

**CARPENTER ROAD / BRITTON PARKWAY
ROUNDBOUT**

LACEY CONTRACT NUMBER PW 2020-29

**SPECIFICATIONS AND BID DOCUMENTS
DEPARTMENT OF PUBLIC WORKS**

LACEY PROJECT NUMBER PW 2020-29

***CITY OF LACEY
WASHINGTON***

CITY OFFICIALS

MAYOR

ANDY RYDER

DEPUTY MAYOR

MALCOLM MILLER

COUNCIL MEMBERS

LENNY GREENSTEIN

MICHAEL STEADMAN

CAROLYN COX

ED KUNKEL

ROBIN VAZQUEZ

CITY MANAGER

RICK WALK

CITY ATTORNEY

DAVID S. SCHNEIDER

DIRECTOR OF PUBLIC WORKS

SCOTT EGGER, P.E.

CITY ENGINEER

AUBREY COLLIER, P.E., S.E.



Martin Hoppe
11/06/2023

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ADVERTISEMENT FOR BIDS
CARPENTER ROAD / BRITTON PARKWAY
ROUNDBOUT

NOTICE IS HEREBY GIVEN that sealed bids will be received by the City of Lacey at City Hall, Lacey, Washington until 2:30 p.m., December 21, 2023, at which time bids will be publicly opened via a live video stream. Links to the YouTube live video stream can be found at <https://cityoflacey.org/rfp-rfq-rfi/> under the specific project section and on the specific project page on the Builders Exchange website located at http://bxwa.com/bxwa_toc/pub/2080/toc.html for the following work:

This contract provides for construction of a modern roundabout to include; pavement rehabilitation, private utilities, stormwater, water, sewer, illumination, landscaping and other work.

Each bid must be accompanied by a certified check for five percent of the amount of the proposal made payable to the City Treasurer, or an approved bid bond for five percent of the amount of the proposal executed on the approved form attached to these specifications. If bid bond is used, the five percent may be shown in dollars and cents or the form may be filled in by inserting therein, in lieu thereof, "five percent of the amount of the accompanying proposal". Check of unsuccessful bidders will be returned immediately upon award of contract.

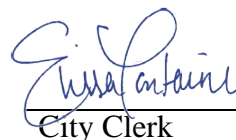
The City Council reserves the right to reject any and all bids and to waive all informalities.

Plans, Specifications, and Addenda for this project are available through the "City of Lacey" on-line plan room. Free of charge access is provided by going to <http://bxwa.com> and clicking on: "Posted Projects", "Public Works", "City of Lacey", and "Projects Bidding". Bidders are asked to "Register" in order to receive automatic email notification of future addenda and to be placed on the "Bidders List". Any questions regarding this contract can be directed to:

D'Andra Buchanan at dbuchana@ci.lacey.wa.us

The range for this project is \$2,500,000 to \$3,000,000.

Publish: **11/09//20203**
11/16/2023



City Clerk

City of Lacey, Washington

A INSTRUCTIONS

INSTRUCTIONS TO BIDDERS

Bidders shall examine contract and bid documents and the site and shall satisfy themselves as to conditions that exist.

Each Bidder shall submit to the City Clerk, Lacey, Washington a sealed bid endorsed upon the outside wrapper with Project Name at the time and place designated in the advertisement.

Bids may be delivered in person to Lacey City Hall, 420 College Street SE, or by mail to City of Lacey 420 College St SE Lacey, WA 98503.

Bids will be publicly opened via a live video stream. Links to the YouTube live video stream can be found at <https://cityoflacey.org/rfp-rfq-rfi/> or under the specific project section and on the specific project page on the Builders Exchange website.

The City of Lacey is committed to offering reasonable accommodations to persons with disabilities. We invite any person with special needs to contact the City Clerk at (360) 491-3212 at least seventy-two (72) hours before the meeting to discuss any special accommodations that may be necessary. Citizens with hearing impairment may call the TDD line at (800) 833-6388.

Each Bidder shall complete the proposal with prices in figures with the extension properly computed. The proposal must be properly signed by a duly authorized agent. Proposal must acknowledge addenda, if any, received.

If alternates are included in the proposal the Bidder shall complete the alternates. The City will award the contract to the lowest responsible Bidder as determined by the Special Provisions. The City reserves the right to delete alternates after award.

