is revised to read:

10
11 The Engineer will normally permit steel piles and steel casings for cast-in-place
12 concrete piles to be spliced. But in each case, the Contractor shall submit Type 2
13 Working Drawings supporting the need and describing the method for splicing. Welded
14 splices shall be spaced at a minimum distance of 10 feet. Only welded splices will be
15 permitted.
16

17 Splice welds for steel piles shall comply with Section 6-03.3(25) and AWS D1.1/D1.1M,
18 latest edition, Structural Welding Code. Splicing of steel piles shall be performed in
19 accordance with an approved weld procedure. The Contractor shall submit a Type 2
20 Working Drawing consisting of the weld procedure. For ASTM A 252 material, mill
21 certification for each lot of pipe to be welded shall accompany the submittal. The ends
22 of all steel pipe piling shall meet the fit-up requirements of AWS D1.1/D1.1M, latest
23 edition, Structural Welding Code Section 5.22.3.1, "Girth Weld Alignment (Tubular),"
24 when the material is spliced utilizing a girth weld.
25

26 Splice welds of steel casings for cast-in-place concrete piles shall be the Contractor's
27 responsibility and shall be welded in accordance with AWS D1.1/D1.1M, latest edition,
28 Structural Welding Code. A weld procedure submittal is not required for steel casings
29 used for cast-in-place concrete piles. Casings that collapse or are not watertight, shall
30 be replaced at the Contractor's expense.
31

32 **6-05.3(7)B Precast Concrete Piles**

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

34
35 The Contractor shall submit Type 2 Working Drawings consisting of the method of lifting
36 the piles.
37

38 **6-05.3(8) Pile Tips and Shoes**

39 In the last paragraph, the second and third sentences are deleted and replaced with the
40 following new sentence:

41
42 If pile tips or shoes other than those denoted in the Qualified Products List are
43 proposed, the Contractor shall submit Type 2 Working Drawings consisting of shop
44 drawings of the proposed pile tip along with design calculations, specifications, material
45 chemistry and installation requirements, along with evidence of a pile driving test
46 demonstrating suitability of the proposed pile tip.
47

48 **6-05.3(9)A Pile Driving Equipment Approval**

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

50
51 Prior to driving any piles, the Contractor shall submit Type 2 Working Drawings
52 consisting of details of each proposed pile driving system.

1
2 In the second paragraph, the first sentence is revised to read:

3
4 The Contractor shall submit Type 2E Working Drawings consisting of a wave equation
5 analysis for all pile driving systems used to drive piling with required ultimate bearing
6 capacities of greater than 300 tons.
7

8 In the second paragraph, the second sentence is deleted.
9

10 The last paragraph is revised to read:

11
12 Changes to the pile driving system after completion of the Working Drawing review
13 require a revised Working Drawing submittal.
14

15 **6-05.3(9)B Pile Driving Equipment Minimum Requirements**

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

17
18 For each drop hammer used, the Contractor shall weigh it in the Engineer's presence or
19 submit a Type 1 Working Drawing consisting of a certificate of its weight.
20

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

22
23 For each diesel, hydraulic, steam, or air-driven hammer used, the Contractor shall
24 submit a Type 1 Working Drawing consisting of the manufacturer's specifications and
25 catalog.
26

27 In the fourth paragraph, "approval" is revised to read "permission".
28

29 The ninth paragraph is revised to read:

30
31 These requirements for minimum hammer size may be waived if a Type 2E Working
32 Drawing is submitted consisting of a wave equation analysis demonstrating the ability of
33 the hammer to obtain the required bearing capacity and minimum tip elevation without
34 damage to the pile.
35

36 **6-05.3(9)C Pile Driving Leads**

37 In the third paragraph, "approved" is revised to read "permitted".
38

39 **6-05.3(11)F Pile Damage**

40 In the first sentence of the second paragraph, "approved" is revised to read "accepted".
41

42 **6-05.3(11)G Pile Cutoff**

43 In the first paragraph, "Engineer's approval" is revised to read "Engineer's permission".
44

45 **6-05.3(11)H Pile Driving From or Near Adjacent Structures**

46 In the first paragraph, item number 3 is revised to read:
47

- 48 3. Type 2E Working Drawings are submitted in accordance with Sections 1-05.3 and 6-
49 02.3(16), showing the structural adequacy of the existing Structure to safely support
50 all of the construction loads.
51

- 1 **6-05.3(12) Determination of Bearing Values**
2 In the footnote below the formula, “approved by the Engineer” is revised to read “acceptable
3 to the Engineer”.
4
- 5 **6-05.3(13) Treatment of Timber Pile Heads**
6 In the second paragraph, the first sentence is revised to read:
7
8 After cutting treated timber piles to correct elevation, the Contractor shall brush three
9 coats of a preservative that meets the requirements of Section 9-09 on all pile heads
10 (except those to be covered with concrete footings or concrete caps).
11
- 12 **6-05.3(15) Completion of Cast-In-Place Concrete Piles**
13 In the first paragraph, “approval” is revised to read “acceptance”.
14
- 15 **6-06.AP6**
- 16 **Section 6-06, Bridge Railings**
17 **January 5, 2015**
- 18 **6-06.3(2) Metal Railings**
19 The second paragraph is revised to read:
20
21 Before fabricating the railing, the Contractor shall submit Type 2 Working Drawings
22 consisting of the shop plans. The Contractor may substitute other rail connection details
23 for those shown in the Plans if details of these changes show in the shop plans and if
24 the Engineer accepts them in the Working Drawing response comments. In reviewing
25 the shop plan Working Drawings, the Engineer indicates only that they are adequate
26 and complete enough. The review does not indicate a check on dimensions.
27
- 28 **6-07.AP6**
- 29 **Section 6-07, Painting**
30 **January 5, 2015**
- 31 **6-07.3 Painting**
32 This section is supplemented with the following new subsections:
33
- 34 **6-07.3(14) Metallic Coatings**
35
- 36 **6-07.3(14)A General Requirements**
37 This specification covers the requirements for thermal spray metallic coatings, with
38 and without additional paint coats, as a means to prevent corrosion.
39
- 40 The coating system consists of surface preparation by wash cleaning and abrasive
41 blast cleaning, thermal spray application of a metallic coating using a material
42 made specifically for that purpose, and, when specified, shop primer coat or shop
43 primer coat plus top coat in accordance with Section 6-07.3(11)A. The system also
44 includes inspection and acceptance requirements.
45
- 46 **6-07.3(14)B Reference Standards**
47 SSPC-SP 10/NACE No. 2 Near White Blast Cleaning

1	SSPC CS 23.00	Guide for Thermal Spray Metallic Coating Systems
2	ASTM-C-633	Standard Test Method for Adhesion or Cohesion
3		Strength of Thermal Spray Coatings
4	ASTM D 4417	Standard Test Methods for Field Measurement of
5		Surface Profile of Blast-Cleaned Steel
6	ASTM D 6386	Standard Practice for Preparation of Zinc (Hot-Dip
7		Galvanized) Coated Iron and Steel Product and
8		Hardware Surfaces for Painting
9	ASTM D 4541	Standard Test Method for Pull-Off Strength of Coatings
10		Using Portable Adhesion Testers
11	ANSI/AWS C2.18	Guide for the Protection of Steel with Thermal Sprayed
12		Coatings of Aluminum, Zinc and their Alloys and
13		Composites

14
15 **6-07.3(14)C Quality Assurance**

16 A representative sample of each lot of the coating material used shall be submitted
17 to the Engineer for analysis prior to use. Zinc shall have a minimum purity of 99.9
18 percent. Zinc Aluminum 85/15 wire shall be 14 percent minimum to 16 percent
19 maximum aluminum.
20

21 The thermal sprayed coating shall have a uniform appearance. The coating shall
22 not contain any blisters, cracks, chips or loosely adhering particles, oil or other
23 surface contaminants, nodules, or pits exposing the substrate.
24

25 The thermal spray coating shall adhere to the substrate with a minimum bond of
26 700 psi. The Contractor's QA program shall include thermal spray coating bond
27 testing.
28

29 The Engineer may cut through the coating with a knife or chisel. If upon doing so,
30 any part of the coating lifts away from the base metal 1/4 in. or more ahead of the
31 cutting blade without cutting the metal, then the bond is considered not effective
32 and is rejected.
33

34 Coated areas which have been rejected or damaged in the inspection procedure
35 described shall have the defective sections blast cleaned to remove all of the
36 thermal sprayed coating and shall then be recoated. Before resubmittal and
37 inspection, those sections where coating has not reached the required thickness
38 shall be sprayed with additional metal until that thickness is achieved.
39

40 **6-07.3(14)D Submittals**

41 The Contractor shall submit to the Engineer, prior to abrasive blast cleaning, a 12
42 inch square steel plate, of the same material and approximate thickness of the steel
43 to be coated, blasted clean in accordance with Section 6-07.3(14)E. The sample
44 plate will be checked for specified angular surface pattern, the abrasive grit size
45 and type used, and the procedure used. This plate shall be used as the visual
46 standard to determine the acceptability of the cleaned surface. In the event the
47 Contractor's cleaning operation is inferior to the sample plate, the Contractor shall
48 be required to correct the cleaning operation to do a job comparable to the
49 specimen submitted.
50

51 At the same time as submitting the abrasive blast cleaned steel plate sample, the
52 Contractor shall submit to the Engineer, a second 12 inch square steel plate of the

1 same material and thickness, cleaned and thermal spray coated in accordance with
2 the same processes and with the same equipment as intended for use in applying
3 the thermal spray coatings. The Engineer may request additional cleaned and
4 thermal spray coated samples to be produced and submitted coincident with
5 thermal spray coating of the items specified in the Plans to receive thermal spray
6 coatings.
7

8 **6-07.3(14)E Surface Preparation**

9 Surface irregularities (e.g., sharp edges and/or carburized edges, cracks,
10 delaminations, pits, etc.) interfering with the application of the coating shall be
11 removed or repaired, prior to wash cleaning. Thermal cut edges shall be ground to
12 reduce hardness to attain the surface profile required from abrasive blast cleaning.
13

14 All dirt, oil, scaling, etc. shall be removed prior to blast cleaning. All surfaces shall
15 be wash cleaned with either clean water at 8000 psi or water and detergent at 2000
16 psi with two rinses with clean water.
17

18 The surface shall be abrasive blast cleaned to near white metal (SSPC-SP 10).
19 The surface profile shall be measured using a surface profile comparator, replica
20 tape, or other method suitable for the abrasive being used in accordance with
21 ASTM D 4417.
22

23 Where zinc coatings up to and including 0.009 inch thick are to be applied, one of
24 the following abrasive grits shall be used with pressure blast equipment to produce
25 a 3.0 mils AA anchor tooth pattern:
26

- 27 1. Aluminum oxide or silicon carbide
28 mesh size: SAE G-25 to SAE G-40
29
- 30 2. Hardened steel grit
31 mesh size: SAE G-25 to SAE G-40
32
- 33 3. Garnet, flint, or crushed nickel or black beauty coal slag
34 mesh size: SAE G-25 to SAE G-50
35

36 Where zinc coatings greater than 0.010 inch thick are to be applied, one of the
37 following abrasive grits shall be used with pressure blast equipment to produce a
38 5.0 mils AA anchor tooth pattern:
39

- 40 1. Aluminum oxide or silicon carbide
41 mesh size: SAE G-18 to SAE G-25
42
- 43 2. Hardened steel grit
44 mesh size: SAE G-18 to SAE G-25
45
- 46 3. Garnet, flint, or crushed nickel or black beauty coal slag
47 mesh size: SAE G-18 to SAE G-25
48

49 The pressure of the blast nozzle, as measured with a needle probe gauge, with
50 pressure type blasting equipment shall be as follows:
51

- 1 1. With aluminum oxide, silicon carbide, flint, or slag - 50 psi minimum and 60
2 psi maximum.
- 3
- 4 2. With garnet or steel grit - 75 psi minimum.
- 5

6 The pressure at the blast nozzle, with siphon blasting (suction blasting), shall be as
7 follows:

- 8
- 9 1. With aluminum oxide, silicon carbide, flint, or slag - 75 psi maximum.
- 10
- 11 2. With garnet or steel grit - 90 psi maximum.
- 12

13 The abrasive blast stream shall be directed onto the substrate surface at a spray
14 angle of 75 to 90 degrees, and moved side to side. The nozzle to substrate
15 distance shall be 4 to 12 inches.

16

17 **6-07.3(14)F Application of Metallic Coating**

18 No surface shall be sprayed which shows any sign of condensed moisture or which
19 does not comply with Section 6-07.3(14)E. If rust bloom occurs within the holding
20 time between abrasive blast cleaning and thermal spraying, the surface shall be
21 reblasted at a blast angle as close to perpendicular to the surface as possible to
22 achieve a 2.0 to 4.0 mil anchor tooth pattern. Thermal spraying shall not take place
23 when the relative humidity is 90% or greater, when the steel temperature is less
24 than 5°F above the dew point, or when the air or steel temperature is less than
25 40°F.

26

27 Clean, dry air shall be used with not less than 50 psi air pressure at the air
28 regulator. Not more than 50 feet of 3/8 in. ID hose shall be used between the air
29 regulator and the metallizing gun. The metallizing gun shall be started and
30 adjusted with the spray directed away from the work. During the spraying operation
31 and depending upon the equipment being used, the gun shall be held as close to
32 perpendicular as possible to the surface from 5 to 8 inches from the surface of the
33 work.

34

35 Manual spraying shall be done in a block pattern, typically 2 feet by 2 feet square.
36 The sprayed metal shall overlap on each pass to ensure uniform coverage. The
37 specified thickness of the coating shall be applied in multiple layers. In no case are
38 fewer than two passes of thermal spraying, overlapping at right angles, acceptable.

39

40 At least one single layer of coating shall be applied within 4 hours of blasting and
41 the surface shall be completely coated to the specified thickness within 8 hours of
42 blasting.

43

44 The minimum coating thickness shall be 6 mils unless otherwise shown in the
45 Plans.

46

47 **6-07.3(14)G Applications of Shop Coats and Field Coats**

48 The surface shall be wiped clean with solvent immediately before applying the
49 wash primer. The wash primer shall have a low viscosity appropriate for absorption
50 into the thermal spray coating, and shall be applied within 8 hours after completion
51 of thermal spraying or before oxidation occurs. The dry film thickness of the wash
52 primer shall not exceed 0.5 mils or be less than 0.3 mils. It shall be applied using

an appropriate spray gun except in those areas where brush or roller application is necessary. The subsequent shop primer or field coats shall be applied no less than one-half hour after a wash primer.

The shop primer coat, when specified, shall be applied in accordance with Section 6-07.3(11)A and the paint manufacturer's recommendations.

All field coats, when specified, shall be applied in accordance with Section 6-07.3(11)A and the paint manufacturer's recommendations. The color of the top coat shall conform to Section 6-03.3(30) as supplemented in these Special Provisions.

6-07.3(2) Submittals

The first paragraph is revised to read:

The Contractor shall submit Type 2 Working Drawings of the painting plan.

6-07.3(10)A Containment

The second paragraph is revised to read:

The containment length shall not exceed the length of a span (defined as pier to pier). The containment system shall not cause any damage to the existing structure. All clamps and other attachment devices shall be padded or designed such that they shall not mark or otherwise damage the steel member to which they are attached. All clamps and other attachment devices shall be fully described in the Contractor's painting plan Working Drawing submittal. Field welding of attachments to the existing structure will not be allowed. The Contractor shall not drill holes into the existing structure or through existing structural members except as shown in the Contractor's painting plan Working Drawing submittal. All provisions for dust collection, ventilation and auxiliary lighting within the containment system shall be fully described the Contractor's painting plan Working Drawing submittal.

In the second to last paragraph, "approved" is revised to read "accepted".

6-07.3(10)E Surface Preparation – Full Paint Removal

This section is revised to read:

For structures where full removal of existing paint is specified, the Contractor shall remove any visible oil, grease, and road tar in accordance with SSPC-SP 1.

Following preparation by SSPC-SP 1, all steel surfaces to be painted shall be prepared in accordance with SSPC-SP 10, near-white metal blast cleaning. Surfaces inaccessible to near-white metal blast cleaning shall be prepared in accordance with SSPC-SP 11, power tool cleaning to bare metal, as allowed by the Engineer.

6-07.3(10)F Collecting, Testing and Disposal of Containment Waste

In the first paragraph, the last sentence before the numbered list is revised (up until the colon) to read:

The sealed waste containers shall be stored in accordance with Section 1-06.4, the painting plan, and the following requirements:

1 In the second paragraph, the first sentence is revised to read:
2
3 All material collected by and removed from the containment system shall be taken to a
4 landside staging area, provided by the Contractor, for further processing and storage
5 prior to transporting for disposal.
6
7 The ninth paragraph is revised to read:
8
9 The Contractor shall submit a Type 1 Working Drawing of all TCLP results.
10
11 The first sentence of the last paragraph is revised to read:
12
13 The Contractor shall submit a Type 1 Working Drawing consisting of waste disposal
14 documentation within 15 working days of each disposal.
15
16 **6-07.3(10)K Coating Thickness**
17 The last paragraph is revised to read:
18
19 If the specified number of coats does not produce a combined dry film thickness of at
20 least the sum of the thicknesses required per coat, or if an individual coat does not meet
21 the minimum thickness, or if visual inspection shows incomplete coverage, the coating
22 system will be rejected, and the Contractor shall discontinue painting and surface
23 preparation operations and shall submit a Type 2 Working Drawing of the repair
24 proposal. The repair proposal shall include documentation demonstrating the cause of
25 the less than minimum thickness along with physical test results, as necessary, and
26 modifications to work methods to prevent similar results. The Contractor shall not
27 resume painting or surface preparation operations until receiving the Engineer's
28 acceptance of the completed repair.
29
30 **6-07.3(10)L Environmental Condition Requirements Prior to Application of**
31 **Paint**
32 In the last paragraph, the second to last sentence is revised to read:
33
34 If a paint system manufacturer's recommendations allow for application of a paint under
35 environmental conditions other than those specified, the Contractor shall submit a Type
36 2 Working Drawing consisting of a letter from the paint manufacturer specifying the
37 environmental conditions under which the paint can be applied.
38
39 In the last sentence of the last paragraph, "approval" is revised to read "concurrence".
40
41 **6-07.3(11)B1 Submittals**
42 The first paragraph (up until the colon) is revised to read:
43
44 The Contractor shall submit Type 2 Working Drawings consisting of the following
45 information:
46
47 **6-07.3(11)B3 Galvanized Surface Cleaning and Preparation**
48 The first paragraph is revised to read:
49
50 Galvanized surfaces receiving the powder coating shall be cleaned and prepared for
51 coating in accordance with ASTM D 6386, and the project-specific powder coating plan.
52

1 **6-07.3(11)B4 Powder Coating Application and Curing**
2 The first paragraph (up until the colon) is revised to read:
3
4 After surface preparation, the two-component powder coating shall be applied in
5 accordance with the powder coating manufacturer's recommendations, the project-
6 specific powder coating plan, and as follows:
7
8 **6-07.3(11)B5 Testing**
9 In the fifth sentence of the first paragraph, the phrase "as approved by the Engineer" is
10 deleted.
11
12 The second paragraph is revised to read:
13
14 The results of the QC testing shall be documented in a QC report, and submitted as a
15 Type 2 Working Drawing.
16
17 In the fourth paragraph, the phrase "as approved by the Engineer" is deleted.
18
19 In the last paragraph, "Engineer's approval" is revised to read "Engineer's acceptance".
20
21 **6-07.3(11)B6 Coating Protection for Shipping**
22 The phrase "as approved by the Engineer" is deleted from this section.
23
24 The first sentence of the last paragraph is revised to read:
25
26 After erection, all coating damage due to the Contractor's shipping, storage, handling,
27 and erection operations shall be repaired by the Contractor in accordance with the
28 project-specific powder coating plan.
29
30 **6-07.5 Payment**
31 The following new paragraph is inserted before the last paragraph:
32
33 All costs in connection with producing the metallic coatings as specified shall be
34 included in the unit contract price for the applicable item or items of work.
35
36 **6-09.AP6**

37 **Section 6-09, Modified Concrete Overlays**
38 **January 5, 2015**

39 **6-09.2 Materials**
40 The second sentence of the fifth paragraph is revised to read:
41
42 Microsilica will be accepted based on submittal of a Manufacturer's Certificate of
43 Compliance.
44
45 The seventh paragraph is revised to read:
46
47 Latex admixture will be accepted based on submittal of a Manufacturer's Certificate of
48 Compliance.
49

1 **6-09.3(1)H Mobile Mixer for Latex Modified Concrete**

2 In item number 2 of the first paragraph, "An approved recording meter" is revised to read "A
3 recording meter".

4
5 In item number 3 of the first paragraph, "an approved flow meter" is revised to read "a flow
6 meter".

7
8 **6-09.3(1)J Finishing Machine**

9 The last two sentences of the last paragraph are revised to read:

10
11 A machine with a vibrating pan as an integral part may be proposed. Other finishing
12 machines will be allowed subject to concurrence of the Engineer.

13
14 **6-09.3(2) Submittals**

15 This section is revised to read:

16
17 The Contractor shall submit the following Working Drawings in accordance with Section
18 1-05.3:

- 19
20 1. A Type 1 Working Drawing of the type of machine (rotary milling, hydro-
21 demolition, or shot blasting) selected by the Contractor for use in this project to
22 scarify concrete surfaces.
- 23
24 2. A Type 1 Working Drawing of the axle loads and axle spacing of the rotary
25 milling machine (if used).
- 26
27 3. A Type 2 Working Drawing of the Runoff Water Disposal Plan (if a hydro-
28 demolition machine is used). The Runoff Water Disposal Plan shall describe all
29 provisions for the containment, collection, filtering, and disposal of all runoff
30 water and associated contaminants generated by the hydro-demolition process,
31 including containment, collection and disposal of runoff water and debris
32 escaping through breaks in the bridge deck.
- 33
34 4. A Type 2 Working Drawing of the method and materials used to contain, collect,
35 and dispose of all concrete debris generated by the scarifying process,
36 including provisions for protecting adjacent traffic from flying debris.
- 37
38 5. A Type 1 Working Drawing of the mix design for concrete Class M, and either
39 fly ash modified concrete, microsilica modified concrete, or latex modified
40 concrete, as selected by the Contractor for use in this project in accordance
41 with Section 6-09.3(3).
- 42
43 6. A Type 1 Working Drawing of samples of the latex admixture and the portland
44 cement for testing and compatibility (if latex modified concrete is used).
- 45
46 7. A Type 2 Working Drawing of the paving equipment specifications and details
47 of the screed rail support system, including details of anchoring the rails and
48 providing rail continuity.
- 49

50 **6-09.3(3)A General**

51 In the last paragraph, the phrase "and as approved by the Engineer" is deleted.

- 1 **6-09.3(4)B Latex Admixture**
2 In the second sentence of the second paragraph, the phrase “and as approved by the
3 Engineer” is deleted.
4
- 5 **6-09.3(5)A General**
6 The second paragraph is deleted.
7
8 In the third and fourth paragraphs, the phrase “and as approved by the Engineer” is deleted.
9
10 In the fifth paragraph, “approved by the Engineer” is revised to read “acceptable to the
11 Engineer”.
12
- 13 **6-09.3(5)B Testing of Hydro-Demolition and Shot Blasting Machines**
14 In the last sentence of the last paragraph, “approval” is revised to read “acceptance”.
15
- 16 **6-09.3(5)C Hydro-Demolishing**
17 In the third and fourth paragraphs, the phrase “as approved by the Engineer” is deleted.
18
- 19 **6-09.3(6)B Deck Repair Preparation**
20 The second to last paragraph is revised to read the following three new paragraphs:
21
22 The exposed steel reinforcing bars and concrete in the repair area shall be sandblasted
23 or hydro-blasted and blown clean just prior to placing concrete.
24
25 Where existing steel reinforcing bars inside deck repair areas show deterioration
26 exceeding the limits defined in the Plans, the Contractor shall furnish and place steel
27 reinforcing bars alongside the deteriorated bars in accordance with the details shown in
28 the Plans. Payment for such extra Work will be by force account as provided in Section
29 1-09.6.
30
31 Bridge deck areas outside the repair area or steel reinforcing bar inside or outside the
32 repair area damaged by the Contractor’s operations, shall be repaired by the Contractor
33 at no additional expense to the Contracting Agency, and to the satisfaction of the
34 Engineer.
35
- 36 **6-09.3(6)C Placing Deck Repair Concrete**
37 The third paragraph is supplemented with the following:
38
39 The Work of Type 1 further deck preparation shall consist of removing and disposing of
40 the concrete within the repair area.
41
42 The following new sentence is inserted before the last sentence of the last paragraph:
43
44 The Work of Type 2 further deck preparation shall consist of removing and disposing of
45 concrete within the repair area, and furnishing, placing, finishing, and curing the repair
46 concrete.
47
- 48 **6-09.3(7) Surface Preparation for Concrete Overlay**
49 The first sentence of the second paragraph is revised to read:
50
51 If either a rotary milling machine or a shot blasting machine is used for concrete
52 scarification, then the concrete deck shall be sandblasted or shot blasted, using

1 equipment identified in the Working Drawing submittals, until sound concrete is
2 exposed.

3

4 The third paragraph is revised to read:

5

6 If a hydro-demolition machine is used for concrete scarification, then the concrete deck
7 shall be cleaned by water blasting with 7,000 psi minimum pressure, until sound
8 concrete is exposed.

9

10 In the fourth paragraph, "as approved by the Engineer" is revised to read "accepted by the
11 Engineer".

12

13 In the last sentence of the eighth paragraph, the phrase "as approved by the Engineer" is
14 deleted.

15

16 In the first sentence of the last paragraph, "approved" is revised to read "allowed".

17

18 **6-09.3(8)B Quality Assurance for Latex Modified Concrete Overlays**

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

20

21 The technical representative shall be capable of performing, demonstrating, inspecting,
22 and testing all of the functions required for placement of the latex modified concrete as
23 specified in Section 6-09.3(11).

24

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

26

27 Recommendations made by the technical representative on or off the jobsite shall be
28 adhered to by the Contractor at no additional expense to the Contracting Agency.

29

30 **6-09.3(10)A Survey of Existing Bridge Deck Prior to Scarification**

31 The third sentence of the fourth paragraph is revised to read:

32

33 A Type 1 Working Drawing of each day's survey record shall be provided to the
34 Engineer within three working days after the end of the shift.

35

36 **6-09.3(10)B Establishing Finish Overlay Profile**

37 In the fourth sentence of the first paragraph, "approved by the Engineer" is revised to read
38 "specified by the Engineer".

39

40 In the second paragraph, the phrase "and as approved by the Engineer" is deleted.

41

42 **6-09.3(11) Placing Concrete Overlay**

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

44

45 If the Contractor elects to work at night to meet these criteria, adequate lighting shall be
46 provided at no additional expense to the Contracting Agency.

47

48 **6-09.4 Measurement**

49 The last paragraph is deleted and replaced with the following:

50

1 Further deck preparation for Type 1 deck repair and for Type 2 deck repair will be
2 measured by the square foot of surface area of deck concrete removed in accordance
3 with Section 6-09.3(6).
4

5 **6-09.5 Payment**

6 The Bid item "Further Deck Preparation", per cubic foot and the paragraph following this Bid
7 item are deleted and replaced with the following two new Bid items:
8

9 "Further Deck Preparation for Type 1 Deck Repair", per square foot.
10

11 "Further Deck Preparation for Type 2 Deck Repair", per square foot.
12

13 The Bid item "Further Deck Preparation", force account and the paragraph following this Bid
14 item are deleted.
15

16 **6-10.AP6**

17 **Section 6-10, Concrete Barrier**

18 **January 5, 2015**

19 **6-10.1 Description**

20 In the second paragraph, "approved" is revised to read "specified".
21

22 **6-10.3 Construction Requirements**

23 In the first paragraph, "approved" is revised to read "specified".
24

25 **6-10.3(5) Temporary Concrete Barrier**

26 The last sentence of the first paragraph is deleted.
27

28 The second paragraph is revised to read:
29

30 If the Contract calls for the removal and resetting of permanent barrier, and the
31 permanent barrier is not required to remain in place until reset, the permanent barrier
32 may be substituted for temporary concrete barrier. Any of the permanent barrier
33 damaged during its use as temporary barrier will become the property of the Contractor
34 and be replaced with permanent barrier when the permanent barrier is reset to its
35 permanent location.
36

37 The third paragraph is revised to read:
38

39 All barrier shall be in good condition, without cracks, chips, spalls, dirt, or traffic marks. If
40 any barrier segment is damaged during or after placement, the Contractor shall
41 immediately repair it to the Engineer's satisfaction or replace it with an undamaged
42 section.
43

44 The following new paragraph is inserted after the third paragraph:
45

46 Delineators shall be placed on the traffic face of the barrier 6 inches from the top and
47 spaced a maximum of 40 feet on tangents and 20 feet through curves. The reflector
48 color shall be white on the right side of traffic and yellow on the left side of traffic. The
49 Contractor shall maintain, replace and clean the delineators when ordered by the
50 Engineer.

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6-11.AP6

Section 6-11, Reinforced Concrete Walls
January 5, 2015

6-11.3(1) Submittals

The first paragraph is revised to read:

The Contractor shall submit Type 2E Working Drawings consisting of excavation shoring plans in accordance with Section 2-09.3(3)D.

The second paragraph is revised to read:

The Contractor shall submit Type 2E Working Drawings of falsework and formwork plans in accordance with Sections 6-02.3(16) and 6-02.3(17).

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

If the Contractor elects to fabricate and erect precast concrete wall stem panels, Type 2E Working Drawings of the following information shall be submitted in accordance with Section 6-02.3(28)A:

The last paragraph is deleted.

6-11.3(3) Precast Concrete Wall Stem Panels

In the third paragraph, the phrase “as approved by the Engineer” is deleted.

6-12.AP6

Section 6-12, Noise Barrier Walls
January 5, 2015

6-12.3(1) Submittals

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

The Contractor shall submit a Type 2 Working Drawing consisting of the noise barrier wall access plan.

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

For construction of all noise barrier walls with shafts, the Contractor shall submit a Type 2 Working Drawing consisting of the shaft construction plan, including at a minimum the following information:

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

For construction of precast concrete noise barrier walls, the Contractor shall submit Type 2 Working Drawings consisting of shop drawings for the precast concrete panels in accordance with Section 6-02.3(28)A.

- 1 **6-12.3(2) Work Access and Site Preparation**
2 In the first paragraph, the first sentence is revised to read:
3
4 The Contractor shall construct work access in accordance with the work access plan.
5
- 6 **6-12.3(3) Shaft Construction**
7 The first paragraph is revised to read:
8
9 The Contractor shall excavate and construct the shafts in accordance with the shaft
10 construction plan.
11
12 In the last sentence of the third paragraph, “approved by the Engineer” is revised to read
13 “acceptable to the Engineer”.
14
15 The fourth paragraph is revised to read:
16
17 When caving conditions are encountered, the Contractor shall stop further excavation
18 until implementing the method to prevent ground caving as specified in the shaft
19 construction plan.
20
21 In the last sentence of the fifth paragraph, “approved” is revised to read “accepted”.
22
23 In the seventh paragraph, “approval” is revised to read “acceptance”.
24
25 In the eighth paragraph, the third sentence is revised to read:
26
27 The Contractor shall install the steel reinforcing bar cage as specified in the shaft
28 construction plan.
29
30 In the second sentence of the last paragraph, “approval” is revised to read “acceptance”.
31
32 In the fourth sentence of the last paragraph, the word “approved” is deleted.
33
- 34 **6-12.3(6) Precast Concrete Panel Fabrication and Erection**
35 In item number 3, the second paragraph is revised to read:
36
37 After receiving the Engineer’s review of the shop drawings, the Contractor shall cast
38 one precast concrete panel to be used as the sample panel. The Contractor shall
39 construct the sample panel in accordance with the procedure and details specified in
40 the shop drawings. The Contractor shall make the sample panel available to the
41 Engineer for acceptance.
42
43 In item number 3, the first sentence of the third paragraph is revised to read:
44
45 Upon receiving the Engineer’s acceptance of the sample panel, the Contractor shall
46 continue production of precast concrete panels for the noise barrier wall.
47
48 In item number 3, the third sentence of the third paragraph is revised to read:
49
50 The sample panel shall be retained at the fabrication site until all precast concrete
51 panels have been fabricated and accepted.
52

1 **6-12.3(10) Finish Line Ground Dressing**

2 In the last sentence of the second paragraph, the phrase “as approved by the Engineer” is
3 deleted.

4
5 **6-13.AP6**

6 **Section 6-13, Structural Earth Walls**
7 **January 5, 2015**

8 **6-13.3(1) Quality Assurance**

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

10

11 The structural earth wall manufacturer shall provide a qualified and experienced
12 representative to resolve wall construction problems.

13

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

15

16 Recommendations made by the structural earth wall manufacturer’s representative shall
17 be followed by the Contractor.

18

19 In the second paragraph, item number 4 is revised to read:

20

21 4. The base of the structural earth wall excavation shall be within three inches of the
22 staked elevations, unless otherwise accepted or specified by the Engineer.

23

24 In the second paragraph, item number 6 is revised to read:

25

26 6. The backfill reinforcement layers shall be located horizontally and vertically within
27 one inch of the locations shown in the structural earth wall working drawings.

28

29 **6-13.3(2) Submittals**

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

31

32 The Contractor, or the supplier as the Contractor’s agent, shall furnish a Manufacturer’s
33 Certificate of Compliance certifying that the structural earth wall materials conform to
34 the specified material requirements.

35

36 The second paragraph is revised to read:

37

38 A Type 1 Working Drawing of all test results, performed by the Contractor or the
39 Contractor’s supplier, which are necessary to assure compliance with the specifications,
40 shall submitted along with each Manufacturer’s Certificate of Compliance.

41

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

43

44 Before fabrication, the Contractor shall submit a Type 1 Working Drawing consisting of
45 the field construction manual for the structural earth walls, prepared by the wall
46 manufacturer.

47

48 In the fourth paragraph, the first sentence is revised to read:

49

1 The Contractor, through the license/patent holder for the structural earth wall system,
2 shall submit Type 2E Working Drawings consisting of detailed design calculations and
3 details.
4

5 The last paragraph is deleted.
6

7 **6-13.3(3) Excavation and Foundation Preparation**

8 In the first paragraph, the last two sentences are revised to read:
9

10 The foundation for the structure shall be graded level for a width equal to or exceeding
11 the length of reinforcing as shown in the structural earth wall working drawings and, for
12 walls with geogrid reinforcing, in accordance with Section 2-12.3. Prior to wall
13 construction, the foundation, if not in rock, shall be compacted as accepted by the
14 Engineer.
15

16 **6-13.3(6) Welded Wire Faced Structural Earth Wall Erection**

17 The first two sentences are revised to read:
18

19 The Contractor shall erect the welded wire wall reinforcement in accordance with the
20 wall manufacturer's field construction manual. Construction geotextile for wall facing
21 shall be placed between the backfill material within the reinforced zone and the coarse
22 granular material immediately behind the welded wire wall facing, as shown in the Plans
23 and the structural earth wall working drawings.
24

25 **6-13.3(7) Backfill**

26 The third paragraph is revised to read:
27

28 Misalignment or distortion of the precast concrete facing panels or concrete blocks due
29 to placement of backfill outside the limits of this specification shall be corrected in a
30 manner acceptable to the Engineer.
31

32 In item number 4 of the fifth paragraph, the phrase "as approved by the Engineer" is deleted.
33

34 The last paragraph is deleted.
35

36 **6-13.3(8) Guardrail Placement**

37 In the first sentence of the second paragraph, "approval" is revised to read "permission".
38

39 **6-13.3(9) SEW Traffic Barrier and SEW Pedestrian Barrier**

40 The first paragraph (up until the colon) is revised to read:
41

42 The Contractor, in conjunction with the structural earth wall manufacturer, shall design
43 and detail the SEW traffic barrier and SEW pedestrian barrier in accordance with
44 Section 6-12.3(2) and the above ground geometry details shown in the Plans. The
45 barrier Working Drawings and supporting calculations shall be Type 2E and shall
46 include, at a minimum, the following:
47

1 **6-14.AP6**

2 **Section 6-14, Geosynthetic Retaining Walls**
3 **January 5, 2015**

4 **6-14.2 Materials**

5 In the first paragraph, the section number next to “Anchor rods and associated nuts, washers
6 and couplers” is revised to read:

7
8 9-06.5(4)
9

10 The following new paragraph is inserted after the first paragraph:

11
12 Anchor plate shall conform to ASTM A 36, ASTM A 572 Grade 50, or ASTM A 588.
13

14 **6-14.3(2) Submittals**

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

16
17 The Contractor shall submit Type 2 Working Drawings consisting of detailed plans for
18 each wall. As a minimum, the submittals shall include the following:
19

20 **6-14.3(4) Erection and Backfill**

21 In the second sentence of the second paragraph, “approved by” is revised to read
22 “acceptable to”.
23

24 In the last sentence of the fifth paragraph, “approval” is revised to read “permission”.
25

26 The sixth paragraph is deleted.
27

28 In item number 5 in the eighth paragraph, the phrase “as approved by the Engineer” is
29 deleted.
30

31 In the ninth paragraph, the first sentence is revised to read:

32
33 The Contractor shall construct wall corners at the locations shown in the Plans, and in
34 accordance with the wall corner construction sequence and method in the Working
35 Drawing submittal.
36

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

38
39 Where required by retaining wall profile grade, the Contractor shall terminate top layers
40 of retaining wall geosynthetic and backfill in accordance with the method in the Working
41 Drawing submittal.
42

43 **6-14.5 Payment**

44 In the paragraph following the Bid item “Concrete Fascia Panel”, per square foot, “concrete
45 leveling pad” is revised to read “concrete footing”.
46

1 **6-15.AP6**

2 **Section 6-15, Soil Nail Walls**
3 **January 15, 2015**

4 **6-15.3(3) Submittals**

5 The first paragraph (excluding the numbered list) is revised to read:

6
7 The Contractor shall submit Type 2 Working Drawings of the following information:

8
9 **6-15.3(6) Soil Nailing**

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

11
12 Damaged or defective encapsulation shall be repaired in accordance with the
13 manufacturer's recommendations.

14
15 The eighth paragraph is revised to read:

16
17 If sections of the wall are constructed at different times than the adjacent soil nail
18 sections, the Contractor shall use stabilizing berms, temporary slopes, or other
19 measures acceptable to the Engineer, to prevent sloughing or failure of the adjacent soil
20 nail sections.

21
22 **6-15.3(8) Soil Nail Testing and Acceptance**

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

24
25 The Contractor shall submit Type 1 Working Drawings of all test data.

26
27 The last sentence of the seventh paragraph is revised to read:

28
29 The Contractor shall submit Type 2E Working Drawings of the reaction frame.

30
31 **6-15.3(8)A Verification Testing**

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

33
34 The Contractor shall submit Type 2E Working Drawings consisting of design details of
35 the verification testing, including the system for distributing test load pressures to the
36 excavation surface and appropriate nail bar size and reaction plate.

37
38 **6-16.AP6**

39 **Section 6-16, Soldier Pile and Soldier Pile Tieback Walls**
40 **January 5, 2015**

41 **6-16.3(2) Submittals**

42 The first paragraph is revised to read:

43
44 The Contractor shall submit Type 2 Working Drawings consisting of shop plans as
45 specified in Section 6-03.3(7) for all structural steel, including the steel soldier piles, and
46 shall submit Type 2 Working Drawings consisting of shop plans and other details as
47 specified in Section 6-17.3(3) for permanent ground anchors.

The second paragraph is revised to read:

The Contractor shall submit Type 1 Working Drawings consisting of the permanent ground anchor grout mix design and the procedures for placing the grout.

The third paragraph (excluding the numbered list) is revised to read:

The Contractor shall submit Type 2E Working Drawings consisting of forming plans for the concrete fascia panels, as specified in Sections 6-02.3(16) and 6-02.3(17).

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

The Contractor shall submit Type 2 Working Drawings consisting of a shaft installation plan.

The last paragraph is deleted.

6-16.3(3) Shaft Excavation

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

A temporary casing, slurry, or other methods specified in the shaft installation plan shall be used if necessary to ensure such safety and stability.

The fourth paragraph is revised to read:

Where caving in conditions are encountered, no further excavation will be allowed until the Contractor has implemented the method to prevent ground caving as submitted in accordance with item 4 of the Shaft Installation Plan.

The sixth paragraph is revised to read:

The excavated shaft shall be inspected and receive acceptance by the Engineer prior to proceeding with construction.

6-16.3(6)B Temporary Lagging

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

The Contractor shall submit Type 2E Working Drawings consisting of the soldier pile wall lagging design details and supporting design calculations. The submittal shall include, at a minimum, the following:

In item number 4 of the second paragraph, "approved by" is revised to read "acceptable to".

The last paragraph (excluding the table) is revised to read:

Notwithstanding the requirements of Section 1-06.1, steel materials used by the Contractor as temporary lagging may be salvaged steel provided that the use of such salvaged steel materials shall be subject to visual inspection and acceptance by the Engineer. For salvaged steel materials where the grade of steel cannot be positively identified, the design stresses for the steel shall conform to the Section 6-02.3(17)B requirements for salvaged steel, regardless of whether rivets are present or not.

1
2 **6-16.3(6)D Installing Lagging and Permanent Ground Anchor**

3 In the last sentence of the second paragraph, the phrase “as approved by the Engineer” is
4 deleted.

5
6 In the last sentence of the fourth paragraph, the phrase “as approved by the Engineer” is
7 deleted.

8
9 **6-16.3(8) Concrete Fascia Panel**

10 In the first paragraph, the phrase “as approved by the Engineer” is deleted.

11
12
13 **6-17.AP6**

14 **Section 6-17, Permanent Ground Anchors**
15 **January 5, 2015**

16 **6-17.3(3) Submittals**

17 The first paragraph is revised to read:

18
19 The Contractor shall submit Type 2 Working Drawings consisting of details and
20 structural design calculations for the ground anchor system or systems intended for use.

21
22 The second paragraph is revised to read:

23
24 The Contractor shall submit a Type 1 Working Drawing consisting of a detailed
25 description of the construction procedure proposed for use.

26
27 The third paragraph (up until the colon) is revised to read:

28
29 The Contractor shall submit a Type 2 Working Drawing consisting of ground anchor
30 schedule giving:

31
32 In the fourth paragraph, the first sentence is revised to read:

33
34 The Contractor shall submit a Type 2 Working Drawing detailing the ground anchor
35 tendon and the corrosion protection system.