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

The City does not pre-qualify Bidders. However, if the apparent low Bidder has not already been determined qualified, the City shall afford seven (7) days after notification for the low Bidder to provide evidence for evaluation, as to capability to perform the work. The evaluation will include consideration of experience, personnel, equipment, financial resources as well as performance record. The information must be sufficient to enable the Bidder to obtain the required qualification rating prior to the award of the contract.

No bidder may withdraw his bid after the hour set for the opening of bids or before award of the contract unless said award is delayed for a period of forty-five (45) days.

CONTRACT PARTS

The contract to be executed as a result of this bid consists of multiple parts, all of which pertain as if fully attached hereto and Bidder shall consider all parts as a complete document. In the event of discrepancies between the various parts, precedent shall be in the following order:

1. Contract Form,
 2. Addenda (if any),
 3. Proposal Form,
 4. Special Provisions,
 5. Technical Specifications, if included,
 6. Contract Plans,
 7. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction,
 8. City of Lacey Development Guidelines and Public Works Standards, and
 9. WSDOT Standard Plans for Road, Bridge and Municipal Construction
- The Bidder is directed to complete and return the forms in Section B as a bid proposal.

BIDDER'S CHECKLIST

The bidder's attention is especially called to the following forms which must be executed in full as required, and submitted with the bid proposal:

1. Proposal: The unit prices bid must be shown in the space provided.
2. Proposal Signature Sheet: To be filled in and signed by the bidder. All addenda must be acknowledged.
3. Bid Deposit: Any bid shall be accompanied by a deposit of cash, certified check, cashier's check, or surety bond, in an amount equal to at least five percent (5%) of the total amount bid. Checks shall be payable to the City Clerk, City of Lacey, Washington.

If a surety bond is used, it shall be submitted on a form furnished by the Commission and signed by the bidder and his surety company. The sureties' "attorney-in-fact" must be registered with the Washington State Insurance Commissioner. The power of attorney must also be submitted with the bond. See Specification section 1-02.7 for more information.

4. Non-Collusion and Debarment Affidavit
5. Subcontractors List

The following form must be submitted within 24 hours following the bid submittal deadlines.

6. Certification of Compliance with Wage Payment Statutes

The following must be completed before the contract can be awarded:

7. L&I training on the requirements related to public works and prevailing wages per RCW 39.04.350
8. Certification of Employment Security Department (ESD) good standing

The following forms are to be executed after the contract is awarded:

9. Contract: This agreement to be executed by the successful bidder
10. Performance and Payment Bond
11. Insurance Certificate

Bidder's Checklist

1. Proposal
2. Proposal Signature Sheet
Addenda Acknowledged
3. Bid Deposit
Power of Attorney included if applicable
4. Non-Collusion and Debarment Affidavit
5. Subcontractor List
6. Certification of Compliance with Wage Payment Statutes
7. L&I Public Works Prevailing Wage Training
8. ESD Certification

B

BID DOCUMENTS

CITY OF LACEY

Carpenter Road/Britton Parkway Roundabout

Lacey Contract Number: PW 2020-29

Federal Aid Project Number:

WSDOT Contract Number:

TIB Contract Number:

Contract Proposal

DATE: _____

The undersigned, as bidder, has examined the bid documents as prepared by the Public Works Department, City of Lacey.

The undersigned, as bidder, proposes to furnish all material and perform all labor in accordance with the bid documents at the following prices.

Bidder must fill in unit prices in figures for each item and total.

Bidder shall sign this proposal form and submit all required paperwork with the bid.