36
37 In the fourth paragraph, item number 3 is revised to read:

- 38
39 3. Unbonded length corrosion protection system, including the permanent rubber seal
40 between the trumpet and the tendon unbonded length corrosion protection and the
41 transition between the tendon bond length and the unbonded tendon length
42 corrosion protection.

43
44 The last five paragraphs are deleted and replaced with the following four new paragraphs:

45
46 The Contractor shall submit Type 2 Working Drawings consisting of shop plans as
47 specified in Section 6-03.3(7) for all structural steel, including the permanent ground
48 anchors.

- 1 The Contractor shall submit Type 1 Working Drawings consisting of the mix design for
2 the grout conforming to Section 9-20.3(4) and the procedures for placing the grout. The
3 Contractor shall also submit the methods and materials used in filling the annulus over
4 the unbonded length of the anchor.
5
6 The Contractor shall submit Type 2 Working Drawings consisting of the method
7 proposed to be followed for the permanent ground anchor testing. This shall include all
8 necessary drawings and details to clearly describe the method proposed.
9
10 The Contractor shall submit Type 2 Working Drawings consisting of calibration data for
11 each load cell, test jack, pressure gauge and master pressure gauge to be used. The
12 calibration tests shall have been performed by an independent testing laboratory and
13 tests shall have been performed within 60 calendar days of the date submitted.
14
15 **6-17.3(5) Tendon Fabrication**
16 In the tenth paragraph, the last sentence is deleted.
17
18 The twelfth paragraph is revised to read:
19
20 The total anchor length shall not be less than that indicated in the Plans or the Working
21 Drawing submittal.
22
23 In the last paragraph, the phrase "as approved by the Engineer" is deleted.
24
25 **6-17.3(7) Installing Permanent Ground Anchor**
26 In the second paragraph, the third sentence is revised to read:
27
28 The Contractor's method to prevent ground movement shall be submitted as a Type 2
29 Working Drawing.
30
31 In the second paragraph, the second to last sentence is revised to read:
32
33 At the point of entry the ground anchor shall be installed within plus or minus three
34 degrees of the inclination from horizontal shown in the Plans or the Working Drawing
35 submittal.
36
37 **6-18.AP6**

38 **Section 6-18, Shotcrete Facing**
39 **January 5, 2015**

40 **6-18.3(1) Submittals**
41 In the first paragraph, the first sentence (up until the colon) is revised to read:
42
43 The Contractor shall submit Type 2 Working Drawings consisting of the following:
44
45 In the first paragraph, item number 2 is revised to read:
46
47 2. Method and equipment used to apply, finish and cure the shotcrete facing.
48
49 The last paragraph is deleted.
50

- 1 **6-18.3(2) Mix Design**
2 In the first paragraph, the second and third sentences are deleted.
3
4 In the last sentence of the second paragraph, “and approved by the Engineer” is deleted.
5
- 6 **6-18.3(3)A Preproduction Testing**
7 In the last sentence, “approved” is revised to read “accepted”.
8
- 9 **6-18.3(7) Shotcrete Application**
10 In the last paragraph, the first sentence is revised to read:
11
12 If field inspection or testing, by the Engineer, indicates that any shotcrete produced, fails
13 to meet the requirements, the Contractor shall immediately modify procedures,
14 equipment, or system, as necessary to produce specification material.
15
- 16 **6-19.AP6**
- 17 **Section 6-19, Shafts**
18 **April 6, 2015**
- 19 **6-19.3(2) Shaft Construction Submittal**
20 The last sentence is revised to read:
21
22 The submittals shall be Type 2 Working Drawings, except the shaft slurry technical
23 assistance submittal shall be Type 1.
24
- 25 **6-19.3(3) Shaft Excavation**
26 In the first paragraph, the phrase “as approved by the Engineer” is deleted.
27
- 28 **6-19.3(3)B4 Temporary Telescoping Shaft Casing**
29 In the first paragraph, the first sentence of item number 1 is revised to read:
30
31 The Contractor shall submit the request to use temporary telescoping casing as a Type
32 2 Working Drawing.
33
- 34 **6-19.3(3)D Bottom of Shaft Excavation**
35 In the first sentence of the second paragraph, “approved” is revised to read “accepted”.
36
- 37 **6-19.3(3)E Shaft Obstruction**
38 In the last sentence, “approved” is revised to read “accepted”.
39
- 40 **6-19.3(3)F Voids Between Permanent Casing and Shaft Excavation**
41 In the last sentence, the words “and as approved by the Engineer” are deleted.
42
- 43 **6-19.3(3)G Operating Shaft Excavation Equipment From an Existing Bridge**
44 The second sentence is revised to read:
45
46 If necessary and safe to do so, and if the Contractor submits a Type 2 Working Drawing
47 consisting of a written request in accordance with Section 6-01.6, the Engineer may
48 permit operation of drilling equipment on a bridge.
49

1 **6-19.3(3)H Seals for Shaft Excavation in Water**

2 The first paragraph is revised to read:

3
4 When shafts are constructed in water and the Plans show a seal between the casing
5 shoring and the upper portion of the permanent casing of the shaft, the Contractor shall
6 construct a seal in accordance with the shaft installation narrative specified in Section 6-
7 19.3(2)B Item 7.
8

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

10
11 If the Contractor uses a casing shoring diameter other than that specified in the Plans,
12 the Contractor shall submit a revised seal design in accordance with Section 6-19.3(2)B
13 Item 7.
14

15 **6-19.3(4)C Slurry Sampling and Testing**

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

17
18 Synthetic slurry shall conform to Section 9-36.2(2), the quality control plan included in
19 the shaft installation narrative in accordance with Section 6-19.3(2)B Item 4.
20

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

22
23 These records shall be submitted as a Type 1 Working Drawing once the slurry system
24 has been established in the first drilled shaft on the project.
25

26 **6-19.3(4)E Maintenance of a Stable Shaft Excavation**

27 In the last sentence of the first paragraph, "approval" is revised to read "review".
28

29 **6-19.3(4)F Disposal of Slurry and Slurry Contacted Spoils**

30 This section is revised to read:

31
32 The Contractor shall manage and dispose of the slurry wastewater in accordance with
33 Section 8-01.3(1)C. Slurry-contacted spoils shall be disposed of as specified in the
34 shaft installation narrative in accordance with Section 6-19.3(2)B, item 8, and in
35 accordance with the following requirements:
36

- 37 1. Uncontaminated spoils in contact with water-only slurry may be disposed of as
38 clean fill.
39
- 40 2. Uncontaminated spoils in contact with water slurry mixed with flocculants
41 approved in Section 8-01.3(1)C3 may be disposed of as clean fill away from
42 areas that drain to surface waters of the state.
43
- 44 3. Spoils in contact with synthetic slurry or water slurry with polymer-based
45 additives or flocculants not approved in Section 8-01.3(1)C3 shall be disposed
46 of in accordance with Section 2-03.3(7)C. With permission of the Engineer, the
47 Contractor may re-use these spoils on-site.
48
- 49 4. Spoils in contact with mineral slurry shall be disposed of in accordance with
50 Section 2-03.3(7)C. With permission of the Engineer, the Contractor may re-use
51 these spoils on-site.
52

1 **6-19.3(5)A Steel Reinforcing Bar Cage Assembly**

2 In the second to last sentence of the first paragraph, the phrase “as approved by the
3 Engineer” is deleted.

4
5 **6-19.3(5)D Steel Reinforcing Bar Cage Support at Base of Shaft Excavation**

6 The first sentence is revised to read:

7
8 For shafts with temporary casing within 15-feet of the bottom of shaft elevation as
9 specified in the Plans, the Contractor may place quarry spalls or other rock backfill
10 acceptable to the Engineer into the shaft below the specified bottom of shaft elevation
11 as a means to support the steel reinforcing bar cage, provided that the materials and
12 means to accomplish this have been addressed by the shaft installation narrative, as
13 specified in Section 6-19.3(2)B Item 9.

14
15 **6-19.3(6)C Care for CSL Access Tubes From Erection Through CSL Testing**

16 In the last sentence, “as approved by the Engineer” is revised to read “acceptable to the
17 Engineer”.

18
19 **6-19.3(8)C Requirements for Leaving Temporary Casing in Place**

20 Item number 1 (up until the colon) is revised to read:

- 21
22 1. The Contractor shall submit a Type 2E Working Drawing of the following
23 information:

24
25 In item C of item number 1, the phrase “in accordance with Section 6-01.9” is deleted.

26
27 Item number 2 is deleted.

28
29 **6-19.3(9)D Requirements to Continue Shaft Excavation Prior to Acceptance of
30 First Shaft**

31 This section is revised to read:

32
33 Except as otherwise noted, the Contractor shall not commence subsequent shaft
34 excavations until receiving the Engineer's acceptance of the first shaft, based on the
35 results and analysis of the crosshole sonic log testing for the first shaft. The Contractor
36 may commence subsequent shaft excavations prior to receiving the Engineer's
37 acceptance of the first shaft, provided the following condition is satisfied:

38
39 The Engineer permits continuing with shaft construction based on the Engineer's
40 observations of the construction of the first shaft, including, but not limited to,
41 conformance to the shaft installation narrative in accordance with Section 6-
42 19.3(2)B, and the Engineer's review of Contractor's daily reports and Inspector's
43 daily logs concerning excavation, steel reinforcing bar placement, and concrete
44 placement.

45
46 **6-19.3(9)F Contractor's Investigation and Remedial Action Plan**

47 This section is revised to read:

48
49 For all shafts determined to be unacceptable, the Contractor shall submit a Type 2
50 Working Drawing consisting of a plan for further investigation or remedial action. All
51 modifications to the dimensions of the shafts, as shown in the Plans, required by the
52 investigation and remedial action plan shall be supported by calculations and working

1 drawings. All investigation and remedial correction procedures and designs shall be
2 submitted.

3
4 **6-19.3(9)H Cored Holes**

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

6
7 Prior to beginning coring, the Contractor shall submit Type 2 Working Drawings
8 consisting of the method and equipment used to drill and remove cores from shaft
9 concrete.

10

11 **8-01.AP8**

12 **Section 8-01, Erosion Control and Water Pollution Control**

13 **January 5, 2015**

14 **8-01.2 Materials**

15 This section is supplemented with the following new paragraph:

16

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

18

- 19 1. The state or provincial seed dealer license and endorsements.
- 20
- 21 2. Copies of Washington State Department of Agriculture (WSDA) test results on
- 22 each lot of seed. Test results must be within six months prior to the date of
- 23 application.
- 24

25 **8-01.3(1)A Submittals**

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

27

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

30

31 **8-01.3(1)C Water Management**

32 Items number 1 through 3 are deleted.

33

34 This section is supplemented with the following new subsections:

35

36 **8-01.3(1)C1 Disposal of Dewatering Water**

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

39

- 40 1. When the turbidity of the groundwater is 25 NTU or less, it may bypass
- 41 detention and treatment facilities and be discharged into the stormwater
- 42 conveyance system at a rate that will not cause erosion or flooding in the
- 43 receiving surface water body.
- 44
- 45 2. When the turbidity of the groundwater is not more than 25 NTU above or 125%
- 46 of the turbidity of the site stormwater runoff, whichever is greater, the same
- 47 detention and treatment facilities as used to treat the site runoff may be used.
- 48

- 1 3. When the turbidity of the groundwater is more than 25 NTU above or 125% of
2 the turbidity of the site stormwater runoff, whichever is greater, the groundwater
3 shall be treated separately from the site stormwater.
4

5 Alternatively, the Contractor may pursue independent disposal and treatment
6 alternatives that do not use the stormwater conveyance system.
7

8 **8-01.3(1)C2 Process Wastewater**

9 Wastewater generated on-site as a byproduct of a construction process shall not be
10 discharged to surface waters of the State. Some sources of process wastewater may be
11 infiltrated in accordance with the NPDES Construction Stormwater General Permit.
12

13 **8-01.3(1)C3 Shaft Drilling Slurry Wastewater**

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

- 20 1. Water-only shaft drilling slurry or water slurry with approved flocculants may be
21 infiltrated on-site. Flocculants used shall meet the requirements of Section 9-
22 14.5(1) or shall be chitosan products listed as General Use Level Designation
23 (GULD) on the Department of Ecology's stormwater treatment technologies
24 webpage for construction treatment. Infiltration is permitted if the following
25 requirements are met:
26
27 a. Wastewater shall have a pH of 6.5 – 8.5 prior to discharge.
28
29 b. The source water meets drinking water standards or the Groundwater
30 Quality Criteria listed in WAC 173-200-040.
31
32 c. The amount of flocculant added to the slurry shall be kept to the minimum
33 needed to adequately settle out solids. The flocculant shall be thoroughly
34 mixed into the slurry.
35
36 d. Infiltration locations shall be at least 100 feet away from surface waters,
37 wells, on-site sewage systems, aquifer-sensitive recharge areas, sole
38 source aquifers, and well-head protection areas. Before infiltration begins,
39 there shall be a minimum of 5 feet of unsaturated soil between the soil
40 surface receiving the wastewater for infiltration and the groundwater
41 surface (i.e., saturated soil).
42
43 e. The slurry removed from the shaft shall be contained in a leak proof cell or
44 tank for a minimum of 3 hours.
45
46 f. Within a 24 hour period, a maximum of 21,000 gallons of slurry wastewater
47 may be infiltrated in an infiltration location. The infiltration rate shall be
48 reduced if needed to prevent wastewater from leaving the infiltration
49 location. The infiltration site shall be monitored regularly during infiltration
50 activity. All wastewater discharged to the ground must fully infiltrate and
51 discharges must stop before the end of each work day.
52

- 1 g. After infiltration activity is complete, loose sediment in the infiltration
2 location that may have resulted from the infiltration activity or the removal
3 of BMPs used to manage infiltration activity shall be stabilized to prevent
4 mobilization by stormwater runoff.
5
- 6 h. Drilling spoils and settled sediments remaining in the containment cell or
7 tank shall be disposed of in accordance with Section 6-19.3(4)F.
8
- 9 i. Infiltration locations shall be marked on the on-site temporary erosion and
10 sediment control (TESC) plan sheets before the infiltration activity begins.
11
- 12 j. Prior to infiltrating water-only shaft drilling slurry or water slurry with
13 approved flocculants, the Contractor shall submit a Shaft Drilling Slurry
14 Wastewater Management and Infiltration Plan as a Type 2 Working
15 Drawing. This Plan shall be kept on-site, adapted if needed to meet the
16 construction requirements, and updated to reflect what is being done in the
17 field. The Working Drawing shall include, at a minimum, the following
18 information:
19
 - 20 i. Plan sheet showing the proposed infiltration location and all surface
21 waters, wells, on-site sewage systems, aquifer-sensitive recharge
22 areas, sole source aquifers, and well-head protection areas within
23 150 feet.
24
 - 25 ii. The proposed elevation of soil surface receiving the wastewater for
26 infiltration and the anticipated phreatic surface (i.e., saturated soil).
27
 - 28 iii. The source of the water used to produce the slurry.
29
 - 30 iv. The estimated total volume of wastewater to be infiltrated.
31
 - 32 v. The approved flocculant to be used (if any).
33
 - 34 vi. The controls or methods (e.g., trenches, traps, berms, silt fence,
35 dispersion, or discharge metering devices) that will be used to
36 prevent surface wastewater runoff from leaving the infiltration
37 location. The Working Drawing shall include all pertinent design
38 details (e.g., sizing of trenches or traps, placement or height of
39 berms, application techniques) needed to demonstrate the proposed
40 controls or methods are adequate to prevent surface wastewater
41 runoff from leaving the infiltration location.
42
 - 43 vii. The strategy for removing slurry wastewater from the shaft and
44 containing the slurry wastewater once it has been removed from the
45 shaft.
46
 - 47 viii. The strategy for monitoring infiltration activity and adapting methods
48 to ensure compliance.
49
 - 50 ix. A contingency plan that can be implemented immediately if it
51 becomes evident that the controls in place or methods being used
52 are not adequate.

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

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

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

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

8-01.3(2)A Preparation for Application

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

8-01.3(2)A1 Seeding

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

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

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

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

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

8-01.3(2)A2 Temporary Seeding

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

1 with sufficient water so the longitudinal depressions remain in the soil surface until
2 completion of the seeding.

3 4 **8-01.3(2)B Seeding and Fertilizing**

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

- 6
7 1. A hydro seeder that utilizes water as the carrying agent, and maintains continuous
8 agitation through paddle blades. It shall have an operating capacity sufficient to
9 agitate, suspend, and mix into a homogeneous slurry the specified amount of seed
10 and water or other material. Distribution and discharge lines shall be large enough to
11 prevent stoppage and shall be equipped with a set of hydraulic discharge spray
12 nozzles that will provide a uniform distribution of the slurry.
13
14 2. Blower equipment with an adjustable disseminating device capable of maintaining a
15 constant, measured rate of material discharge that will ensure an even distribution of
16 seed at the rates specified.
17
18 3. Helicopters properly equipped for aerial seeding.
19
20 4. Power-drawn drills or seeders.
21
22 5. Areas in which the above methods are impractical may be seeded by hand
23 methods.
24

25 **8-01.3(2)C Liming**

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

27 28 **8-01.3(2)C Vacant**

29 30 **8-01.3(2)D Mulching**

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

32
33 Distribution of straw mulch material shall be by means that utilizes forced air to blow
34 mulch material on seeded areas.
35

36 **8-01.3(11) Outlet Protection**

37 In the last sentence, "Section 9-13.6" is revised to read "Section 9-13.1(5)".
38

39 **8-01.4 Measurement**

40 In the twelfth paragraph, "liming" is deleted.
41

42 **8-01.5 Payment**

43 The bid item "Liming", per acre is deleted.
44

45 **8-02.AP8**

46 **Section 8-02, Roadside Restoration** 47 **January 5, 2015**

48 **8-02.3(1) Responsibility During Construction**

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

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

8-02.3(2) Roadside Work Plan

This section's title is revised to read:

Work Plans

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

8-02.3(2)A Roadside Work Plan

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

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

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

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

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

8-02.3(2)C Plant Establishment Plan

The Plant Establishment Plan shall be prepared in accordance with the requirements of Section 8-02.3(13) and submitted as a Type 1 Working Drawing. The Plan shall show the proposed scheduling of activities, materials, equipment to be utilized for the first-year plant establishment, and an emergency contact person. The Plan shall include the management of the irrigation system, when applicable. Should the plan become unworkable at any time during the first-year plant establishment, the Contractor shall submit a revised plan prior to proceeding with further Work.

1 **8-02.3(3) Weed and Pest Control**

2 This section is supplemented with the following new paragraph:

3
4 Grass, including grass applied in accordance with Section 8-01, growing within the
5 mulch ring of a plant shall be considered a weed and be controlled on the project in
6 accordance with the weed and pest control plan.
7

8 **8-02.3(4) Topsoil**

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

10
11 After the topsoil has been spread, all large clods, hard lumps, and rocks 2 inches in
12 diameter and larger, and litter shall be raked up, removed, and disposed of by the
13 Contractor.
14

15 The following new paragraph is inserted after the first paragraph:

16
17 Topsoil stockpiled for project use shall be protected to prevent erosion and weed
18 growth. Weed growth on topsoil stockpile sites shall be immediately eliminated in
19 accordance with the approved Weed and Pest Control Plan.
20

21 **8-02.3(4)C Topsoil Type C**

22 The last sentence is revised to read:

23
24 Topsoil Type C shall meet the requirements of Sections 8-02.3(4), 8-02.3(4)B, and 9-
25 14.1(3).
26

27 **8-02.3(12) Completion of Initial Planting**

28 Item number 4 in the last paragraph is deleted.
29

30 **8-02.3(13) Plant Establishment**

31 The first sentence of the second paragraph is deleted.

32
33 The second paragraph is supplemented with the following new sentence:

34
35 The 1 calendar year shall be extended an amount equal to any periods where the
36 Contractor does not comply with the plant establishment plan.
37

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

39
40 During the first year of plant establishment under PSIFE (Plant Selection Including Plant
41 Establishment), the Contractor shall meet monthly with the Engineer for the purpose of
42 joint inspection of the planting material on a mutually agreed upon schedule.
43

44 The last two paragraphs are deleted.
45

46 **8-02.4 Measurement**

47 This section is supplemented with the following:

48
49 Plant selection will be measured per each.

50
51 PSIFE __ (Plant Selection Including Plant Establishment) will be measured per each.
52

1 **8-02.5 Payment**
2 The paragraph following the bid item "Topsoil Type ____", per acre is revised to read:
3
4 The unit Contract price per acre for "Topsoil Type ____" shall be full payment for all
5 costs for the specified Work.
6
7 The bid item "PSIPE ____", per each and the paragraph following the bid item are revised to
8 read:
9
10 "PSIPE ____", per each.
11
12 The unit Contract price for "Plant Selection ____", per each, and "PSIPE ____", per each,
13 shall be full pay for all Work necessary for weed control within the planting area,
14 planting area preparation, fine grading, planting, cultivating, plant storage and
15 protection, fertilizer and root dip, staking, cleanup, and water necessary to complete
16 planting operations as specified to the end of first year plant establishment.
17
18 The bid item "Plant Establishment - ____ Year" is deleted.
19
20 **8-04.AP8**
21
22 **Section 8-04, Curbs, Gutters, and Spillways**
January 5, 2015
23
24 **8-04.2 Materials**
25 The referenced section for the following item is revised to read:
26
27 Hand Placed Riprap 9-13.1(4)
28
29 **8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways**
30 The first sentence in the fourth paragraph is revised to read:
31
32 Expansion joints in the curb or curb and gutter shall be spaced as shown in the Plans,
33 and placed at the beginning and ends of curb returns, drainage Structures, bridges, and
34 cold joints with existing curbs and gutters.
35
36 In the third sentence of the fourth paragraph, "1/4-inch" is revised to read "3/8-inch".
37
38 **8-04.3(1)A Extruded Cement Concrete Curb**
39 The second sentence in the second paragraph is revised to read:
40
41 Cement concrete curbs shall be anchored to the existing pavement by placing steel
42 reinforcing bars 1 foot on each side of every joint.
43
44 The third paragraph is revised to read:
45
46 Steel reinforcing bars shall meet the dimensions shown in the Standard Plans.