A Roadway - Roundabout

No.	Quantity	Unit	Item ID	Item Description	Unit Price	Extended Price
A1	150000	MC	104-010	Minor Change	\$1.00	\$150,000.00
A2	1	LS	105-010	Record Drawing	\$5,000.00	\$5,000.00
A3	1	LS	107-010	SPCC Plan	LUMP SUM	
A4	1	LS	109-010	Mobilization	LUMP SUM	
A5	1	LS	110-010	Project Temporary Traffic Control	LUMP SUM	
A6	1200	HR	110-040	Flaggers		
A7	150	SF	110-050	Construction Signs Class A		
A8	3348	HR	110-070	Portable Changeable Message Sign		
A9	1	LS	201-010	Clearing and Grubbing	LUMP SUM	
A10	1	LS	202-510	Removal of Structures and Obstructions	LUMP SUM	
A11	3200	CY	203-010	Roadway Excavation Incl. Haul		
A12	400	CY	203-130	Embankment Compaction		
A13	700	TN	203-190	Gravel Borrow Incl. Haul		
A14	1	LS	205-510	Trench Safety System	LUMP SUM	
A15	4	EA	213-710	Adjust Gas Valve Box		
A16	2700	TN	404-010	Crushed Surfacing Base Course		
A17	820	TN	404-020	Crushed Surfacing Top Course		
A18	300	TN	504-110	Commercial HMA		
A19	1400	TON	504-514	Fiber Reinforced HMA CI 1/2 in. PG 58V-22		
A20	808	LF	704-512	12 Inch Diameter Storm Sewer Pipe		
A21	11	EA	705-210	Catch Basin Type 1		

A22	5	EA	705-248	Catch Basin Type 2 - 48 In. Diam.		
A23	1248	TN	708-610	Bank Run Gravel for Trench Backfill		
A24	640	TN	708-620	Imported Pipe Bedding		
A25	100	HR	708-810	Utility Potholing		
A26	3	EA	712-915	Raise Valve Box to Grade		
A27	1	EA	715-910	Adjust Water Meter		
A28	1	LS	801-010	ESC Lead	LUMP SUM	
A29	1	AC	801-550	Seeding, Fertilizing, and Mulching		
A30	1	LS	801-680	Erosion/Water Pollution Control	LUMP SUM	
A31	368	CY	802-010	Topsoil Type A		
A32	24	CY	802-220	Bark or Wood Chip Mulch		
A33	1	LS	802-560	Plant Selection Including Plant Establishment	LUMP SUM	
A34	1	LS	803-005	Irrigation System	LUMP SUM	
A35	1150	LF	804-010	Cement Conc. Traffic Curb and Gutter		
A36	1620	LF	804-020	Cement Conc. Traffic Curb		
A37	260	LF	804-060	Cement Conc. Pedestrian Curb		
A38	190	LF	804-520	Modified Cement Conc. Traffic Curb		
A39	7	EA	804-620	Concrete Scupper		
A40	1	LS	805-510	Lawn and Landscape Restoration	LUMP SUM	
A41	2.9	HUND	809-010	Raised Pavement Marker Type 1		
A42	2.2	HUND	809-020	Raised Pavement Marker Type 2		
A43	5	EA	813-520	Monument Case and Cover		
A44	570	SY	814-510	Cement Conc. Sidewalk		
A45	12	EA	814-530	Cement Conc. Curb Ramp		
A46	380	SY	814-570	Concrete Paving Pattern B - Truck Apron		
A47	340	SY	814-580	Concrete Paving Pattern C - Median		
A48	290	LF	814-590	Roundabout Truck Apron Cement Conc. Curb and Gutter		
A49	5	TN	815-060	Quarry Spalls		
A50	1	LS	820-505	Illumination System	LUMP SUM	
A51	1	EA	820-625	AC Powered LED Stop Sign		
A52	4310	LF	822-020	Plastic Line		
A53	280	LF	822-120	Plastic Wide Lane Line		
A54	2	EA	822-190	Plastic Traffic Arrow		
A55	4	EA	822-210	Plastic Traffic Letter		
A56	250	LF	822-670	Plastic Crosswalk Line		
A57	6	EA	822-770	Plastic Bicycle Legend		
A58	15	EA	822-780	Plastic Yield Line Symbol		
A59	8000	LF	823-010	Temporary Pavement Marking - Short Duration		
A60	5	EA	830-040	Streambed Boulders Type 4		
A61	25	EA	830-060	Streambed Boulders Type 6		
A62	1	LS	850-792	Project Closeout	\$5,000.00	\$5,000.00