1 **8-09.AP8**

2 **Section 8-09, Raised Pavement Markers**
3 **April 7, 2014**

4 **8-09.3(6) Recessed Pavement Marker**

5 The following sentence is inserted after the first sentence of the first paragraph:

6
7 The Contractor shall ensure that grinding of the pavement does not result in any
8 damage, (e.g. chipping, spalling or raveling) to the pavement to remain.

9
10 **8-11.AP8**

11 **Section 8-11, Guardrail**
12 **April 7, 2014**

13 **8-11.3(1) Beam Guardrail**

14
15 After the below Amendments to 8-11.3(1)F and 8-11.3(1)G are applied, this section is
16 supplemented with the following new sub-section:

17
18 **8-11.3(1)F Removing and Resetting Beam Guardrail**

19 The Contractor shall remove and reset existing guardrail posts, rail element, hardware
20 and blocks to the location shown in the Plans. The mounting height of reset rail element
21 shall be at the height shown in the Plans. The void caused by the removal of the post
22 shall be backfilled and compacted.

23
24 The Contractor shall remove and replace any existing guardrail posts and blocks that
25 are not suited for re-use, as staked by the Engineer. The void caused by the removal of
26 the post shall be backfilled and compacted. The Contractor shall then furnish and install
27 a new guardrail post to provide the necessary mounting height.

28
29 **8-11.3(1)A Erection of Posts**

30 The second paragraph in this section is deleted.

31
32 **8-11.3(1)C Terminal and Anchor Installation**

33 The last sentence in the last paragraph is deleted.

34
35 **8-11.3(1)F Plans**

36 This section number is revised to:

37
38 **8-11.3(1)G**

39
40 **8-11.3(1)G Guardrail Construction Exposed to Traffic**

41 This section number is revised to:

42
43 **8-11.3(1)H**
44

1 **8-18.AP8**

2 **Section 8-18, Mailbox Support**
3 **August 4, 2014**

4 **8-18.3(1) Type 3 Mailbox Support**

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

6

7 With the Engineer's consent, a Type 3 Mailbox Support design, made of steel or other
8 durable material, that meets the NCHRP 350 or the Manual for Assessing Safety
9 Hardware (MASH) crash test criteria may be used in place of the design shown in the
10 *Standard Plans*.

11

12 **8-20.AP8**

13 **Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation**
14 **Systems, and Electrical**
15 **April 6, 2015**

16 **8-20.2(1) Equipment List and Drawings**

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

18

19 Supplemental data would include such items as catalog cuts, product Specifications,
20 shop drawings, wiring diagrams, etc.

21

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

23

24 If the luminaires are not listed in the Qualified Products List, the Contractor shall submit
25 the following information for each different type of luminaire required on the Contract:

26

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

28

29 The Contractor shall submit for approval Type 3E Working Drawings in accordance with
30 Section 1-05.3 for each of the following types of standards called for on this project:

31

32 The fifth paragraph is revised to read:

33

34 The Contractor will not be required to submit shop drawings for approval for light
35 standards and traffic signal standards conforming to the preapproved plans listed in the
36 Special Provisions. The Contractor may use preapproved plans posted on the WSDOT
37 website with a more current revision date than published in the Special Provisions.

38

39 **8-20.3(1) General**

40 The following six new paragraphs are inserted after the second paragraph:

41

42 If a portion of an existing communication conduit system is damaged due to the
43 Contractor's activities, the affected system shall be restored to original condition.
44 Conduit shall be repaired. Communication cables shall be replaced and the
45 communication system shall be made fully operational within 24 hours of being
46 damaged.

47

Damaged communication cable shall be replaced between existing termination or splice points. No additional termination or splice points will be allowed. An existing termination or splice point is defined as a location where all existing fiber strands or twisted pair wires are terminated or spliced at one point. Communication cable shall be defined as either copper twisted pair or fiber optic cables. The Contractor may use temporary splices to restore Contracting Agency communication systems until the permanent communication cable system is restored.

When damage to an existing communication system has occurred, the Contractor shall perform the following in addition to other restoration requirements:

1. Inspect the communication raceway system including locate wire or tape to determine the extent of damage.
2. Contact the Engineer for Fiber Optic Cable and Twisted Pair (TWP) Copper Cable acceptance testing requirements and communication system restoration requirements.
3. Initially perform the acceptance tests to determine the extent of damage and also perform the acceptance tests after repairs are completed. Provide written certification that the communication cable system, including the locate wire or tape, is restored to test standard requirements.

Communication cables shall be restored by Contractor personnel that are WSDOT prequalified for communication installation work. Restoration shall be considered electrical work when the path of the communication system interfaces with electrical systems. Electrical work of this nature shall be performed by Contractor personnel that are WSDOT prequalified for work on both electrical and communication systems.

If the Contractor or Subcontractors are unable or unqualified to complete the restoration work, the Engineer may have the communication or electrical systems restored by other means and subtract the cost from the money that will be or is due the Contractor.

When field repair of existing conduit, innerduct or outerduct is required, the repair kits shall be installed per manufacturer's recommendations. Repair kits and each connection point between the repair kit and the existing raceway system shall be sealed to prevent air leakage during future cable installation.

8-20.3(8) Wiring

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

Every conductor at every wire termination, connector, or device shall have an approved wire marking sleeve bearing, as its legend, the circuit number indicated in the Contract.

8-20.3(13)A Light Standards

In the third paragraph, the last sentence of item number 1 is revised to read:

Conduit shall extend a maximum of 1 inch above the top of the foundation, including grounding end bushing or end bell bushing.

In the fourth paragraph, the second sentence of item number 1 is revised to read:

1 Conduits shall be cut to a maximum height of 2 inches above the foundation including
2 grounding end bushing or end bell bushing.

3
4 **8-21.AP8**

5 **Section 8-21, Permanent Signing**
6 **April 6, 2015**

7 **8-21.3(9)F Foundations**

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

9
10 The excavation and backfill shall conform to the requirements of Section 2-09.3.

11
12 **8-22.AP8**

13 **Section 8-22, Pavement Marking**
14 **April 6, 2015**

15 **8-22.3(6) Removal of Pavement Markings**

16 The second and third sentences of the first paragraph are revised to read:

17
18 Grinding to remove pavement markings is allowed prior to application of a Bituminous
19 Surface Treatment. Grinding to remove pavement marking from hot mix asphalt and
20 cement concrete pavements is allowed to a depth just above the pavement surface,
21 then water blasting or shot blasting shall be required to remove the remaining markings.

22
23 **8-23.AP8**

24 **Section 8-23, Temporary Pavement Markings**
25 **January 5, 2015**

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

28
29 **8-23.1 Description**

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

34
35 **8-23.2 Materials**

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

39

40 Raised Pavement Markers	9-21
41 Temporary Marking Paint	9-34.2(6)
42 Plastic	9-34.3
43 Glass Beads for Pavement Marking Materials	9-34.4
44 Temporary Pavement Marking Tape	9-34.5
45 Temporary Flexible Raised Pavement Markers	9-34.6

8.23.3 Construction Requirements

8-23.3(1) General

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

8-23.3(2) Preliminary Spotting

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

8-23.3(3) Preparation of Roadway Surface

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

8-23.3(4) Pavement Marking Application

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

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

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

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

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

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

8-23.3(4)A1 Temporary Pavement Marking Paint

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

1 **8-23.3(4)A2 Temporary Pavement Marking Tape**

2 Application of temporary pavement marking tape shall be in conformance
3 with the manufacturer's recommendations.
4

5 Black mask pavement marking tape shall mask the existing line in its
6 entirety.
7

8 **8-23.3(4)A3 Temporary Raised Pavement Markers**

9 Temporary raised pavement markers are not allowed on bituminous
10 surface treatments.
11

12 **8-23.3(4)A4 Temporary Flexible Raised Pavement Markers**

13 Flexible raised pavement markers are required for new applications of
14 bituminous surface treatments. Flexible raised pavement markers are not
15 allowed on other pavement types unless otherwise specified or approved
16 by the Engineer. Flexible raised pavement markers shall be installed with
17 the protective cover in place. The cover shall be removed immediately
18 after spraying asphaltic material.
19

20 **8-23.3(4)B Temporary Pavement Markings – Long Duration**

21 Application of paint, pavement marking tape and plastic for long duration
22 pavement markings shall meet the requirements of Section 8-22.3(3);
23 application of raised pavement markers shall meet the requirements of Section
24 8-09.3; and application of flexible pavement markings shall be in conformance
25 with the manufacturer's recommendations.
26

27 **8-23.3(4)C Tolerance for Lines**

28 Tolerance for lines shall conform to Section 8-22.3(4).
29

30 **8-23.3(4)D Maintenance of Pavement Markings**

31 Temporary pavement markings shall be maintained in serviceable condition
32 throughout the project until permanent pavement markings are installed. As
33 directed by the Engineer; temporary pavement markings that are damaged,
34 including normal wear by traffic, shall be repaired or replaced immediately.
35 Repaired and replaced pavement markings shall meet the requirements for the
36 original pavement marking.
37

38 **8-23.3(4)E Removal of Pavement Markings**

39 Removal of temporary paint is not required prior to paving; all other temporary
40 pavement markings shall be removed.
41

42 All temporary pavement markings that are required on the wearing course prior
43 to construction of permanent pavement markings and are not a part of the
44 permanent markings shall be completely removed concurrent with or
45 immediately subsequent to the construction of the permanent pavement
46 markings. Temporary flexible raised pavement markers on bituminous surface
47 treatment pavements shall be cut off flush with the surface if their location
48 conflicts with the alignment of the permanent pavement markings. All other
49 temporary pavement markings shall be removed in accordance with Section 8-
50 22.3(6).
51

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

8-23.4 Measurement

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

8-23.5 Payment

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

“Temporary Pavement Marking – Short Duration”, per linear foot.

“Temporary Pavement Marking – Long Duration”, per linear foot.

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

9-01.AP9

Section 9-01, Portland Cement January 5, 2015

9-01.2(3) Low Alkali Cement

This section is revised to read:

When low alkali portland cement is required, the percentage of alkalis in the cement shall not exceed 0.60 percent by weight calculated as Na_2O plus $0.658 \text{ K}_2\text{O}$. This limitation shall apply to all types of portland cement.

9-01.2(4) Blended Hydraulic Cement

The first paragraph is revised to read:

Blended hydraulic cement shall be either Type IP(X)(MS) or Type IS(X)(MS) cement conforming to AASHTO M 240 or ASTM C 595, except that the portland cement used to produce blended hydraulic cement shall not contain more than 0.75 percent alkalis by weight calculated as Na_2O plus $0.658 \text{ K}_2\text{O}$ and shall meet the following additional requirements:

1. Type IP(X)(MS) - Portland-Pozzolan Cement where (X) equals the targeted percentage of fly ash, the fly ash is limited to a maximum of 35 percent by weight of the cementitious material; (MS) indicates moderate sulfate resistance.
2. Type IS(X)(MS) - Portland Blast-Furnace Slag Cement, where: (X) equals the targeted percentage of ground granulated blast-furnace slag, the ground granulated blast furnace slag is limited to a maximum of 50 percent by weight of the cementitious material; (MS) indicates moderate sulfate resistance.

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

The source and weight of the fly ash or ground granulated blast-furnace slag shall be certified on the cement mill test report or cement certificate of analysis and shall be reported as a percent by weight of the total cementitious material.

9-01.3 Tests and Acceptance

The first paragraph is revised to read:

Cement may be accepted by the Engineer based on the cement mill test report number or cement certificate of analysis number indicating full conformance to the Specifications. All shipments of the cement to the Contractor or concrete supplier shall identify the applicable cement mill test report number or cement certificate of analysis number and shall be provided by the Contractor or concrete supplier with all concrete deliveries.

The second paragraph is revised to read:

Cement producers/suppliers that certify portland cement or blended cement shall participate in the Cement Acceptance Program as described in WSDOT Standard Practice QC 1.

9-01.4 Storage on the Work Site

This section is revised to read:

At the request of the Engineer, the Contractor shall provide test data to show that cement stored on site for longer than 60 days meets the requirements of 9-01. Tests shall be conducted on samples taken from the site in the presence of the Engineer. Test results that meet the requirements of 9-01 shall be valid for 60 days from the date of sampling, after which the Engineer may require further testing.

9-02.AP9

Section 9-02, Bituminous Materials

April 6, 2015

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

The first paragraph is supplemented with the following:

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 PGAB requirements of AASHTO M 320 Table 1 for the grade of asphalt binder specified by the Contract.

This section is supplemented with the following:

The recycling agent used to rejuvenate the recovered asphalt from recycled asphalt pavement (RAP) and reclaimed asphalt shingles (RAS) shall meet the specifications in Table 1:

Table 1	RA 1	RA 5	RA 25
---------	------	------	-------

Test	ASTM Test Method	Min.	Max.	Min.	Max.	Min.	Max.
Viscosity @ 140°F cSt	D2170 or D2171	50	150	200	800	1000	4000
Flashpoint COC, °F	D92	400		400		400	
Saturates, Wt. %	D2007		30		30		30
Specific Gravity	D70 or D2198	Report		Report		Report	
Tests on Residue from RTFC	D2872						
Viscosity Ratio ¹			3		3		3
Mass Change ± %			4		4		4
¹ Viscosity Ratio = $\frac{\text{RTFC Viscosity @ 140°F, cSt}}{\text{Original Viscosity @ 140°F, cSt}}$							

9-02.1(6)A Polymerized Cationic Emulsified Asphalt CRS-2P

In the ninth row of the table, "Test" is revised to read "Tests".

The eleventh row in the table is revised to read:

Elastic Recovery %	T 301 ²	50	
--------------------	--------------------	----	--

The last two rows of the table are deleted.

Footnote 2 below the table is revised to read:

2 The residue material for T 301 shall come from the modified distillation per note 1.

Footnote 3 below the table is deleted.

The last paragraph is deleted.

9-03.AP9

Section 9-03, Aggregates

April 6, 2015

9-03.1(2)C Use of Substandard Gradings

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

Vacant

9-03.1(4)C Grading

In the second paragraph, the first sentence is deleted.

The third paragraph is deleted.

1
2 **9-03.1(5)B Grading**

3 The last paragraph is revised to read:
4

5 The Contracting Agency may sample each aggregate component prior to introduction to
6 the weigh batcher or as otherwise determined by the Engineer. Each component will be
7 sieve analyzed separately in accordance with WSDOT FOP for WAQTC/AASHTO Test
8 Method T-27/11. All aggregate components will be mathematically re-combined by the
9 proportions (percent of total aggregate by weight) provided by the Contractor on
10 Concrete Mix Design Form 350-040.
11

12 **9-03.8(1) General Requirements**

13 The first paragraph up until the colon is revised to read:
14

15 Preliminary testing of aggregates for source approval shall meet the following test
16 requirements:
17

18 The list in the first paragraph is supplemented with the following:
19

20 Sand Equivalent 45 min.
21

22 The following new paragraph is inserted after the first paragraph:
23

24 Aggregate sources that have 100 percent of the mineral material passing the No. 4
25 sieve shall be limited to no more than 5 percent of the total weight of aggregate.
26

27 **9-03.8(2) HMA Test Requirements**

28 The second paragraph (up until the colon) is revised to read:
29

30 The mix design shall produce HMA mixtures when combined with RAP, RAS, coarse
31 and fine aggregate within the limits set forth in Section 9-03.8(6) and mixed in the
32 laboratory with the designated grade of asphalt binder, using the Superpave gyratory
33 compactor in accordance with WSDOT FOP for AASHTO T 312, and at the required
34 gyrations for N initial, N design, and N maximum with the following properties:
35

36 The third paragraph is revised to read:
37

38 The mix criteria for Hamburg Wheel-Track Testing and Indirect Tensile Strength do not
39 apply to HMA accepted by commercial evaluation.
40

41 **9-03.8(3)B Gradation – Recycled Asphalt Pavement and Mineral Aggregate**

42 This section is supplemented with the following:
43

44 For HMA with greater than 20 percent RAP by total weight of HMA the RAP shall be
45 processed to ensure that 100 percent of the material passes a sieve twice the size of
46 the maximum aggregate size for the class of mix to be produced.
47

48 When any amount of RAS is used in the production of HMA the RAS shall be milled,
49 crushed or processed to ensure that 100 percent of the material passes the ½ inch
50 sieve. Extraneous materials in RAS such as metals, glass, rubber, soil, brick, tars,
51 paper, wood and plastic shall not exceed 2.0 percent by mass as determined on
52 material retained on the No. 4 sieve.

9-03.14(3) Common Borrow

This section is revised to read:

Material for common borrow shall consist of granular or nongranular soil and/or aggregate which is free of deleterious material. Deleterious material includes wood, organic waste, coal, charcoal, or any other extraneous or objectionable material. The material shall not contain more than 3 percent organic material by weight. The plasticity index shall be determined using test method AASHTO T 89 and AASHTO T 90.

The material shall meet one of the options in the soil plasticity table below.

Soil Plasticity Table

Option	Sieve	Percent Passing	Plasticity Index
1	No. 200	0 - 12	N/A
2	No. 200	12.1 - 35	6 or Less
3	No. 200	Above 35	0

All percentages are by weight.

If requested by the Contractor, the plasticity index may be increased with the approval of the Engineer.

9-03.14(4) Gravel Borrow for Structural Earth Wall

In the second table, the row beginning with "pH" is revised to read:

pH	WSDOT Test Method T 417	4.5 - 9	5 – 10
----	-------------------------	---------	--------

9-03.21(1) General Requirements

The following new paragraph is inserted after the second paragraph:

Reclaimed asphalt shingles samples shall contain less than the maximum percentage of asbestos fibers based on testing procedures and frequencies established in conjunction with the specifying jurisdiction and state or federal environmental regulatory agencies.

9-04.AP9

Section 9-04, Joint and Crack Sealing Materials January 5, 2015

9-04.1(4) Elastomeric Expansion Joint Seals

In this section, "AASHTO M 220" is revised to read "ASTM D 2628".

- 1 **9-04.2(1) Hot Poured Joint Sealants**
2 In the first paragraph, "AASHTO M 324" is revised to read "ASTM D 6690".
3
- 4 **9-04.2(2) Poured Rubber Joint Sealer**
5 In item number 9, "WSDOT Test Method No. 412" is revised to read "ASTM D 5329".
6
- 7 **9-05.AP9**
- 8 **Section 9-05, Drainage Structures and Culverts**
9 **April 7, 2014**
- 10 **9-05.13 Ductile Iron Sewer Pipe**
11 The first paragraph is deleted.
12
- 13 **9-06.AP9**
- 14 **Section 9-06, Structural Steel and Related Materials**
15 **January 5, 2015**
- 16 **9-06.5(4) Anchor Bolts**
17 The third sentence of the second paragraph is revised to read:
18
19 Nuts for ASTM F 1554 Grade 36 or 55 black or galvanized anchor bolts shall conform to
20 ASTM A 563, Grade A or DH.
21
- 22 **9-07.AP9**
- 23 **Section 9-07, Reinforcing Steel**
24 **January 6, 2014**
- 25 **9-07.5(1) Epoxy-Coated Dowel Bars (for Cement Concrete Pavement**
26 **Rehabilitation)**
27 This section is revised to read:
28
29 Epoxy-coated dowel bars shall be round plain steel bars of the dimensions shown in the
30 Standard Plans. They shall conform to AASHTO M 31, Grade 60 or ASTM A 615,
31 Grade 60 and shall be coated in accordance with ASTM A 1078 Type 2 coating, except
32 that the bars may be cut to length after being coated. Cut ends shall be coated in
33 accordance with ASTM A 1078 with a patching material that is compatible with the
34 coating, inert in concrete and recommended by the coating manufacturer. The thickness
35 of the epoxy coating shall be 10 mils plus or minus 2 mils. The Contractor shall furnish a
36 written certification that properly identifies the coating material, the number of each
37 batch of coating material used, quantity represented, date of manufacture, name and
38 address of manufacturer, and a statement that the supplied coating material meets the
39 requirements of ASTM A 1078 Type 2 coating. Patching material, compatible with the
40 coating material and inert in concrete and recommended by the manufacturer shall be
41 supplied with each shipment for field repairs by the Contractor.
42
- 43 **9-07.5(2) Corrosion Resistant Dowel Bars (for Cement Concrete Pavement)**
44 This section's title is revised to read:
45

1 **9-07.5(2) Corrosion Resistant Dowel Bars (for Cement Concrete Pavement and**
2 **Cement Concrete Pavement Rehabilitation)**

3
4 **9-08.AP9**

5 **Section 9-08, Paints and Related Materials**
6 **January 5, 2015**

7 **9-08.1(2)H Top Coat, Single Component, Moisture-Cured Polyurethane**

8 The second paragraph is revised to read:

9
10 Color and Gloss: As specified in the Plans or Special Provisions

11
12 The last item in the requirements list is revised to read:

13
14 The top coat shall be a gloss or semi-gloss

15
16 **9-08.1(8) Standard Colors**

17 The second paragraph is deleted.

18
19 The third paragraph is revised to read:

20
21 Unless otherwise specified, all top or finish coats shall be gloss or semi-gloss, with the
22 paint falling within the range of greater than 70 for gloss and 35 to 70 for semi-gloss on
23 the 60-degree gloss meter.