C8	5	LF	709-506	6 Inch Water Main		
C9	60	LF	709-508	8 Inch Water Main		
C10	155	LF	709-517	16 Inch Water Main		
C11	1	EA	709-810	Blow-off Assembly for Extendable Main		
C12	4	EA	709-950	Connect to Existing Water Main		
C13	1	EA	712-504	4 Inch Gate Valve		
C14	1	EA	712-508	8 Inch Gate Valve		
C15	3	EA	712-517	16 Inch Gate Valve		
C16	1	EA	712-610	2 Inch Air and Vacuum Release Valve		
C17	1	EA	714-510	Hydrant Assembly		
					Schedule C Subtotal:	
					Tax Rate (%) : 9.50 Tax:	
					Schedule C Total:	

D Sewer

No.	Quantity	Unit	Item ID	Item Description	Unit Price	Extended Price
D1	35000	MC	104-010	Minor Change	\$1.00	\$35,000.00
D2	100	HR	110-040	Flaggers		
D3	140	HR	110-070	Portable Changeable Message Sign		
D4	1	LS	205-510	Trench Safety System	LUMP SUM	
D5	2	CY	209-080	Controlled Density Fill		
D6	50	TN	504-110	Commercial HMA		
D7	1	EA	705-948	Low Point Drain 48-Inch Diam		
D8	960	TN	708-610	Bank Run Gravel for Trench Backfill		
D9	480	TN	708-620	Imported Pipe Bedding		
D10	1	EA	717-660	2 Inch Air and Vacuum Release Valve - Sewer		
D11	724	LF	717-712	12 Inch Diameter Force Main Sewer Pipe		
D12	7	EA	717-804	4 Inch Plug Valve		
D13	1	EA	717-834	4 Inch Sewer Tapping Valve with Tapping Sleeve		
D14	1	EA	717-960	Connect to Existing Sanitary Sewer Force Main		
					Schedule D Subtotal:	
					Tax Rate (%) : 9.50 Tax:	
					Schedule D Total:	

Contract Total:
(All Schedules)

The undersigned also agrees as follows:

- Within 10 calendar days after the contract is awarded to sign and return the contract and provide insurance documents.
- That this proposal cannot be withdrawn within 45 days after receipt of bids.
- That it is the understanding that the City of Lacey may accept or reject any or all bids.
- The undersigned hereby agrees to pay for labor not less than the prevailing rates of wages per the bid documents.
- Enclosed with this proposal is a bid deposit in the sum of 5% of the bid total amount which it is agreed shall be collected and retained by the City of Lacey as liquidated damages in the event this proposal is accepted by the City of Lacey with 45 calendar days after the receipt of bids and the undersigned fails to execute the contract and the required bond with the City of Lacey, under the conditions thereof, within 10 calendar days after the undersigned is notified that said proposal has been accepted, otherwise said bid deposit shall be returned to the undersigned upon demand.
- A Performance/Payment Bond will be furnished to the City with the contract.
- Retention will be held on this contract per RCW 60.28.011.

Addenda Receipt Acknowledged

_____, _____, _____

Signature of Bidder

Date

(If an Individual, Partnership, or Non-Incorporated organization)

Firm Name

Please Print

Phone

Address of Bidder: _____

Name and Address of Firm Members:

Signature of Bidder (if a Corporation)

Title: _____

Firm Name: _____ Phone: _____

Business Address: _____

Incorporated under the Laws of the State of _____

Officers Address

President: _____

Secretary: _____

Treasurer: _____

BID DEPOSIT SELECTION

A bid deposit in an amount of five percent (5%) of the total bid amount is attached hereto:

CASH	<input type="checkbox"/>	In the amount of _____
CASHIER'S CHECK	<input type="checkbox"/>	In the amount of _____
CERTIFIED CHECK	<input type="checkbox"/>	In the amount of _____
BID BOND	<input type="checkbox"/>	In the amount of <u>5% of the total bid amount</u>

CONTRACTOR'S BID DEPOSIT SURETY BOND
to City of Lacey, Washington

We, _____, as Principal, existing under and by virtue of the laws of the State of Washington and authorized to do business in the State of Washington, and _____, as Surety, organized and existing under the laws of the State of _____, are held and firmly bound unto the City of Lacey, a Washington municipality, as Obligee, in the penal sum of 5% of the total amount bid, not to exceed \$ _____, for the payment of which we jointly and severally bind ourselves, and our legal representatives and successors.

WHEREAS, the Principal has submitted a bid for Carpenter Road/Britton Parkway Roundabout.

NOW THEREFORE, the condition of the obligation is such that if the Obligee shall accept the bid of Principal and make timely award to the Principal according to the terms of the bid documents; and the Principal shall, within ten days after notice of the award, exclusive of the day of notice, enter into the contract with the Obligee and furnish the contractor's bonds (performance and payment bonds) with Surety satisfactory to the Obligee in an amount equal to 100% of the amount of the bid proposed including additives, alternatives and Washington State sales tax, then this obligation shall be null and void; otherwise if the Principal fails to enter into the contract and fails to furnish the contractor's bonds within ten days of notice of award, exclusive of the day of notice, the amount of the bid deposit shall be forfeited to the Obligee, payable by the Surety; but in no event will the Surety's liability exceed the face amount of this bid bond.

This bond may be executed in two original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the officer executing on behalf of the surety.

PRINCIPAL (CONTRACTOR)

SURETY

Principal Signature

Date

Surety Signature

Date

Printed Name

Printed Name

Title

Title

Name, address, and telephone of local office/agent of Surety Company is:

NON-COLLUSION AND DEBARMENT AFFIDAVIT

State of _____)

)ss

County of _____)

I, the undersigned, being duly sworn, deposes and says that the person, firm, association, copartnership 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 proposal of the City of Lacey for consideration in the award of a contract on the improvement described as follows.

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

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

Name of Project

Name of Firm

Signature of Authorized Member

Sworn to before me this

_____ day of _____, 20 _____

Notary Public

(CORPORATE SEAL)

SUBCONTRACTOR LIST

Prepared in compliance with RCW 39.30.060 as amended

To Be Submitted with the Bid Proposal

Project Name: _____

Failure to list subcontractors with whom the bidder, if awarded the contract, will directly subcontract for performance of the work of structural steel installation and rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106RCW, and electrical, as described in Chapter 19.28 RCW or naming more than one subcontractor to perform the same work will result in your bid being non-responsive and therefore void.

Subcontractor(s) with whom the bidder will directly subcontract that are proposed to perform the work of structural steel installation and rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW **must** be listed below. The work to be performed is to be listed below the subcontractor(s) name.

To the extent the Project includes one or more categories of work referenced in RCW 39.30.060, and no subcontractor is listed below to perform such work, the bidder certifies that the work will either (i) be performed by the bidder itself, or (ii) be performed by a lower tier subcontractor who will not contract directly with the bidder.

Subcontractor Name: _____
Work to be Performed: Structural steel installation

Subcontractor Name: _____
Work to be Performed: Rebar installation

Subcontractor Name: _____
Work to be Performed: Plumbing

Subcontractor Name: _____
Work to be Performed: Electrical

Subcontractor Name: _____
Work to be Performed: Heating ventilation and air conditioning

* Bidder's are notified that is the opinion of the enforcement agency that PVC or metal conduit, junction boxes, etc, are considered electrical equipment and therefore considered part of electrical work, even if the installation is for future use and no wiring or electrical current is connected during the project.

CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES

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

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

Bidder’s Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

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

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

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

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

**CERTIFICATION OF EMPLOYMENT SECURITY DEPARTMENT (ESD)
GOOD STANDING AND NUMBER**

The bidder hereby provides an ESD number and certifies that per RCW 39.04.350 and Title 50 RCW, in which the City will verify prior to entering into contract with the Contractor, that the Bidder has a valid ESD number and is deemed to be in good standing with Washington State's Employment Security Department.

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

Bidder's Business Name

Employment Security Department (ESD) Number

WA State Unified Business Identifier (UBI #)

Signature of Authorized Official*

Printed Name

Title

Date

City

State

C CONTRACT DOCUMENTS

CONSTRUCTION CONTRACT

THIS AGREEMENT, made and effective as of the date of the last signature below, between the City of Lacey, hereinafter called Owner, under and by virtue of the charter, laws and ordinances of the said Owner and the laws of the State of Washington, and

_____ hereinafter called Contractor,

WITNESSETH:

That in consideration of the payment, covenants and agreement hereinafter mentioned, attached and made a part of this Agreement, to be made and performed by the parties hereto, the parties covenant and agree as follows regarding:

1. The Contractor shall do all work and furnish all tools, materials and equipment in accordance with and as described in the attached Plans and Specifications, and in full compliance with the terms, conditions and stipulations herein set forth and attached, now referred to and by such reference incorporated herein and made a part hereof as fully for all purposes as if here set forth at length, and shall perform any alterations in or in addition to the work covered by this Contract and every part thereof and any force account work which may be ordered as provided in this Contract and every part thereof.