24
25 **9-09.AP9**

26 **Section 9-09, Timber and Lumber**
27 **January 6, 2014**

28 **9-09.3(1) General Requirements**

29 The fourth paragraph is revised to read:

30
31 All orders of treated timber and lumber shall be accompanied by a Certificate of
32 Treatment record. The Certificate of Treatment showing conformance to this
33 specification and AWWA standards shall include the following information:

34
35 Name and location of the wood preserving company,

36
37 Customer identification,

38
39 Date of treatment and charge number,

40
41 Type of chemical used and amount of retention,

42
43 Treating process and identification of the Specification used,

44
45 Boring records verifying treatment penetration for timber and lumber with a nominal
46 dimension of 6" x 6" or larger,

47
48 Description of material that was treated, and

1
2 Signature of a responsible plant official.
3
4 The fifth paragraph is deleted.
5
6 The first sentence in the last paragraph is revised to read:
7
8 All timber and lumber to be used in aquatic environments, unless specified otherwise in
9 the Contract, shall be chemically treated using Western Wood Preservers Institute Best
10 Management Practices (BMPs).
11

12 **9-10.AP9**

13 **Section 9-10, Piling**
14 **March 3, 2014**

15 **9-10.5 Steel Piling**

16 This section is revised to read:

17
18 The material for rolled steel piling H-piling and pile splices shall conform to ASTM A 36,
19 ASTM A 572 or ASTM A 992. The material for steel pipe piling and splices shall
20 conform to one of the following requirements except as specifically noted in the Plans:
21

- 22 1. API 5L Grade X42 or X52 material may be used for longitudinal seam welded or
23 helical (spiral) seam submerged-arc welded pipe piles of any diameter.
24
25 2. ASTM A 252 Grade 2 or 3 material may be used for longitudinal seam welded
26 or helical (spiral) seam submerged-arc welded pipe piles of any diameter. For
27 the purposes of welding and prequalification of base metal, steel pipe pile
28 designated as ASTM A 252 may be treated as prequalified provided the
29 chemical composition conforms to a prequalified base metal classification listed
30 in Table 3.1 of the AWS D1.1/D1.1M, latest edition, Structural Welding Code,
31 the grade of pipe piling meets or exceeds the grade specified in the Plans, and
32 the carbon equivalent (CE) is a maximum of 0.45-percent.
33
34 3. ASTM A 572 or ASTM A 588 material may be used for longitudinal seam
35 welded piles of any diameter.
36

37 For helical (spiral) seam submerged-arc welded pipe piles, the maximum radial offset of
38 strip/plate edges shall be 1/8 inch. The offset shall be transitioned with a taper weld and
39 the slope shall not be less than a 1 in 2.5 taper. The weld reinforcement shall not be
40 greater than 3/16 inches and misalignment of weld beads shall not exceed 1/8 inch.
41

42 Steel soldier piles, and associated steel bars and plates, shall conform to ASTM A 36,
43 ASTM A 572 or ASTM A 992, except as otherwise noted in the Plans.
44

45 All steel piling may be accepted by the Engineer based on the Manufacturer's
46 Certificate of Compliance submitted in accordance with Section 1-06.3. The
47 manufacturer's certificate of compliance submittal for steel pipe piles shall be
48 accompanied by certified mill test reports, including chemical analysis and carbon
49 equivalence, for each heat of steel used to fabricate the steel pipe piling.
50

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 5, 2015**

5 This section's content is deleted.

6

7 **9-13.1 Loose Riprap**

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

9

10 **9-13.1 Riprap and Quarry Spalls**

11

12 **9-13.1(1) General**

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

19

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

26

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

30

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

31

32 **9-13.1(2) Heavy Loose Riprap**

33 Heavy loose riprap shall meet the following requirements for grading:

34

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

35

36

37 **9-13.1(3) Light Loose Riprap**

38 Light loose riprap shall meet the following requirements for grading:

39

	Size Range	Maximum Size
20% to 90%	300 lbs. to 1 ton (2 cu. ft. to ½ cu. yd.)	

15% to 80%	50 lbs. to 1 ton ($\frac{1}{3}$ cu. ft. to $\frac{1}{2}$ cu. yd.)	
10% to 20%	3 inch	50 lbs. (spalls)

9-13.1(4) Hand Placed Riprap

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

9-13.1(5) Quarry Spalls

Quarry spalls shall meet the following requirements for grading:

Sieve Size	Percent Passing
8"	100
3"	40 max.
$\frac{3}{4}$ "	10 max.

9-13.2 Hand Placed Riprap

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

9-13.2 Vacant

9-13.4 Rock for Erosion Control and Scour Protection

The last sentence is revised to read:

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

9-13.6 Quarry Spalls

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

9-13.6 Vacant

9-14.AP9

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

9.14.1 Soil

This section, including title, is revised to read:

9-14.1 Topsoil

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

9-14.1(2) Topsoil Type B

The last sentence of the second paragraph is deleted.

9-14.2 Seed

This section is revised to read:

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

(1) Common and botanical names of seed

(2) Lot number

(3) Net weight

(4) Pounds of Pure live seed (PLS) in the mix

(5) Origin of seed

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

9-14.4(3) Bark or Wood Chips

This section's title is revised to read:

Bark or Wood Chip Mulch

The first paragraph is revised to read:

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

9-14.4(6) Gypsum

The first sentence is revised to read:

Gypsum shall consist of Calcium Sulfate ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) in a pelletized or granular form.

9-14.4(7) Tackifier

This section is revised to read:

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

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

9-14.4(8) Compost

The second paragraph is revised to read:

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

1 **9-14.4(8)A Compost Submittal Requirements**

2 Item 2 is revised to read:

3

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

7

8 **9-14.6(1) Description**

9 Item number 3 in the fourth paragraph is revised to read:

10

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

15

16 **9-14.6(2) Quality**

17 The second and third paragraphs in this section are revised to read:

18

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

24

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

27

28 **9-15.AP9**

29 **Section 9-15, Irrigation System**
30 **August 4, 2014**

31 **9-15.18 Detectable Marking Tape**

32 In the second paragraph, the table is supplemented with the following new row:

33

Non-Potable Water	Purple
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34

35

36 **9-16.AP9**

37 **Section 9-16, Fence and Guardrail**
38 **August 4, 2014**

39 **9-16.2(1)B Wood Fence Posts and Braces**

40 In the table, the row beginning with "ACA" is deleted.

41

1 **9-29.AP9**

2 **Section 9-29, Illumination, Signal, Electrical**
3 **April 6, 2015**

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

5 This section is supplemented with the following new subsection:
6

7 **9-29.1(9) Repair**

8 Manufacturer repair kits shall be used for field repair of existing conduit, innerduct and
9 outerduct. The conduit repair kit shall be manufactured specifically for the repair of
10 existing damaged conduit, inner duct and outer duct. The repair kit shall be
11 prepackaged and include the split conduit and split couplings necessary to restore the
12 damaged conduit to the original inside dimensions including a water and air tight seal.
13

14 **9-29.2(1)B Heavy Duty Junction Boxes**

15 The second paragraph is revised to read:
16

17 The Heavy-Duty Junction Box steel frame, lid support and lid fabricated from steel plate
18 and shapes shall be painted with a shop applied, inorganic zinc primer in accordance
19 with Section 6-07.3. Ductile iron and gray iron castings shall not be painted.
20

21 The following new paragraph is inserted after the second paragraph:
22

23 The concrete used in Heavy-Duty Junction Boxes shall have a minimum compressive
24 strength of 4,000 psi.
25

26 In the fourth paragraph (after the preceding Amendment is applied), the table is revised to
27 read:
28

Materials	Requirement
Concrete	Section 6-02
Reinforcing Steel	Section 9-07
Lid	ASTM A 786 diamond plate steel, rolled from plate complying with ASTM A 572, grade 50 or ASTM A 588, and having a min. CVN toughness of 20 ft-lb at 40 degrees F. Or Ductile iron casting meeting Section 9-05.15
Frame and stiffener plates	ASTM A 572 grade 50 or ASTM A 588, both with min. CVN toughness of 20 ft-lb at 40 degrees F Or Gray iron casting meeting Section 9-05.15
Anchors (studs)	Section 9-06.15
Threaded Anchors for Gray Iron Frame	ASTM F1554 grade 55 Headed Anchor Requirements
Bolts, Studs, Nuts, Washers	ASTM F 593 or A 193, Type 304 or 316, or Stainless steel grade 302, 304, or 316 in accordance with approved shop drawings
Hinges and Locking and Latching Mechanism and associated Hardware and Bolts	In accordance with approved shop drawings

The last paragraph is revised to read:

The bearing seat and lid perimeter shall be free from burrs, dirt, and other foreign debris that would prevent solid seating. Bolts and nuts shall be liberally coated with anti-seize compound. Bolts shall be installed snug tight. The bearing seat and lid perimeter shall be machined to allow a minimum of 75 percent of the bearing areas to be seated with a tolerance of 0.0 to 0.005 inches measured with a feeler gage. The bearing area percentage will be measured for each side of the lid as it bears on the frame.

9-29.2(2) Standard Duty and Heavy-Duty Cable Vaults and Pull Boxes

This section's title is revised to read:

Small Cable Vaults, Standard Duty Cable Vaults, Heavy-Duty Cable Vaults, Standard Duty Pull Boxes, and Heavy-Duty Pull Boxes

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

Small, Standard Duty and Heavy-Duty Cable Vaults and Standard Duty and Heavy-Duty Pull Boxes shall be constructed as a concrete box and as a concrete lid.

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

This section's title is revised to read:

Small Cable Vaults, Standard Duty Cable Vaults, and Standard Duty Pull Boxes

The first paragraph is revised to read:

Small and Standard Duty Cable Vaults and Standard Duty Pull boxes shall be concrete and have a minimum load rating of 22,500 pounds and be tested in accordance with Section 9-29.2(1)C for concrete Standard Duty Junction Boxes.

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

Concrete for Small and Standard Duty Cable Vaults and Standard Duty Pull Boxes shall have a minimum compressive strength of 4,000 psi.

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

All Small and Standard Duty Cable Vaults and Standard Duty Pull Boxes placed in sidewalks, walkways, and shared-use paths shall have slip-resistant surfaces.

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

Materials for Small and Standard Duty Cable Vaults and Standard Duty Pull Boxes shall conform to the following:

9-29.3 Fiber Optic Cable, Electrical Conductors, and Cable

This section is supplemented with the following new subsection:

1 **9-29.3(3) Wire Marking Sleeves**
2 Wire marking sleeves shall be full-circle in design, non-adhesive, printable using an
3 indelible ink and shall fit snugly on the wire or cable. Marking sleeves shall be made
4 from a PVC or polyolefin, and provide permanent identification for wires and cables.
5

6 **9-29.3(2)A4 Location Wire**

7 This section is revised to read:

8
9 Location wire shall be steel core copper clad minimum size AWG 14 insulated
10 conductor. The insulation shall be orange High Molecular Weight High Density
11 Polyethylene (HMHDPE).
12

13 **9-29.16 Vehicular Signal Heads, Displays, and Housing**

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

15
16 A 1-inch-wide strip of yellow retro-reflective, type IV prismatic sheeting, conforming to
17 the requirements of Section 9-28.12, shall be applied around the perimeter of each
18 backplate with the exception of installations where all sections of the display will be dark
19 as part of normal operation such as ramp meters, hawk signals and tunnels.
20

21 **9-31.AP9**

22 **Section 9-31, Elastomeric Bearing Pads**

23 **August 4, 2014**

24 This section's title is revised to read:

25 **Elastomeric Pads**

26
27
28 **9-31.1 Requirements**

29 In the first paragraph, the word "bearing" is deleted from the first sentence.

30
31 In the first sentence of the second paragraph, the word "bearing" is deleted and replaced
32 with "elastomeric".

33
34 In the last sentence of the second paragraph, the word "Bearing" is deleted and replaced
35 with "Elastomeric".

36
37 In the third paragraph, the word "bearing" is deleted and replaced with the word
38 "elastomeric".
39

40 **9-32.AP9**

41 **Section 9-32, Mailbox Support**

42 **August 4, 2014**

43 **9-32.7 Type 2 Mailbox Support**

44 The first sentence is revised to read:

45
46 Type 2 mailbox supports shall be 2-inch 14-gage steel tube and shall meet the NCHRP
47 350 or the Manual for Assessing Safety Hardware (MASH) crash test criteria.

9-34.AP9

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

9-34.2 Paint

The second paragraph is revised to read:

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

9-34.4 Glass Beads for Pavement Marking Materials

In the third paragraph, the table titled "Metal Concentration Limits" is revised to read:

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

9-34.5 Temporary Pavement Marking Tape

This section is revised to read:

Biodegradable tape with paper backing is not allowed.

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

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

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

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

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

9-34.6 Temporary Raised Pavement Markers

This section's title is revised to read:

Temporary Flexible Raised Pavement Markers

The second paragraph is deleted.

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9-35.AP9

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

9-35.0 General Requirements

The following item is deleted from the list of temporary traffic control materials:

Barrier Drums

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

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

9-35.2 Construction Signs

The first sentence is revised to read:

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

9-35.7 Traffic Safety Drums

The third paragraph is revised to read:

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

9-35.8 Barrier Drums

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

9-35.8 Vacant

9-35.12 Transportable Attenuator

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

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

9-35.13 Tall Channelizing Devices

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

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

SECTION II

SPECIAL PROVISIONS

INTRODUCTION TO THE SPECIAL PROVISIONS

(July 31, 2007 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2014 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by the Amendments to the Standard Specifications and these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

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

(May 18, 2007 APWA GSP)
(August 7, 2006 WSDOT GSP)
(May 2015 COS)

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT/APWA, current edition
- *City of Snohomish Engineering Design and Construction Standards*

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

Wherever reference is made in the Standard Specifications to the Contracting Agency, State, Commission, Department of Transportation, Secretary of Transportation, such reference shall be deemed to be the City of Snohomish through its City Council, employees, and duly authorized representatives.

DIVISION 1

GENERAL REQUIREMENTS

DESCRIPTION OF WORK

(March 13, 1995 WSDOT GSP)

This contract provides for the construction of approximately 260 lineal feet of buried 12.75-inch O.D. fuse-welded HDPE storm drain pipe, 45 lineal feet of 12-inch ductile iron pipe, concrete pipe anchors, associated manholes, removal of structures and obstructions, clearing, grubbing, erosion control, traffic control, utility conflict resolution, miscellaneous surface restoration, and other related items, all as located within the City of Snohomish's corporate limits, easements, and public right-of-way, as shown on the drawings and specified in these technical provisions.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions

(September 12, 2008 APWA GSP)

This Section is supplemented with the following:

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

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

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

Additive

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

Alternate

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

Contract

The written agreement between the Contracting Agency and the Contractor. It describes, among other things:

1. What work will be done, and by when;
2. Who provides labor and materials; and
3. How Contractors will be paid

The Contract includes the Contract (Agreement) form; bidder's completed Proposal Form, all required forms, certificates and affidavits, performance, labor and material payment bonds, the 2014 Standard Specifications for Road, Bridge and Municipal Construction and amendments thereto, Contract Provisions, Contract Plans, Standard Plans, City of Snohomish Engineering Standards and Specifications and associated Standard Details, addenda and change orders.

Contract Documents

See definition for "Contract".

Contract Time

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

Dates***Bid Opening Date***

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

Award Date

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

Contract Execution Date

The date the Contracting Agency officially binds the agency to the contract.

Notice to Proceed Date

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

Substantial Completion Date

The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, and only minor incidental work, replacement of temporary substitute facilities, or correction or repair remains for the physical completion of the total contract.

Physical Completion Date

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

Completion Date

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

Final Acceptance Date

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

Notice of Award

The written notice from the Contracting Agency to the successful bidder signifying the Contracting Agency's acceptance of the bid.

Notice to Proceed

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

Traffic

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

1-02 BID PROCEDURES AND CONDITIONS**1-02.1 Prequalification of Bidders**

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder

(March 25, 2009 APWA GSP)

Bidders must meet the minimum qualifications of RCW 39.04.350(1), as amended:

“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:

- (a) At the time of bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW;
- (b) Have a current state unified business identifier number;
- (c) If applicable, have industrial insurance coverage for the bidder's employees working in Washington as required in Title 51 RCW; an employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and
- (d) Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).”

1-02.2 Plans and Specifications

(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

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.

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

To Prime Contractor	No. of Sets	Basis of Distribution
Contract Provisions	2	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	2	Furnished automatically upon award.

Additional plans and Contract Provisions may be obtained from the City if needed upon request.

1-02.4 Examination Of Plans, Specifications And Site Of Work

(March 13, 1995 WSDOT GSP)

1-02.4(1) General

(May 2015 COS)

This Section is supplemented with the following:

Contractor shall review the entire Contract to ensure that the completeness of their Proposal includes all items of Work regardless of where shown on the Plans and in the Contract. Bidders are cautioned that alternate sources of information (copies of the Contract obtained from third parties) are not necessarily an accurate or complete representation of the Plans and Contract. Bidders shall use such information at their own risk.

City of Snohomish storm and sewer standards are included in the Appendix.

1-02.5 Proposal Forms

(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

At the request of a bidder, the Contracting Agency will provide a proposal form for any project on which the bidder is eligible to bid.

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

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

The project is divided among three bidding schedules. Award will be made as a whole to one BIDDER however; the City reserves the right to award one, all, none or any combination of the Schedules thereof that best serves the interest of the City.

Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid. The bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

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

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.

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

1-02.7 Bid Deposit (October 1, 2005 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;

5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

The bidder must use the bond form included in the Contract Provisions.

1-02.9 Delivery of Proposal

(October 1, 2005 APWA GSP)

Revise the first paragraph to read:

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

1-02.13 Irregular Proposals

(March 25, 2009 APWA GSP)

Revise item 1 to read:

1. A proposal will be considered irregular and will be rejected if:
 - a. The Bidder is not prequalified when so required;
 - b. The authorized proposal form furnished by the Contracting Agency is not used or is altered;
 - c. The completed proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
 - d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
 - e. A price per unit cannot be determined from the Bid Proposal;
 - f. The Proposal form is not properly executed;
 - g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
 - h. The Bidder fails to submit or properly complete a Disadvantaged, Minority or Women's Business Enterprise Certification, if applicable, as required in Section 1-02.6;
 - i. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
 - j. More than one proposal is submitted for the same project from a Bidder under the same or different names.

1-02.14 Disqualification of Bidders

(March 25, 2009 APWA GSP, Option B)

Delete this Section and replace it with the following:

A Bidder will be deemed not responsible if:

1. the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or
2. evidence of collusion exists with any other Bidder or potential Bidder. Participants in collusion will be restricted from submitting further bids; or
3. the Bidder, in the opinion of the Contracting Agency, is not qualified for the work or to the full extent of the bid, or to the extent that the bid exceeds the authorized prequalification amount as may have been determined by a prequalification of the Bidder; or
4. an unsatisfactory performance record exists based on past or current Contracting Agency work or for work done for others, as judged from the standpoint of conduct of the work; workmanship; or progress; affirmative action; equal employment opportunity practices; termination for cause; or Disadvantaged Business Enterprise, Minority Business Enterprise, or Women's Business Enterprise utilization; or
5. there is uncompleted work (Contracting Agency or otherwise), which in the opinion of the Contracting Agency might hinder or prevent the prompt completion of the work bid upon; or
6. the Bidder failed to settle bills for labor or materials on past or current contracts, unless there are extenuating circumstances acceptable to the Contracting Agency; or
7. the Bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract, unless there are extenuating circumstances acceptable to the Contracting Agency; or
8. the Bidder is unable, financially or otherwise, to perform the work, in the opinion of the Contracting Agency; or
9. there are any other reasons deemed proper by the Contracting Agency.

As evidence that the Bidder meets the bidder responsibility criteria above, the apparent two lowest Bidders must submit to the Contracting Agency within 24 hours of the bid submittal deadline, documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with all applicable responsibility criteria, including all documentation specifically listed in the supplemental criteria. The Contracting Agency reserves the right to request such documentation from other Bidders as well, and to request further documentation as needed to assess bidder responsibility.

The basis for evaluation of Bidder compliance with these supplemental criteria shall be any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) which any reasonable owner would rely on for determining such compliance, including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from owners for whom the

Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Contracting Agency which is believed to be relevant to the matter.

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within 24 hours of receipt of the Contracting Agency's determination by presenting its appeal to the Contracting Agency. The Contracting Agency will consider the appeal 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 final determination.

1-02.15 Pre Award Information

(October 1, 2005 APWA GSP)

Revise this section to read:

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

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

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this section to read:

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

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

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

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

1-03.4 Contract Bond

(October 1, 2005 APWA GSP)

Revise the first paragraph to read:

The successful bidder shall provide an executed contract bond for the full contract amount. This contract bond shall:

1. Be on a Contracting Agency-furnished form;
2. Be signed by an approved surety (or sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Be conditioned upon the faithful performance of the contract by the Contractor within the prescribed time;
4. Guarantee that the surety shall indemnify, defend, and protect the Contracting Agency against any claim of direct or indirect loss resulting from the failure:

- a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform the contract, or
 - b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
 6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond must be signed by the president or vice-president, unless accompanied by written proof of the authority of the individual signing the bond to bind the corporation (i.e., corporate resolution, power of attorney or a letter to such effect by the president or vice-president).