The Contractor shall provide and bear the expense of all materials, labor, equipment, tools, implements and conveniences and things of every description that may be requisite for the transfer of materials and for constructing and completing the work provided for in this Contract and every part thereof, except such as are mentioned in the Specifications to be furnished by the Owner.

2. The Owner 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 schedule of unit or itemized prices hereto attached, at the time and in the manner and upon the conditions provided for in this Contract and every part thereof.
3. Contractor, for himself and for his heirs, executors, administrators, successors, assigns, does hereby agree to the full performance of all the covenants herein contained upon the part of Contractor.
4. It is further provided that no liability shall attach to Owner or Agent thereof by reason of entering into this Contract, except as expressly provided herein.
5. Payments will be made under the Contract according to the schedule of rates and prices and the specification attached and made a part thereof. Partial payments under the Contract will be made at the request of the Contractor not more than once each month upon approval of the Owner, as hereinafter specified, provided they are in accordance

with the provisions of RCW 60.28.010. There will be reserved and retained from monies earned by the Contractor, as determined by such monthly estimates, a sum equal to 5 percent of the Contract price.

Payment of the retained percentage shall be withheld for a period of forty-five (45) days following the final acceptance of the work and materials by the Owner, and shall be paid the Contractor at the expiration of said forty-five (45) days in event no claims, as provided by law, have been filed against such funds; and provided further, that releases have been obtained from all departments and agencies having jurisdiction over the activities of the Contractor. In the event such claims are filed, Contractor shall be paid such retained percentages less an amount sufficient to pay any such claims together with a sum sufficient to pay the cost of such action, and to cover attorney fees as determined by the Owner.

6. Requests for review of substitute items of material or equipment will not be accepted by the Owner or Agent from anyone other than the Contractor. If the Contractor wishes to furnish a substitute item, the Contractor shall make written application to the Owner's Agent for acceptance thereof, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing the same function as that specified. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, which shall be considered by the Owner in evaluating the proposed substitute. The Owner may require the Contractor to furnish at the Contractor's expense, additional data about the proposed substitute. The Owner will be the sole judge of acceptability, and no substitute will be ordered without the Owner's prior written acceptance. The Owner may require the Contractor to furnish at the Contractor's expense, a special performance guarantee or other surety with respect to any other substitute.

The Owner or Agent will record the time and expenses in evaluating substitutions proposed by the Contractor. Whether or not the Owner accepts a proposed substitute, the Contractor shall reimburse the Owner for the costs of evaluating any proposed substitute.

7. The Owner reserves the right, after the final payment has been made, to claim and recover by process of law such sums as may be sufficient to make good any defects in the equipment or to recover any over-payment resulting from dishonest acts of the Contractor.
8. The contract time will commence to run, and the Contractor shall start to perform his obligation under the contract documents, on the day indicated in the Notice to Proceed given by Owner to Contractor; but in no event shall contract time commence to run later than the 30th calendar day after the date when both Owner and Contractor execute the Contract. A Notice to Proceed may be given at any time within thirty (30) calendar days after the date when both Owner and Contractor execute the Contract.
9. The Contractor shall guarantee the materials and workmanship for a period of one (1) year from and after the date of final acceptance by the Owner.

If, within said guarantee period, repairs are required which, in the opinion of the Owner, are rendered necessary as a result of work or materials which are inferior, defective or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Owner, and without expense to the Owner, (a) correct all defects and place in satisfactory condition in every particular all of such guaranteed work and materials; (b) make good all damage which in the opinion of the Owner is caused by such defects; and (c) make good any other work or material or the equipment and contents of a building, structure or site disturbed in fulfilling any such guarantee.

If the Contractor, after notice, fails within ten (10) days to proceed to comply to the terms of this guarantee, the Owner may have the defects corrected, and the Contractor and his Surety shall be liable for all expense incurred, provided, however, that in case of an emergency where, in the opinion of the Owner, delay would cause serious loss or damage, repairs may be made without notice being given to the Contractor and the Contractor shall pay the cost thereof.

IN WITNESS WHEREOF, the said Contractor has executed this instrument and the City Manager, pursuant to resolution duly adopted, has caused this instrument to be executed in the name of the City of Lacey the day and year first above-written.

Contractor

Date

Contractor's Registration Number (UBI No.)

City of Lacey Business License Number

City Manager

Date

ATTEST:

By:

City Clerk

APPROVED AS TO FORM:

By :

City Attorney

**CONTRACTOR'S PERFORMANCE/PAYMENT BOND
to City of Lacey, Washington**

The City of Lacey, Washington, in Thurston County, has awarded to _____
(Contractor), as Principal, a contract for the construction of the project designated as **Carpenter Road /
Britton Parkway Roundabout** Project No. **Project #2020-29** in Lacey, Washington, and said Principal is
required under the terms of the Contract to furnish a performance/payment bond in accordance with chapter
39.08 Revised Code of Washington (RCW).

The Principal, and _____ (Surety), a corporation, organized
under the laws of _____ and licensed to do business in the State of Washington as surety and named
in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the
Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to the City of
Lacey, as Obligee, in the sum of \$_____ total Contract amount (including
Washington State sales tax), subject to the provisions herein.

The obligations of this bond shall become null and void, if and when the Principal, its heirs, executors,
administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the
Contract and fulfill all the terms and conditions of all duly authorized modifications, additions, and changes to said
Contract that may hereafter be made, at the time and in the manner therein specified; shall pay all persons in
accordance with chapters 39.08, 39.12, and 60.28 RCW, including all workers, laborers, mechanics, subcontractors,
and material suppliers, and all persons who shall supply such contractor or subcontractor with provisions and
supplies for the carrying on of such work; shall warranty the work as provided in the Contract and shall indemnify
and hold harmless the Obligee from any defects in the workmanship and materials incorporated into the work for the
period identified in the Contract; and if such obligations have not been fulfilled, this bond shall remain in full force
and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the
Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in
any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition
to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms
and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the
obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two original counterparts and shall be signed by the parties' duly authorized officers.
This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the
officer executing on behalf of the surety.

PRINCIPAL (CONTRACTOR)

SURETY

Principal Signature Date

Surety Signature Date

Printed Name

Printed Name

Title

Title

Name, address, and telephone of local office/agent of Surety Company is:

**DECLARATION OF OPTION FOR MANAGEMENT OF
STATUTORY RETAINED PERCENTAGE**

- A. I hereby elect to have the retained percentage of this contract held in a fund by the City of Lacey until forty-five (45) days following final acceptance of the work.

Contractor (please print)

Date

Signature

- B. I hereby elect to have the City of Lacey invest the retained percentage of this contract from time to time as such retained percentage accrues and in accordance with RCW Ch. 60.28.

I hereby designate _____ as the repository for the escrow of said funds.

I hereby further agree to be fully responsible for payment of all costs or fees incurred as a result of placing said percentage in escrow and investing it as authorized by statute.

The City of Lacey shall not be liable in any way for any costs or fees in connection therewith.

Contractor (please print)

Date

Signature

- C. I hereby elect to hold a retainage bond.

Contractor (please print)

Date

Signature

D
SPECIAL
PROVISIONS

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SPECIAL PROVISIONS

INTRODUCTION TO THE SPECIAL PROVISIONS

(January 19, 2022 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2023 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

The project-specific Special Provisions are not labeled as such, but are generally denoted with (*****). The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source, except WSDOT uses a date only (2nd on list). For example:

(March 8, 2013 APWA GSP)
(April 1, 2013)
(May 1, 2013 Lacey GSP)

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 Lacey Development Guidelines and Public Works Standards, current edition

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

DESCRIPTION OF WORK

This contract provides for construction of a modern roundabout to include; pavement rehabilitation, private utilities, stormwater, water, sewer, illumination, landscaping and other work.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions

(January 19, 2022 APWA GSP)

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

Dates

Bid Opening Date

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

Award Date

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

Contract Execution Date

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

Notice to Proceed Date

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

Substantial Completion Date

The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date

The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date

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

Final Acceptance Date

The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications or WSDOT General Special Provisions, to the terms “Department of Transportation”, “Washington State Transportation Commission”, “Commission”, “Secretary of Transportation”, “Secretary”, “Headquarters”, and “State Treasurer” shall be revised to read “Contracting Agency”.