1-04 SCOPE OF THE WORK

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

(October 1, 2005 APWA GSP)

Revise the second paragraph to read:

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

1. Addenda,
2. Proposal Form,
3. Special Provisions, including APWA General Special Provisions, if they are included,
4. Contract Plans,
5. Amendments to the Standard Specifications,
6. WSDOT Standard Specifications for Road, Bridge and Municipal Construction,
7. Contracting Agency's Standard Plans (if any), and
8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.6 Variation in Estimated QuantitiesReplacement

Section 1-04.6 is hereby deleted and replaced with the following:

Payment to the Contractor will be made only for the actual quantities of work performed and accepted in conformance with the contract. When the actual accepted quantity of work performed under a unit item varies from the original proposal quantity, payment will be at the unit contract price for all work and within the original time for completion.

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

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

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

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

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

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

1-05.11 Final Inspection

Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing

(October 1, 2005 APWA GSP)

1-05.11(1) Substantial Completion Date

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

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

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

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

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

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

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7. The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract, but shall

not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3) Operational Testing

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

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

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

1-05.13 Superintendents, Labor and Equipment of Contractor (March 25, 2009 APWA GSP)

Revise the seventh paragraph to read:

Whenever the Contracting Agency evaluates the Contractor's qualifications pursuant to Section 1-02.14, it will take these performance reports into account.

1-05.15 Method of Serving Notices (March 25, 2009 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project Engineer's office. Electronic copies such as e-mails or electronically delivered copies

of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new section:

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

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

Add the following new section:

1-05.17 Oral Agreements
(October 1, 2005 AWPA GSP)

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

1-06 CONTROL OF MATERIAL

Buy America

Section 1-06 is supplemented with the following:

(August 6, 2007 WSDOT GSP)

The major quantities of steel and iron construction material that is permanently incorporated into the project shall consist of American-made materials only. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and false work.

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

American-made material is defined as material having all manufacturing processes occurring domestically. To further define the coverage, a domestic product is a manufactured steel material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

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

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

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

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:
 - a. Open hearth furnace.
 - b. Basic oxygen.
 - c. Electric furnace.
 - d. Direct reduction.
2. Rolling, heat treating, and any other similar processing.
3. Fabrication of the products.
 - a. Spinning wire into cable or strand.
 - b. Corrugating and rolling into culverts.
 - c. Shop fabrication.

A certification of materials origin will be required for any items comprised of, or containing, steel or iron construction materials prior to such items being incorporated into the permanent work. The certification shall be on DOT Form 350-109EF provided by the Engineer, or

such other form the Contractor chooses, provided it contains the same information as DOT Form 350-109EF.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws To Be Observed

(May 2015 COS)

Section 1-07.1 is supplemented with the following:

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

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

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

All work under this contract shall be performed in a safe manner. The Contractor all Subcontractors shall observe all rules and regulations of the Washington State Department of Labor and Industries, rules and regulations of OSHA, WISHA or any other jurisdiction, and all other applicable safety standards. The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the Work. This requirement shall apply continuously and not be limited to normal working hours.

The Engineer's review of the Contractor's work plan, safety plan, construction sequence, schedule or performance does not and is not intended to include review or approval of the adequacy of the Contractor's safety measures in, on, or near the construction site. The Engineer does not purport to be a safety expert, is not engaged in that capacity under the Contract, and has neither the authority nor the responsibility to enforce construction safety laws, rules, regulations or procedures, or to order the stoppage of Work for claimed violations thereof.

The Contractor shall exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees and property. All exposed moving parts of equipment capable of inflicting injury by accidental contact shall be protected with sturdy removable guards in accordance with applicable safety regulations.

1-07.2 State Sales Tax

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

1-07.2 State Sales Tax

(October 1, 2005 APWA GSP)

1-07.2(1) General

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(4) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(3) describes this exception.

The Contracting Agency will pay the retained percentage only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.050). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(2) State Sales Tax — Rule 171

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

1-07.2(3) State Sales Tax — Rule 170

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

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

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

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

1-07.2(4) Services

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

1-07.5 Environmental Regulations

Section 1-07.5 is supplemented with the following:

(August 3, 2009 WSDOT GSP)

Environmental Commitments

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

General

The Contractor shall ensure that the Project Manager representing the Prime Contractor and all Subcontractors has read and understands this Special Provision. Prior to commencing any work on site, the Contractor shall provide the Engineer with a signed statement from the Project Manager stating that the Project Manager has read, understands and will abide by the conditions of this Special Provision.

Wetlands and Water Quality

The following restrictions and requirements pertain to work throughout the project limits:

Areas set aside for wash out of concrete delivery trucks, pumping equipment, and tools shall be approved by the Engineer. This area shall not have any possibility of draining to storm drainage infrastructure or waters of the State including wetlands.

During any operation involving saw cutting of concrete, a vacuum method to collect all concrete dust and debris shall be used at all times. Additionally, all water generated by the cutting operation shall be controlled and contained, to be disposed of on land with no possibility of entry to waters of the State, including wetlands.

Payment

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

1-07.17 Utilities and Similar Facilities (May 2015 XOS)

This Section is supplemented with the following:

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained with out uncovering, measuring or other verification.

Utility Locations

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

Water City of Snohomish Joe Palmer Water Division Lead 425-328-0068	Sewer and Storm Drain City of Snohomish Derek DeBardi Sewer and Storm Division Lead 425-328-6251
Power Snohomish County PUD 360-563-2218	Gas Puget Sound Energy 1-888-225-5773
Cable Comcast 425-754-0064	Phone Frontier 425-231-4609

1-07.17(2) Utility Construction, Removal, or Relocation by Others (May 2015 COS)

Delete this Section in its entirety and replace with the following:

Any authorized agent of the Contracting Agency or utility owners may enter the right-of-way to repair, rearrange, alter, or connect their equipment. The Contractor shall cooperate with such effort and shall avoid creating delays or hindrances to those doing the work. As needed, the Contractor shall arrange to coordinate work schedules.

The Contractor shall carry out the Work in a way that will minimize interference and delay for all forces involved. Any costs incurred prior to the utility owners anticipated completion (or if no completion is specified, within a reasonable period of time) that results from the coordination and prosecution of the Work regarding utility adjustment, relocation, replacement, or construction shall be at the Contractor's expense as provided in Section 1-05.14.

The Contractor shall coordinate all work with the various utility companies and their Contractors. The Contractor, when scheduling his work crews, shall use production rates that anticipate the need to provide buck-outs and/or gaps in the driveways, curb and gutter, and/or pavement sections where existing utility structures currently exist, and then come back at a later time to construct the missing sections after the utility has been relocated or adjusted by the applicable utility. The Contractor shall assume that the utilities will not be relocated prior to construction of this project nor at his convenience during the course of construction. As such, the Contractor shall assume such, and schedule his crews and his subcontractors to remobilize to the various sites and temporarily relocate his or his subcontractor's crews to other areas of the project and complete other unaffected portions of the project in order to coordinate the relocation of the utilities with the various utility companies. There shall be no additional money or time due the Contractor for leaving gaps or for buck-out construction, remobilization, demobilization, out of sequence construction, relocation of work crews, and construction of curb, gutter, or driveway patches after the utility has been relocated. It is the intent of these Specifications that the Contractor diligently pursue other work on the site when such conflicts occur and recognize and plan for the inherent inefficiencies and impaired production rates.

Payment

All costs to comply with this Section and repair specified in this Section, unless otherwise stated, are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the bid prices of the Contract.

1-07.18 Public Liability and Property Damage Insurance

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

1-07.18 Insurance (May 10, 2006 APWA GSP)

1-07.18(1) General Requirements

- A. The Contractor shall obtain the insurance described in this section from insurers approved by the State Insurance Commissioner pursuant to RCW Title 48. The insurance must be provided by an insurer with a rating of A-: VII or higher in the A.M. Best's Key Rating Guide, which is licensed to do business in the state of Washington (or issued as a surplus line

by a Washington Surplus lines broker). The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer (including financial condition), terms and coverage, the Certificate of Insurance, and/or endorsements.

- B. The Contractor shall keep this insurance in force during the term of the contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated (see C. below).
- C. If any insurance policy is written on a claim made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Final Completion or earlier termination of this contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period (“tail”) or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.
- D. The insurance policies shall contain a “cross liability” provision.
- E. The Contractor’s and all subcontractors’ insurance coverage shall be primary and non-contributory insurance as respects the Contracting Agency’s insurance, self-insurance, or insurance pool coverage.
- F. All insurance policies and Certificates of Insurance shall include a requirement providing for a minimum of 45 days prior written notice to the Contracting Agency of any cancellation in any insurance policy.
- G. Upon request, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s).
- H. The Contractor shall not begin work under the contract until the required insurance has been obtained and approved by the Contracting Agency.
- I. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days notice to the Contractor to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- J. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the contract and no additional payment will be made.

1-07.18(2) Additional Insured

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

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

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, whether primary, excess, contingent or otherwise, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(3) describes limits lower than those maintained by the Contractor.

1-07.18(3) Subcontractors

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

1-07.18(4) Evidence of Insurance

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. The certificate and endorsements must conform to the following requirements:

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

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve the Contractor from liability in excess of such limits. All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

A policy of Commercial General Liability Insurance, including:

Per project aggregate
Premises/Operations Liability
Products/Completed Operations – for a period of one year following final acceptance of the work.

Personal/Advertising Injury
Contractual Liability
Independent Contractors Liability
Stop Gap / Employers' Liability
Explosion, Collapse, or Underground Property Damage (XCU)
Blasting (only required when the Contractor's work under this Contract includes exposures to which this specified coverage responds)

Such policy must provide the following minimum limits:

\$1,000,000 Each Occurrence
\$3,000,000 General Aggregate
\$1,000,000 Products & Completed Operations Aggregate
\$1,000,000 Personal & Advertising Injury, each offence

Stop Gap / Employers' Liability
\$1,000,000 Each Accident
\$1,000,000 Disease - Policy Limit
\$1,000,000 Disease - Each Employee

1-07.18(5)B Automobile Liability

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

\$1,000,000 combined single limit

1-07.18(5)C Workers' Compensation

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

1-07.18(5)F Excess or Umbrella Liability

The Contractor shall provide Excess or Umbrella Liability coverage at limits of \$2,000,000 per occurrence and annual aggregate. This excess or umbrella liability coverage shall apply, at a minimum, to both the Commercial General and Auto insurance policy coverage.

1-07.23 Public Convenience And Safety

(April 2, 2007 WSDOT GSP)

Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent

Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

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

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

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

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

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

1-07.23(1) Construction Under Traffic

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

(August 7, 2006 WSDOT GSP)

Lane closures are subject to the following restrictions:

1. Single lane closures will be allowed between 8:00 am and 5:00 pm Monday through Friday except as described below.

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

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

1-07.23(2) Construction and Maintenance of Detours

Section 1-07.23(2) is supplemented with the following:

No road closures will be allowed for this project. The Contractor shall submit a traffic control plan that details traffic control during construction in Maple Avenue.

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

1-07.24 Rights of Way *(October 1, 2005 APWA GSP)*

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

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

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

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

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

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

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

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

1-08 PROSECUTION AND PROGRESS

Add the following new section:

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

Add the following new section:

1-08.0(1) Preconstruction Conference (October 10, 2008 APWA GSP)

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

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

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

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

Add the following new section:

1-08.0(2) Hours of Work
(May 25, 2006 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Contracting Agency, the normal straight time working hours for the contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. of a working day with a maximum 1-hour lunch break and a 5-day work week. The normal straight time 8-hour working period for the contract shall be established at the preconstruction conference or prior to the Contractor commencing the work.

If a Contractor desires to perform work on holidays, Saturdays, Sundays, or before 7:00 a.m. or after 6:00 p.m. on any day, the Contractor shall apply in writing to the Engineer for permission to work such times. Permission to work longer than an 8-hour period between 7:00 a.m. and 6:00 p.m. is not required. Such requests shall be submitted to the Engineer no later than noon on the working day prior to the day for which the Contractor is requesting permission to work.

Permission to work between the hours of 10:00 p.m. and 7:00 a.m. during weekdays and between the hours of 10:00 p.m. and 9:00 a.m. on weekends or holidays may also be subject to noise control requirements. Approval to continue work during these hours may be revoked at any time the Contractor exceeds the Contracting Agency's noise control regulations or complaints are received from the public or adjoining property owners regarding the noise from the Contractor's operations. The Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

Permission to work Saturdays, Sundays, holidays or other than the agreed upon normal straight time working hours Monday through Friday may be given subject to certain other conditions set forth by the Contracting Agency or Engineer. These conditions may include but are not limited to: requiring the Engineer or such assistants as the Engineer may deem necessary to be present during the work; requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency employees who worked during such times, on non Federal aid projects; considering the work performed on Saturdays, Sundays, and holidays as working days with regards to the contract time; and considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period. Assistants may include, but are not limited to, survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees when in the opinion of the Engineer, such work necessitates their presence.

1-08.4 Notice to Proceed and Prosecution of the Work

(October 1, 2005 APWA GSP)

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

1-08.5 Time for Completion

(May 2015 COS)

Delete this Section in its entirety and replace with the following:

The Contractor shall complete all Contract Work within the number of “working days” stated in the Contract Provisions or as extended by the Engineer in accordance with Section 1-08.8. Every day will be counted as a “working day” unless it is a nonworking day or an Engineer determined unworkable day. A nonworking day is defined as a Saturday, a Sunday, a day on which the Contract specifically suspends Work, or one of these holidays: January 1, the third Monday of January, the third Monday of February, Memorial Day, July 4, Labor Day, November 11, Thanksgiving, and Christmas Day. When any of these holidays fall on a Sunday, the following Monday shall be counted a nonworking day. When the holiday falls on a Saturday, the preceding Friday shall be counted a nonworking day. The days between December 25 and January 1 will be classified as nonworking days, provided the Contractor actually suspends performance of the Work.

Any unworkable day is defined as a half or whole day the Engineer declares to be unworkable because of weather or conditions caused by the weather that prevents satisfactory and timely performance of the Work shown on the critical path of the Contractor’s approved progress schedule. Other conditions beyond the control of the Contractor may qualify for an extension of time in accordance with Section 1-08.8.

The Contract time shall begin on the first working day following the 10th calendar day after the issuance of the written notice to proceed or the first day on which the Contractor begins to perform Work on the site, whichever first occurs. The Contract Provisions may specify another starting date for the Contract time, in which case time will begin on the starting date specified.

Each working day shall be charged to the Contract as it occurs until the Work is physically complete. If requested by the Contractor in writing, the Engineer will provide the Contractor

with a weekly statement that shows the number of working days: (1) charged to the Contract the week before; (2) specified for the substantial and physical completion of the Contract; and (3) remaining for the physical completion of the Contract. The statement will also show the nonworking days and any partial or whole days that the Engineer determines to be unworkable. If the Contractor disagrees with any statement issued by the Engineer, the Contractor shall submit a written protest within 10 calendar days after the date of the statement. The protest shall be sufficiently detailed to enable the Engineer to ascertain the basis for the dispute and the amount of time disputed. Any statement that is not protested by the Contractor as required in this Section shall be deemed as having been accepted. If the Contractor elects to work 10 hours a day for four days a week (a 4-10 schedule), the fifth day of the week of that week will be charged as a working day if that day would be chargeable as a working day if the Contractor had not elected to utilize the 4-10 schedule.

The Engineer will give the Contractor written notice of the Completion Date of the Contract after all of the Contractor's obligations under the Contract have been performed by the Contractor. The following events must occur before the Completion Date will be established:

1. The physical Work on the project must be complete; and
2. The Contractor must furnish all documentation required by the Contract and required by law, to allow the Contracting Agency to process final acceptance of the Contract. The following documents must be received by the Project Engineer prior to establishing a Completion Date:
 - a. Certified payrolls (Federal-aid projects);
 - b. Material acceptance certification documents;
 - c. Annual report of amounts paid as MBE/WBE participants or quarterly report of amounts credited as DBE participation, as required by the Contract Provisions
 - d. Final Contract voucher certification;
 - e. Property owner releases if needed as required by Section 1-07.24.

1-08.5 Time for Completion
(June 28, 2007 APWA GSP, Option B)

Revise the third and fourth paragraphs to read:

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

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor elects to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day, then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor's obligations under the contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
 - a. Certified Payrolls (each pay period)
 - b. Material Acceptance Certification Documents
 - c. A report listing the names and addresses of the subcontractors and suppliers receiving contract funds from the Project.
 - d. Final Contract Voucher Certification
 - e. Any Property owner releases per Section 1-07.24

1-08.7 Maintenance During Suspension (October 1, 2005 APWA GSP)

Revise the second paragraph to read:

At no expense to the Contracting Agency, the Contractor shall provide through the construction area a safe, smooth, and unobstructed roadway, sidewalk, and path for public use during suspension (as required in Section 1-07.23 or the Special Provisions). This may include a temporary road or detour.

1-09.1 Asphalt
(May 2015 COS)

Supplement this section with the following:

Asphalt Patch shall be measured by trench neat line and not to exceed 6-inches in depth. Payment for Asphalt Patch shall be per square yard based on measurement parameters listed in this supplement.

1-09.6 Force Account
(October 10, 2008 APWA GSP)

Supplement this section with the following:

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

1-09.9 Payments
(October 10, 2008 APWA GSP)

Delete the third paragraph and replace it with the following:

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

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

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

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — partial payment for lump sum Bid items will be a percentage of the price in the Proposal based on the Engineer's determination of the amount of Work performed, with consideration given to, but not exclusively based on, the Contractor's lump sum breakdown for that item.
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 after signature of approval by the City Manager.

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

1. Retainage per Section 1-09.9(1);
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.

Payments will be made by warrants, issued by the Contracting Agency's fiscal officer, against the appropriate fund source for the project. Payments received on account of work performed by a subcontractor are subject to the provisions of RCW 39.04.250.

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.

DIVISION 2
EARTHWORK

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description

Supplement this section with the following:

The work includes removing and disposing of existing storm drain pipe, concrete sidewalk, driveway, curb and gutter. Additionally, this work includes removal of all large rock, trees, landscaping, fencing and any miscellaneous items and work needed to perform the work shown on the Plans.

2-02.3 Construction Requirements (May 2015 COS)

This Section is supplemented with the following:

The removal of any existing improvements shall be conducted in such a manner as not to damage utilities and any portion of the infrastructure that is to remain in place. Any deviation in this matter will obligate the Contractor at his own expense, to repair, replace or otherwise make proper restoration to the satisfaction of the Contracting Agency.

When sawing of concrete or combinations of materials is required, the depth of cut shall be as such to accomplish the intended purpose, without damaging surfaces to be left in place and will be determined in the field to the satisfaction of the Engineer.

2-02.3(3) Removal of Pavement, Sidewalks, Curbs and Gutters (May 2015 COS)

This Section is supplemented with the following:

Existing cement concrete sidewalks, driveways, roadway slabs, curbs, and curbs and gutters shall be removed at the nearest construction joint where possible and removed and waste hauled as required for the construction of this Project. Where directed by the Engineer, cement concrete curbs or curb and gutter shall be saw-cut per Section 2-02.3(6) prior to removal. Existing pavement shall be pre-cut per Section 2-02.3(6) before commencing excavation and shall be removed as required for the construction.

2-02.3(5) Waste Disposal (New Section) (May 2015 COS)

Waste materials shall be loaded and hauled to a waste site secured by the Contractor and shall be disposed of in such a manner as to meet all requirements of state, county and municipal regulations regarding health, safety and public welfare.

Trench excavation soils may be hauled to the City Pit located at 123rd Ave SE, Snohomish, WA, if approved by the Public Works Inspector. Contractor shall coordinate hauling all soils, if approved, to the City Pit with the Public Works Inspector relative to haul hours and off loading locations.

2-02.3(6) Sawcutting (New Section) (May 2015)

Where shown on the Plans or where directed in the field by the Engineer, the Contractor shall make a neat vertical saw-cut at the boundaries of the area to be removed. Care shall be taken during saw cutting so as to prevent damage to the existing asphalt concrete, or concrete, to remain in place. Any pavement or concrete damaged by the Contractor outside the area

scheduled for removal due to the Contractor's operations or negligence shall be repaired or replaced to the Contracting Agency's satisfaction by the Contractor at no additional cost to the Contracting Agency.

All cuts shall be continuous, full depth, and shall be made with saws specifically equipped for this purpose. No skip cutting or jack hammering will be allowed unless specifically approved otherwise in writing by the Engineer. Any pavement that is damaged outside the allowable trench widths or as marked in the field, not included in the overlay, in accordance with the Plans or pre-approved by the Contracting Agency shall be repaired entirely at the Contractor's expense.

Wheel cutting or jack hammering shall not be considered an acceptable means of pavement "cutting," unless pre-approved in writing by the Engineer. However, even if pre-approved as a method of cutting, no payment will be made for this type of work, and it shall be included in the various unit contract and lump sum prices listed in the Proposal. The location of all pavement cuts shall be pre-approved by the Engineer in the field before cutting commences. All water and slurry material resulting from saw cutting operations shall be vacuumed and not be allowed to enter the storm drainage or sanitary sewer system. It shall be removed from the site and disposed of in accordance with the Washington State Department of Ecology regulations.

2-02.5 Payment (May 2015 COS)

This Section is supplemented with the following:

All costs for saw cutting as indicated in the Plans and as may be additionally necessary to construct the Project shall be included in the unit Contract and lump sum prices as listed in the Proposal. No additional or separate payment will be made for saw cutting.

The lump sum contract price for "Removal of Structures and Obstructions" shall be full compensation for furnishing all tools, labor, equipment, materials, and incidentals necessary for removing, loading, hauling, relocating, disposing of, and/or delivering items as noted herein and directed in the field by the Engineer, to include but not limited to, fees, fuel and permits related to disposal.

2-02.4 Measurement

Supplement this section with the following:

Sawcutting will be measured by the linear foot of sawcut, along the line and grade of the sawcut and the limits of the sawcut as shown in the Plans.

2-02.5 Payment

Supplement this section with the following:

"Saw cutting", per linear foot.

The unit contract price per linear foot for "Sawcutting" shall be full pay for performing the work as specified, including containment, collection, and disposal of all saw cutting debris and wastewater.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.3(14)C Compacting Earth Embankments

Supplement this section with the following:

Method C shall be used for this project. Additionally, Contractor shall be responsible for all compaction testing for this project.

2-03.4 Measurement (May 2015 COS)

This Section is supplemented with the following:

Measurement of Over Excavation and Unsuitable Foundation Excavation, Incl. Haul will be per cubic yard, as field neat line measured in the excavated area (not truck measurement)

2-04 HAUL (May 2015 COS)

This Section is supplemented with the following:

If the sources of materials provided by the Contractor necessitates hauling over any public roads, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes. No separate monies will be due the Contractor for this work.

2-09 STRUCTURE EXCAVATION (May 2015 COS)

This Section is supplemented with the following:

When any work is being considered by the Contractor in the vicinity of an existing utility, the Contractor shall so inform an authority of the particular utility in ample time so that the utility involved and the Contractor may take any precautions necessary to facilitate construction in the vicinity of the utility, and thereby protect that particular utility from damage.

Protecting and Maintaining Utility Service

The Contractor shall protect and maintain the operational service of existing utility systems in a continuous manner as possible. The Contractor shall have the approval from the Engineer and notification shall be given to the Contracting Agency before any disruptions of service in existing

utilities will be allowed. The Contractor shall comply with all the conditions established by the Engineer and the Contracting Agency. The Contractor shall give the utility owner a minimum notice of 48 hours before disrupting any planned service interruption. No planned interruption to an existing system shall be allowed on Fridays, weekends, or holidays, unless specifically agreed to in writing by the Contracting Agency. Where services are to be shut down, affected parties shall be notified in writing by the Contractor (i.e., door hangers) at least 48 hours and not more than 72 hours in advance of the time and period of shut down. The Contractor shall make every effort to keep shut down schedules to periods of anticipated minimum usage and for the least period of time.

Where the construction crosses or is adjacent to existing utilities, the Contractor shall exercise extreme care to protect such utilities from damage. Additionally, the Contractor shall review the Plans, the project site and familiarize himself with the various utilities and plan his construction activities in recognition that the very close proximity of existing utilities to the proposed work will adversely affect production rates of installation of the various planned improvements. The Contractor is hereby advised and cautioned that the location of existing utilities will be cause for considerable and extreme care and due diligence on the part of the Contractor. As such, work production rates are anticipated to be significantly impacted by their presence and normal production rates should not be anticipated, during construction by the Contractor for work in these areas. The Contractor shall anticipate minor alignment adjustments will also be required to accommodate the installation of utilities.

4-04.5 Payment (May 2015 COS)

This Section is supplemented with the following:

The unit contract prices bid for the various types of ballast, structural fill, crushed surfacing base course, and crushed surfacing top course materials shall include all costs for obtaining the materials, hauling the materials to the site, stockpiling, spreading, grading, shaping, compaction, compaction testing, material testing, and all other incidentals, complete, in place and in good working order. Asphalt grindings are not subject to reimbursement under any of these bid items.

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

7-04 STORM SEWERS

7-04.1 Description

This Section is supplemented with the following:

The Contractor shall furnish, install, and operate all necessary equipment to bypass storm drainage flows around the construction areas until such time that the new drainage system is ready to convey these flows. Contractor shall submit a bypass plan for approval prior to

commencing work.

The Contractor shall construct the reinforced concrete pipe anchor block around the HDPE pipe as shown on the plans.

7-04.2 Materials

(May 2015 COS)

This Section is supplemented with the following:

Pipe materials shall meet the requirements of the following sections:

High Density Polyethylene Pipe (HDPE) 9-05.21

All HDPE pipe and fittings shall be SDR 17

Mortar Type 3 9-20.4(4)

7-04.3(1)A General

(May 2015 COS)

This Section is supplemented with the following:

All lines shall be flushed clean of all debris prior to acceptance. The debris shall be intercepted and collected at the nearest downstream point of access. The material shall then be loaded and waste hauled to a Contracting Agency approved dumpsite.

A reinforced concrete anchor block, poured around the HDPE pipe as shown on the Plans. The concrete anchor shall bear against undisturbed earth as much as possible.

7-04.3(1)A General

(May 2015 COS)

This Section is supplemented with the following:

All lines shall be flushed clean of all debris prior to acceptance. The debris shall be intercepted and collected at the nearest downstream point of access. The material shall then be loaded and waste hauled to a Contracting Agency approved dumpsite.

7-04.4 Measurements

(May 2015 COS)

Supplement this section with the following:

Measurement for the HDPE pipe shall be actual length measured at grade.

7-04.5 Payment

(May 2015 COS)

This section is supplemented with the following:

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

“HDPE Storm Sewer Pipe 12.75 in. O.D.,” per linear foot.”

The unit contract price per linear foot of “HDPE Storm Sewer Pipe 12.75 O.D. in. O.D.” shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item, to include but not limited to excavation, pipe bedding, backfill, compaction, pipe welding, compaction testing, material testing, removal and waste haul of excess or unsuitable excavated material, dewatering, bypass pumping and maintaining storm sewer flows, connections to existing and new systems, flushing, cleaning, and testing.

“Reinforce Concrete Anchor Block, per each.”

The lump sum contract price for “Reinforce Concrete Anchor Block” shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies and incidentals required to complete all work to furnish and install this item, to include but not limited to excavation, compaction, compaction testing, material testing, dewatering, forming, reinforcing steel, placement of concrete, and removal and waste haul of excess or unsuitable material.

“12-inch Ductile Iron Pipe, per linear foot”

The unit contract price per linear foot of storm drain pipe shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item, to include but not limited to excavation, pipe bedding, backfill, compaction, compaction testing, material testing, removal and waste haul of excess or unsuitable excavated material, dewatering, bypass pumping and maintaining storm sewer flows, connections to existing and new systems, flushing, cleaning, and testing.

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

7-05.3 Construction Requirements

(May 2015 COS)

This Section is supplemented with the following:

The Contractor shall construct all manholes and catch basins from precast concrete bases and risers. Cast-in-place concrete bases shall only be used for “straddle” of existing systems and shall be watertight. In areas of new and existing pavement, the grate rim elevation shall be set to promote drainage flow. In unimproved areas, the rim elevations shall be set as shown on the Plans. Dewatering shall be per Section 7-08.3(1).

Unless specifically noted herein or shown differently on the Plans, the Contractor shall connect to the manhole and catch basin as follows:

<u>Pipe</u>	<u>Connection System</u>
DI	Kor-N-Seal*
HDPE	Kor-N-Seal*
PVC	Kor-N-Seal*
Corrugated Polyethylene	Per Manufacturer’s
Recommendation	
*Or Contracting Agency approved equal.	

All pipes entering manholes, catch basins, and dry well structures shall be securely connected to the structures with either a boot-type rubber coupling or a heavy-duty sand collar per manufacturer’s recommendations to effectively seal the pipe to the structure.

7-05.4 Measurement (May 2015 COS)

This Section is supplemented with the following:

Manholes, saddle manholes and catch basins will be measured per each and shall include frame and cover. No additional payment will be made on the basis of manhole or catch basin height.

7-05.5 Payment (May 2015 COS)

This Section is supplemented with the following:

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

The unit contract price per each for each catch basin, saddle manhole and manhole shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item, to include but not limited to structure excavation, foundation gravel, backfill, compaction, compaction testing, material testing, cast in place concrete base, removal and waste haul of excess or unsuitable excavated material, pipe connection, channelizing, dewatering, bypass pumping and maintaining flows, and adjusting to finished grade.

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.1 Description

This Section is supplemented with the following:

This work includes the installation of the HDPE storm sewer pipe to be welded and laid in the trench. The upstream end of the HDPE pipe is to be connected to the existing manhole and anchored in the trench as detailed on the Plans. The Contractor shall excavate a maximum trench width of 36 inches.

7-08.2 Materials

(May 2015 COS)

This Section is supplemented with the following:

Gravel Backfill for Pipe Zone Bedding shall meet the requirements of Section 9-03.9(3) for Top Course.

Bank Run Gravel for Trench Backfill shall meet the requirements of Section 9-03.14(1) for Gravel Borrow.

7-08.3(1)A Trenches

This Section is supplemented with the following:

Payment for trench excavation shall be included in the unit price for each respective pipe to be installed as part of this project. No separate or additional payment for trench excavation beyond the unit price bid for each respective pipe will be paid.

The length of trench excavation in advance of pipe laying shall be kept to a maximum of 100 feet. Excavation shall either be closed up at the end of the day or protected per Section 1.07.23(1).

The Contractor shall limit his excavation to the limits of the maximum payment width and depth shown on the Plans. If the Contractor purposely or neglectfully excavates trenches to a width or depth beyond the neat line payment limit of the trench as shown on the Plans, the expenses associated with any additional trenching, waste haul, trench backfill, compaction, compaction testing, material testing and surface restoration as a result of excavating beyond the neat line payment limits shall be borne by the Contractor.

It is not anticipated that solid rock other than existing landscape rock will be encountered. Should such material be encountered, the excavation, removal and waste haul will be paid for by change order per Section 1-04.4. Boulders or broken rock less than 2 cubic yards in volume, shall not be classified as rock, nor will so called "hard-pan" or cemented gravel, even though it may be advantageous to use special equipment in its removal.

Trench excavation shall also include waste hauling all excess and/or unsuitable material encountered, including but not limited to, abandoned pipelines, concrete, asphalt, tree stumps, trees, logs, abandoned rail ties, piling, and riprap.

The Contractor shall furnish all equipment necessary to dewater the excavation. Before operations begin, the Contractor shall have sufficient pumping equipment and/or other machinery available on site to assure that the operation of any dewatering system can be maintained.

The Contractor shall dispose of the water in such a manner as not to cause a nuisance or menace to the public, and comply with all codes, regulations, and ordinances of applicable governing authorities with regard to drilling, dewatering, and erosion control. The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soil, prevent disturbance of backfill and prevent movement of structures and pipelines.

The dewatering system shall be installed and operated by the Contractor so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. Should settlement of the surrounding area and/or structures be observed, the Contractor shall cease dewatering operations and implement contingency plans. The cost of repairing any damage to adjacent structures, underground facilities or utilities and satisfactory restoration of above ground facilities to include fences, paving, concrete, etc., shall be the responsibility of the Contractor.

The Contractor shall be required to comply with all conditions and requirements mandated by the Department of Ecology for the construction, operation, and decommissioning of dewatering facilities.

7-08.3(2)B Pipe Laying – General (May 2015 COS)

This Section is supplemented with the following:

All pipe shall be unloaded from delivery vehicles with mechanical equipment. Dropping of pipe onto the ground or mats will not be permitted. All pipe and fittings shall be carefully lowered into the trench in such a way as to prevent damage to pipe materials and protective coatings and linings. Under no circumstances shall materials be dropped or dumped into the trench.

Every precaution shall be taken to prevent foreign material from entering the pipe while it is being laid. The pipe shall be secured in place with pipe bedding tamped under it. Precaution shall be taken to prevent dirt from entering the joint space. At times when pipe laying is not in progress, the open ends of pipe shall be closed by a watertight plug or other means approved by the Contracting Agency. If water is in the trench when work resumes, the seal shall remain in place until the trench is dewatered as specified for groundwater control.

All connections to existing pipe of differing materials shall be made with adapters which are specifically manufactured for this purpose. If the band type adapters are used, then only stainless steel bands will be allowed. Pipe shall be installed in compliance with the manufacturer's recommendations.

The HDPE pipe shall be butt-fuse welded with a machine specifically made for this purpose, in compliance with the manufacturer's recommendations. Welders or heat fusion technician must provide suitable evidence that they are competent to heat fuse the pipe and fittings as further referenced in ASTM D2657. Contractor shall submit proof of welder certifications prior to commencing work.

All connections to existing pipe of differing materials shall be made with adapters per the City of Snohomish Standards and Specifications.

7-08.4 Measurement

(May 2015 COS)

Delete all paragraphs under this Section and replace with the following:

Measurement for Removal of Unsuitable Material (Trench) will be per cubic yard of material removed below the foundation depth as shown on the Plans.

7-08.5 Payment

(May 2015 COS)

Delete all paragraphs under this Section and replace with the following:

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

“Unsuitable Foundation Excavation Including Haul” per cubic yard.

The unit contract price per cubic yard for “Unsuitable foundation excavation including haul” shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to remove unsuitable material below the trench bottom, to include but not limited to excavation, removal and waste haul of unsuitable excavated material and dewatering.

“Trench Excavation Safety Systems,” lump sum.

The lump sum contract price for “Trench Excavation Safety Systems” shall include all costs of furnishing, installing, maintaining, and removing those items necessary to provide adequate safety systems for trench excavation, as specified in Section 2 09.3(3)D. This item shall be paid proportionate to the satisfactory installation of all facilities that require trench excavation safety systems including pipeline, conduits, walls, embankments, and structures as noted in the Proposal, or otherwise required for the performance of this work.

“Import Trench Backfill,” per ton.

The unit contract price per ton for “Import Trench Backfill” shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item, to include but not limited to backfill trenches, dewatering, excavation, loading, waste haul of excess excavated native material, and placing, shaping, compacting, compaction testing, and material testing the import trench backfill material.

All costs of plugging and abandoning of pipe, structures, and appurtenances to be left in place shall be considered incidental to the Project and merged into the various items bid. All costs to providing dewatering as required shall be included into the unit contract price for the type and size of pipe installed. All costs of providing bypass pumping as required shall be included into the unit contract price for the type and size of pipe installed.

8-01.1 Description

Supplement this section with the following:

This Work includes installation, maintenance, and removal of silt fence, straw bales, filter bags, inlet protection, street cleaning, and all other erosion and water pollution control devices necessary to prevent impacts to the Pilchuck and Snohomish Rivers.

8-04 CURB, GUTTERS, AND SPILLWAYS

8-04.3 Construction Requirements

(May 2015 COS)

This Section is supplemented with the following:

Any curb and gutter damaged, defaced, cracked, chipped, or determined to be of poor workmanship, in the opinion of the Contracting agency, shall be removed, waste hauled and replaced by the Contractor, at the Contractor’s expense. Sacking and grinding shall not be considered an acceptable means for repairing unacceptable sections. The Contractor shall further provide verbal and written notice (door hangers) to property owners identifying restricted use of their driveways, sidewalks, etc. This notice must be provided twice: at 1 week prior and again 1 day prior to the work being performed.

8-14 CEMENT CONCRETE SIDEWALKS

8-14.3 Construction Requirements

(May 2015 COS)

This Section is supplemented with the following:

Any sidewalk damaged, defaced, cracked chipped, or determined to be of poor workmanship, in the opinion of the Contracting Agency, shall be removed, waste hauled, and replaced by the Contractor at the Contractor's expense. Damaged sidewalk shall be removed at a construction or expansion joint, Sawcutting will not be allowed. Sacking, grinding, or spot repairs shall not be considered an acceptable means for repairing unacceptable sections. The Contractor shall further provide verbal and written notice (door hangers) to property owners identifying restricted use of their driveways, sidewalks, etc. This notice must be provided twice: at one (1) week prior and again one (1) day prior to the work being performed.

8-13 MONUMENT CASES

8-13.1 Description

Supplement this section with the following:

This Work shall also include furnishing and replacing monuments under the supervision of a Professional Licensed Surveyor.

8-13.3 Construction Requirements

The fourth paragraph is deleted and this section is supplemented with the following:

The Contractor shall be responsible for reestablishing legal survey markers such as monuments and monument cases under the supervision of a Professional Licensed Surveyor, and for filing all the necessary monument replacement forms through the Washington State Department of Natural Resources.

All survey work performed by the Contractor shall conform to all applicable sections of the Revised Code of Washington and the Washington Administrative Code.

The Contractor shall perform all of the necessary calculations for the contracted survey work and shall provide copies of these calculations to the Contracting Agency. Electronic files of all survey data shall be provided and in a format acceptable to the Contracting Agency.

The Contractor shall provide all traffic control, signing, and temporary traffic control devices in order to provide a safe work zone.

8-13.4 Measurement

Revise this section to read:

Measurement of monument, case and cover will be by the unit for each monument replaced.

8-13.5 Payment

Revise the bid item to read:

“Monument”, per each.

8-30 MISCELLANEOUS (May 2015 COS)

This Section is supplemented with the following:

8-30.1 Project Documentation (May 2015 COS)

Description

The Work described in this section includes record drawings, photographs, and property release forms.

Construction Requirements Record Drawings

Record drawings and other documents are to be maintained and annotated by the Contractor during construction as follows: (1) a neatly and legibly marked set of Contract Plans showing the final location of piping, structures, paving limits, curbs, gutters, sidewalks, relocated utility structures, monuments, channelization, etc.; (2) additional documents such as schedules, lists, drawings, and easement/permit forms included in the Specifications; and (3) Contractor layout and installation drawings.

Unless otherwise specified, record drawings shall be full size and maintained in a clean, dry, and legible condition. Record documents shall not be used for construction purposes and shall be available for review by the Contracting Agency during normal working hours at the Contractor’s field office. At the completion of the Work and prior to final payment, all record drawings and attachments shall be submitted to the Contracting Agency.

The record drawings shall be prepared concurrently with the Work being performed and shall be kept current at all times. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:

Additions	Red
Deletions	Green
Comments	Blue
Dimensions	Graphite

The record drawings shall identify all existing or abandoned utilities that were found during construction and not shown on the original Contract Plans. The Contractor will be provided with one set of Contract Plans for this purpose. At the end of the project, each record drawing and

other document shall be stamped and signed by the Contractor, attesting to the accuracy of the drawing or other document.

Photographs

The Contractor shall provide comprehensive preconstruction photographs of the entire Work site and adjoining properties. The photographs shall provide complete coverage of all features. Before construction starts, two each 4" x 6" color glossy prints of each exposure, together with the electronic file, shall be delivered to the Contracting Agency. Photographs shall be taken in and along the project limits, prior to construction. Special attention shall be provided to depict existing conditions, edge of pavement, drainage facilities, and utility markers. The photographs shall be of commercial quality and the back of each glossy color print shall indicate the date, name of the project and the location and direction where the photograph was taken. Photographs shall be provided in one bound 3 ring photograph album, with photographs arranged in a logical order and protected by clear plastic sheeting or sleeves specifically made for this purpose. The Contractor shall provide post-construction photographs from the same spot and angle as the pre-construction photographs. The Contractor shall provide a minimum of 24 pre and 24 post-construction photographs of each Work site.

Payment

All work required to complete the project documentation shall be considered incidental to the contract and as such merged in the various items bid.

9-05 DRAINAGE STRUCTURES, CULVERTS AND CONDUITS

9-05.15(1) Manhole Ring and Cover

(May 2015 COS)

This Section is supplemented with the following:

Manhole rings and covers shall conform to Section 9-05.15(1) of the Standard Specifications unless indicated otherwise in the Contract Documents.

9-05.21 High Density Polyethylene Pipe (HDPE) (New Section)

(May 2015 COS)

The storm sewer pipe shall be HDPE SDR 17 butt-fused welded pipe of the size as shown on the drawings and further noted on the Plans. Where conflicts or discrepancies exist between these specifications and the plans, these specifications will take precedence.

The polyethylene pipe and fittings for the storm sewer pipe shall be high density, black PE 3408 pipe. The pipe shall be made from polyethylene resin compound. The minimum cell classification shall be PE 345434C for PE 3408 materials per ASTM D3350. The manufacturer

shall provide the proper certification to ensure the materials comply with the specifications requirements. The material shall contain a minimum of 2 percent and no more than 3 percent by weight of well-dispersed and finely divided carbon black.

The pipe shall be homogenous throughout and uniform in color, density and other properties. The pipe shall be manufactured in accordance with ASTM F714. Dimensions and tolerances for pipe outside diameter and minimum wall thickness shall be in accordance with ASTM F714 and as measured and calculated per ASTM D2122.

The manufacturer shall furnish an affidavit that all materials delivered comply with the requirements of the specifications together with copies of the test results (nominal values). Pipe and polyethylene fittings shall be produced by the same manufacturer from identical material meeting the requirements of this specification. Polyethylene fittings may be molded, or fabricated by heat fusion joining polyethylene components prepared from pipe, molded fittings, or polyethylene sheet or block, except fittings 12 inches nominal diameter and smaller shall be molded meeting the requirements of ASTM D3261. Fittings fabricated from pipe shall be manufactured from pipe stock with a wall thickness not less than 25 percent greater than that of the pipe to which the fitting is to be jointed. The wall thickness of an outlet may be the same as the wall thickness of the pipe to which the outlet is to be joined. Flanged joining of the pipe shall be performed with a convoluted ductile iron back-up flange conforming to the vital dimensions of ANSI 16.5. The flange shall be epoxy coated ductile iron conforming to ASTM 536, Grade 65/45/12. Gaskets provided at all flanged joints shall be neoprene. All buried flange connections shall be furnished with stainless steel bolts and nuts.

The bolts shall be evenly tightened using a crossing pattern and each flanged joint shall be checked and retightened after one hour or more has passed.

APPENDICIES

A. PREVAILING MINIMUM HOURLY WAGE RATE

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: 06/02/2015

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>
Snohomish	Asbestos Abatement Workers	Journey Level	\$42.67	<u>5D</u>	<u>1H</u>	
Snohomish	Boilermakers	Journey Level	\$64.29	<u>5N</u>	<u>1C</u>	
Snohomish	Brick Mason	Brick And Block Finisher	\$44.46	<u>5A</u>	<u>1M</u>	
Snohomish	Brick Mason	Journey Level	\$51.32	<u>5A</u>	<u>1M</u>	
Snohomish	Brick Mason	Pointer-Caulker-Cleaner	\$51.32	<u>5A</u>	<u>1M</u>	
Snohomish	Building Service Employees	Janitor	\$9.47		<u>1</u>	
Snohomish	Building Service Employees	Shampooer	\$9.47		<u>1</u>	
Snohomish	Building Service Employees	Waxer	\$9.47		<u>1</u>	
Snohomish	Building Service Employees	Window Cleaner	\$13.48		<u>1</u>	
Snohomish	Cabinet Makers (In Shop)	Journey Level	\$15.08		<u>1</u>	
Snohomish	Carpenters	Acoustical Worker	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Bridge, Dock And Wharf Carpenters	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Carpenter	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Carpenters on Stationary Tools	\$52.45	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Creosoted Material	\$52.42	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Floor Finisher	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Floor Layer	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Scaffold Erector	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Cement Masons	Journey Level	\$52.38	<u>7A</u>	<u>1M</u>	
Snohomish	Divers & Tenders	Diver	\$105.37	<u>5D</u>	<u>4C</u>	<u>8A</u>
Snohomish	Divers & Tenders	Diver On Standby	\$59.50	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Diver Tender	\$54.82	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Surface Rcv & Rov Operator	\$54.82	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Surface Rcv & Rov Operator Tender	\$51.07	<u>5A</u>	<u>4C</u>	
Snohomish	Dredge Workers	Assistant Engineer	\$54.75	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Assistant Mate (Deckhand)	\$54.33	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Boatmen	\$54.75	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Engineer Welder	\$55.79	<u>5D</u>	<u>3F</u>	

Snohomish	Dredge Workers	Leverman, Hydraulic	\$56.92	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Mates	\$54.75	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Oiler	\$54.33	<u>5D</u>	<u>3F</u>	
Snohomish	Drywall Applicator	Journey Level	\$52.32	<u>5D</u>	<u>1H</u>	
Snohomish	Drywall Tapers	Journey Level	\$52.37	<u>5P</u>	<u>1E</u>	
Snohomish	Electrical Fixture Maintenance Workers	Journey Level	\$13.76		<u>1</u>	
Snohomish	Electricians - Inside	Cable Splicer	\$62.37	<u>7H</u>	<u>1E</u>	
Snohomish	Electricians - Inside	Construction Stock Person	\$30.95	<u>7H</u>	<u>1D</u>	
Snohomish	Electricians - Inside	Journey Level	\$58.23	<u>7H</u>	<u>1E</u>	
Snohomish	Electricians - Motor Shop	Craftsman	\$15.37		<u>1</u>	
Snohomish	Electricians - Motor Shop	Journey Level	\$14.69		<u>1</u>	
Snohomish	Electricians - Powerline Construction	Cable Splicer	\$69.95	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Certified Line Welder	\$63.97	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Groundperson	\$43.62	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$63.97	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Journey Level Lineperson	\$63.97	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Line Equipment Operator	\$53.81	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Pole Sprayer	\$63.97	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Powderperson	\$47.55	<u>5A</u>	<u>4D</u>	
Snohomish	Electronic Technicians	Journey Level	\$30.10		<u>1</u>	
Snohomish	Elevator Constructors	Mechanic	\$82.67	<u>7D</u>	<u>4A</u>	
Snohomish	Elevator Constructors	Mechanic In Charge	\$89.40	<u>7D</u>	<u>4A</u>	
Snohomish	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$13.50		<u>1</u>	
Snohomish	Fence Erectors	Fence Erector	\$14.00		<u>1</u>	
Snohomish	Flaggers	Journey Level	\$36.17	<u>7A</u>	<u>3I</u>	
Snohomish	Glaziers	Journey Level	\$54.91	<u>7L</u>	<u>1Y</u>	
Snohomish	Heat & Frost Insulators And Asbestos Workers	Journeyman	\$61.18	<u>5J</u>	<u>1S</u>	
Snohomish	Heating Equipment Mechanics	Journey Level	\$70.37	<u>7F</u>	<u>1E</u>	
Snohomish	Hod Carriers & Mason Tenders	Journey Level	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Industrial Power Vacuum Cleaner	Journey Level	\$9.47		<u>1</u>	
Snohomish	Inland Boatmen	Boat Operator	\$54.57	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Cook	\$50.95	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Deckhand	\$51.19	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Deckhand Engineer	\$52.18	<u>5B</u>	<u>1K</u>	

Snohomish	Inland Boatmen	Launch Operator	\$53.40	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Mate	\$53.40	<u>5B</u>	<u>1K</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$9.73		<u>1</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$11.48		<u>1</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$12.78		<u>1</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$9.47		<u>1</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$10.53		<u>1</u>	
Snohomish	Insulation Applicators	Journey Level	\$52.32	<u>5D</u>	<u>4C</u>	
Snohomish	Ironworkers	Journeyman	\$61.62	<u>7N</u>	<u>10</u>	
Snohomish	Laborers	Air, Gas Or Electric Vibrating Screed	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Airtrac Drill Operator	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Ballast Regular Machine	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Batch Weighman	\$36.17	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Brick Pavers	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Brush Cutter	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Brush Hog Feeder	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Burner	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Caisson Worker	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Carpenter Tender	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Caulker	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Cement Dumper-paving	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Cement Finisher Tender	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Change House Or Dry Shack	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Chipping Gun (under 30 Lbs.)	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Chipping Gun(30 Lbs. And Over)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Choker Setter	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Chuck Tender	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Clary Power Spreader	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Clean-up Laborer	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Concrete Dumper/chute Operator	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Concrete Form Stripper	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Concrete Placement Crew	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Concrete Saw Operator/core Driller	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Crusher Feeder	\$36.17	<u>7A</u>	<u>3I</u>	

Snohomish	Laborers	Curing Laborer	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Ditch Digger	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Diver	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Drill Operator (hydraulic,diamond)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Dry Stack Walls	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Dump Person	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Epoxy Technician	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Erosion Control Worker	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Faller & Bucker Chain Saw	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Fine Graders	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Firewatch	\$36.17	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Form Setter	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Gabian Basket Builders	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	General Laborer	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Grade Checker & Transit Person	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Grinders	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Grout Machine Tender	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Groutmen (pressure)including Post Tension Beams	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Guardrail Erector	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Hazardous Waste Worker (level A)	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Hazardous Waste Worker (level B)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Hazardous Waste Worker (level C)	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	High Scaler	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Jackhammer	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Laserbeam Operator	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Maintenance Person	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Manhole Builder-mudman	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Material Yard Person	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Motorman-dinky Locomotive	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Bla	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pavement Breaker	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pilot Car	\$36.17	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pipe Layer Lead	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pipe Layer/tailor	\$43.46	<u>7A</u>	<u>3I</u>	

Snohomish	Laborers	Pipe Pot Tender	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pipe Reliner	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pipe Wrapper	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pot Tender	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Powderman	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Powderman's Helper	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Power Jacks	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Railroad Spike Puller - Power	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Raker - Asphalt	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Re-timberman	\$44.00	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Remote Equipment Operator	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rigger/signal Person	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rip Rap Person	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rivet Buster	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rodder	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Scaffold Erector	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Scale Person	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Sloper (over 20")	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Sloper Sprayer	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Spreader (concrete)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Stake Hopper	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Stock Piler	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tamper (multiple & Self- propelled)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Toolroom Person (at Jobsite)	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Topper	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Track Laborer	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Track Liner (power)	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Traffic Control Laborer	\$38.68	<u>7A</u>	<u>3I</u>	<u>8R</u>
Snohomish	Laborers	Traffic Control Supervisor	\$38.68	<u>7A</u>	<u>3I</u>	<u>8R</u>
Snohomish	Laborers	Truck Spotter	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tugger Operator	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$64.99	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$70.02	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$73.70	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$79.40	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$81.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers		\$86.62	<u>7A</u>	<u>3I</u>	<u>8Q</u>

		Tunnel Work-Compressed Air Worker 64.01-68.00 psi				
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$88.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$90.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$92.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Guage and Lock Tender	\$44.10	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Miner	\$44.10	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Vibrator	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Vinyl Seamer	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Watchman	\$32.87	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Welder	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Well Point Laborer	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Window Washer/cleaner	\$32.87	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers - Underground Sewer & Water	General Laborer & Topman	\$42.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers - Underground Sewer & Water	Pipe Layer	\$43.46	<u>7A</u>	<u>3I</u>	
Snohomish	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	\$17.31		<u>1</u>	
Snohomish	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	\$20.06		<u>1</u>	
Snohomish	Landscape Construction	Landscaping Or Planting Laborers	\$14.13		<u>1</u>	
Snohomish	Lathers	Journey Level	\$52.32	<u>5D</u>	<u>1H</u>	
Snohomish	Marble Setters	Journey Level	\$51.32	<u>5A</u>	<u>1M</u>	
Snohomish	Metal Fabrication (In Shop)	Fitter	\$15.38		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Laborer	\$9.79		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Machine Operator	\$9.47		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Painter	\$9.98		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Welder	\$15.38		<u>1</u>	
Snohomish	Millwright	Journey Level	\$53.42	<u>5D</u>	<u>4C</u>	
Snohomish	Modular Buildings	Journey Level	\$9.47		<u>1</u>	
Snohomish	Painters	Journey Level	\$37.80	<u>6Z</u>	<u>2B</u>	
Snohomish	Pile Driver	Journey Level	\$52.57	<u>5D</u>	<u>4C</u>	
Snohomish	Plasterers	Journey Level	\$50.42	<u>7Q</u>	<u>1R</u>	
Snohomish	Playground & Park Equipment Installers	Journey Level	\$11.94		<u>1</u>	
Snohomish	Plumbers & Pipefitters	Journey Level	\$63.57	<u>5A</u>	<u>1G</u>	
Snohomish	Power Equipment Operators	Asphalt Plant Operators	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Assistant Engineer	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Barrier Machine (zipper)	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Batch Plant Operator, Concrete	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Bobcat	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>

Snohomish	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Brooms	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Bump Cutter	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cableways	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Chipper	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Compressor	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Finish Machine -laser Screed	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Conveyors	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	\$55.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 200 Tons To 300 Tons, Or 250' Of Boom (including Jib With Attachments)	\$56.36	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Friction 100 Tons Through 199 Tons	\$56.36	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Friction Over 200 Tons	\$56.92	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Over 300 Tons Or 300' Of Boom (including Jib With Attachments)	\$56.92	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Crusher	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Deck Engineer/deck Winches (power)	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Derricks, On Building Work	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Dozers D-9 & Under	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators		\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Drill Oilers: Auger Type, Truck Or Crane Mount				
Snohomish	Power Equipment Operators	Drilling Machine	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Gradechecker/stakeman	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Guardrail Punch	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Horizontal/directional Drill Locator	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Horizontal/directional Drill Operator	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hydralifts/boom Trucks Over 10 Tons	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$55.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loaders, Plant Feed	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loaders: Elevating Type Belt	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Locomotives, All	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Material Transfer Device	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$55.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Motor Patrol Grader - Non- finishing	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Motor Patrol Graders, Finishing	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators		\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Oil Distributors, Blower Distribution & Mulch Seeding Operator				
Snohomish	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers, strato	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$55.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Pavement Breaker	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Posthole Digger, Mechanical	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Power Plant	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Pumps - Water	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Rigger And Bellman	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Rollagon	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Roller, Other Than Plant Mix	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Roto-mill, Roto-grinder	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Saws - Concrete	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Scrapers - Concrete & Carry All	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Service Engineers - Equipment	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shotcrete/gunite Equipment	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators		\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons				
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$55.79	7A	3C	8P
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$56.36	7A	3C	8P
Snohomish	Power Equipment Operators	Slipform Pavers	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators	Spreader, Toppersider & Screedman	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators	Subgrader Trimmer	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators	Tower Bucket Elevators	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators	Tower Crane Over 175'in Height, Base To Boom	\$56.36	7A	3C	8P
Snohomish	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	\$55.79	7A	3C	8P
Snohomish	Power Equipment Operators	Transporters, All Track Or Truck Type	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators	Trenching Machines	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators	Truck Mount Portable Conveyor	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators	Welder	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators	Wheel Tractors, Farmall Type	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators	Yo Yo Pay Dozer	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Bobcat	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Brooms	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cableways	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Chipper	\$54.75	7A	3C	8P
Snohomish		Compressor	\$51.97	7A	3C	8P

	Power Equipment Operators-Underground Sewer & Water				
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$55.24	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	\$51.97	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Conveyors	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	\$55.79	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 Tons To 300 Tons, Or 250' Of Boom (including Jib With Attachments)	\$56.36	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$55.24	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	\$51.97	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction 100 Tons Through 199 Tons	\$56.36	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction Over 200 Tons	\$56.92	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: Over 300 Tons Or 300' Of Boom (including Jib With Attachments)	\$56.92	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Crusher	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	\$55.24	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish		Drilling Machine	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>

	Power Equipment Operators- Underground Sewer & Water				
Snohomish	Power Equipment Operators- Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$51.97	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$51.97	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Gradechecker/stakeman	\$51.97	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Guardrail Punch	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$55.24	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Locator	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Operator	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks Over 10 Tons	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	\$51.97	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$55.79	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$55.24	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loaders, Plant Feed	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loaders: Elevating Type Belt	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Locomotives, All	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Material Transfer Device	\$54.75	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$55.79	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Motor Patrol Grader - Non- finishing	\$54.33	<u>7A</u>	<u>3C</u> <u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Motor Patrol Graders, Finishing	\$55.24	<u>7A</u>	<u>3C</u> <u>8P</u>

Snohomish	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers, strato	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$55.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Power Plant	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Rigger And Bellman	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Rollagon	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	\$51.97	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$54.75	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>

Snohomish	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$55.79	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$56.36	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Crane Over 175'in Height, Base To Boom	\$56.36	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	\$55.79	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	\$54.33	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	\$54.75	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Welder	\$55.24	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	\$51.97	7A	3C	8P
Snohomish	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	\$54.75	7A	3C	8P
Snohomish	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$45.75	5A	4A	
Snohomish	Power Line Clearance Tree Trimmers	Spray Person	\$43.38	5A	4A	

Snohomish	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$45.75	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Trimmer	\$40.84	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$30.74	<u>5A</u>	<u>4A</u>	
Snohomish	Refrigeration & Air Conditioning Mechanics	Mechanic	\$63.57	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Brick Mason	Journey Level	\$20.00		<u>1</u>	
Snohomish	Residential Carpenters	Journey Level	\$40.14	<u>5D</u>	<u>4C</u>	
Snohomish	Residential Cement Masons	Journey Level	\$14.00		<u>1</u>	
Snohomish	Residential Drywall Applicators	Journey Level	\$40.14	<u>5D</u>	<u>4C</u>	
Snohomish	Residential Drywall Tapers	Journey Level	\$52.37	<u>5P</u>	<u>1E</u>	
Snohomish	Residential Electricians	Journey Level	\$31.49	<u>7F</u>	<u>1D</u>	
Snohomish	Residential Glaziers	Journey Level	\$37.30	<u>7L</u>	<u>1H</u>	
Snohomish	Residential Insulation Applicators	Journey Level	\$25.68		<u>1</u>	
Snohomish	Residential Laborers	Journey Level	\$20.73		<u>1</u>	
Snohomish	Residential Marble Setters	Journey Level	\$30.74		<u>1</u>	
Snohomish	Residential Painters	Journey Level	\$17.46		<u>1</u>	
Snohomish	Residential Plumbers & Pipefitters	Journey Level	\$28.99		<u>1</u>	
Snohomish	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$37.72	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$42.58	<u>7F</u>	<u>1R</u>	
Snohomish	Residential Soft Floor Layers	Journey Level	\$42.41	<u>5A</u>	<u>3D</u>	
Snohomish	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$42.48	<u>5C</u>	<u>2R</u>	
Snohomish	Residential Stone Masons	Journey Level	\$30.74		<u>1</u>	
Snohomish	Residential Terrazzo Workers	Journey Level	\$9.47		<u>1</u>	
Snohomish	Residential Terrazzo/Tile Finishers	Journey Level	\$21.60		<u>1</u>	
Snohomish	Residential Tile Setters	Journey Level	\$25.17		<u>1</u>	
Snohomish	Roofers	Journey Level	\$45.71	<u>5A</u>	<u>3H</u>	
Snohomish	Roofers	Using Irritable Bituminous Materials	\$48.71	<u>5A</u>	<u>3H</u>	
Snohomish	Sheet Metal Workers	Journey Level (Field or Shop)	\$70.37	<u>7F</u>	<u>1E</u>	
Snohomish	Shipbuilding & Ship Repair	Boilermaker	\$39.82	<u>7M</u>	<u>1H</u>	
Snohomish	Shipbuilding & Ship Repair	Carpenter	\$38.10	<u>7R</u>	<u>2B</u>	
Snohomish	Shipbuilding & Ship Repair	Electrician	\$37.58	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Heat & Frost Insulator	\$61.18	<u>5J</u>	<u>1S</u>	
Snohomish	Shipbuilding & Ship Repair	Laborer	\$27.88	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Machinist	\$37.58	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Painter	\$37.80	<u>6Z</u>	<u>2B</u>	
Snohomish	Shipbuilding & Ship Repair	Shipfitter	\$37.58	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Welder/Burner	\$37.58	<u>5T</u>	<u>3E</u>	

Snohomish	Sign Makers & Installers (Electrical)	Sign Installer	\$26.56		<u>1</u>	
Snohomish	Sign Makers & Installers (Electrical)	Sign Maker	\$20.50		<u>1</u>	
Snohomish	Sign Makers & Installers (Non-Electrical)	Sign Installer	\$22.56		<u>1</u>	
Snohomish	Sign Makers & Installers (Non-Electrical)	Sign Maker	\$20.50		<u>1</u>	
Snohomish	Soft Floor Layers	Journey Level	\$42.41	<u>5A</u>	<u>3D</u>	
Snohomish	Solar Controls For Windows	Journey Level	\$9.47		<u>1</u>	
Snohomish	Sprinkler Fitters (Fire Protection)	Journey Level	\$69.74	<u>5C</u>	<u>1X</u>	
Snohomish	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		<u>1</u>	
Snohomish	Stone Masons	Journey Level	\$51.32	<u>5A</u>	<u>1M</u>	
Snohomish	Street And Parking Lot Sweeper Workers	Journey Level	\$15.00		<u>1</u>	
Snohomish	Surveyors	Assistant Construction Site Surveyor	\$54.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Surveyors	Chainman	\$53.81	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Surveyors	Construction Site Surveyor	\$55.24	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Telecommunication Technicians	Journey Level	\$22.38		<u>1</u>	
Snohomish	Telephone Line Construction - Outside	Cable Splicer	\$36.96	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$20.49	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Installer (Repairer)	\$35.40	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Special Aparatus Installer I	\$36.96	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Special Apparatus Installer II	\$36.19	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$36.96	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$34.34	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Telephone Lineperson	\$34.34	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television Groundperson	\$19.45	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television Lineperson/Installer	\$25.89	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television System Technician	\$30.97	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television Technician	\$27.77	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Tree Trimmer	\$34.34	<u>5A</u>	<u>2B</u>	
Snohomish	Terrazzo Workers	Journey Level	\$46.96	<u>5A</u>	<u>1M</u>	

Snohomish	Tile Setters	Journey Level	\$46.96	<u>5A</u>	<u>1M</u>	
Snohomish	Tile, Marble & Terrazzo Finishers	Finisher	\$37.79	<u>5A</u>	<u>1B</u>	
Snohomish	Traffic Control Stripers	Journey Level	\$43.11	<u>7A</u>	<u>1K</u>	
Snohomish	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	\$49.85	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Asphalt Mix To 16 Yards (W. WA-Joint Council 28)	\$49.01	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Dump Truck	\$37.94		<u>1</u>	
Snohomish	Truck Drivers	Dump Truck And Trailer	\$38.52		<u>1</u>	
Snohomish	Truck Drivers	Other Trucks	\$38.52		<u>1</u>	
Snohomish	Truck Drivers	Transit Mixer	\$34.63		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.05		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Oiler	\$13.93		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Well Driller	\$19.01		<u>1</u>	