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

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

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

Additive

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

Alternate

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

Business Day

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

Contract Bond

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

Contract Documents

See definition for “Contract”.

Contract Time

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

Notice of Award

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

Notice to Proceed

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

Traffic

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

1-02 BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder

(January 24, 2011 APWA GSP)

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

1-02.2 Plans and Specifications

(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed 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
Reduced plans (11" x 17")	3	Furnished automatically upon award
Contract Provisions	3	Furnished automatically upon award
Large plans (22" x 34")	3	Furnished only upon request

Additional plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor's own expense.

1-02.4 Examination of Plans, Specifications and Site of Work

1-02.4(1) General

(December 30, 2022 APWA GSP Option B)

The first sentence of the ninth paragraph, beginning with "Prospective Bidder desiring...", is revised to read:

Prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business 5 business days preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.5 Proposal Forms

(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit

prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder's name, address, telephone number, and signature; the bidder's UDBE/DBE/M/WBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

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

1-02.6 Preparation of Proposal

(March 3, 2022 Lacey GSP)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.
5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last two paragraphs, and replace it with the following:

The Bidder shall submit a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification within 24 hours of the bid opening will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture.

1-02.6 Preparation of Proposal

(August 2, 2004 WSDOT 1-02.6OPT15.GR1)

1-02.7 Bid Deposit

(March 8, 2013 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;

5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.9 Delivery of Proposal

(March 3, 2022 Lacey GSP)

Delete this section and replace it with the following:

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

If supplemental information is due after the Bid Proposal is due, the document(s) shall be submitted as follows:

1. In a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added, or
2. By e-mail to the following e-mail address: ProjectAdmin@ci.lacey.wa.us

All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" that is received after the time specified, or received in a location other than that specified in the Call for Bids.

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

1-02.10 Withdrawing, Revising, or Supplementing Proposal

(July 23, 2015 APWA GSP)

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

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

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and

3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

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

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

1-02.12 Public Opening of Proposals

(November 20, 2020 Lacey GSP)

Delete and replace this section with the following:

Proposals will be opened and publicly read by live video stream per the "Instructions to Bidders" in Section A of these Specifications at the time as indicated in the call for Bids

1-02.13 Irregular Proposals

(December 30, 2022 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
 - a. The Bidder is not prequalified when so required;
 - b. The authorized Proposal form furnished by the Contracting Agency is not used or is altered;
 - c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
 - d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
 - e. A price per unit cannot be determined from the Bid Proposal;
 - f. The Proposal form is not properly executed;
 - g. The Bidder fails to submit or properly complete a Subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
 - h. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification (WSDOT Form 272-056), if applicable, as required in Section 1-02.6;
 - i. The Bidder fails to submit Written Confirmation (WSDOT Form 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidder's DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provision;
 - j. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
 - k. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
 - l. The Bidder fails to submit DBE Trucking Credit Forms (WSDOT Form 272-058), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
 - m. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or

- n. More than one Proposal is submitted for the same project from a Bidder under the same or different names.
- 2. A Proposal may be considered irregular and may be rejected if:
 - a. The Proposal does not include a unit price for every Bid item;
 - b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
 - c. Receipt of Addenda is not acknowledged;
 - d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
 - e. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders **(May 17, 2018 APWA GSP Option A)**

Delete this Section and replace it with the following:

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

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

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

1-02.15 Pre-Award Information **(December 30, 2022 APWA GSP)**

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.

7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.3 Execution of Contract

(January 19, 2022 APWA GSP)

Revise this section to read:

Within 3 calendar days of Award date (not including Saturdays, Sundays and Holidays), the successful Bidder shall provide the information necessary to execute the Contract to the Contracting Agency. The Bidder shall send the contact information, including the full name, email address, and phone number, for the authorized signer and bonding agent to the Contracting Agency.

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

Within 10 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, and the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

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

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

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

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

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

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

1-03.7 Judicial Review

(December 30, 2022 APWA GSP)

Revise this section to read:

All decisions made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

1-04 SCOPE OF THE WORK

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

(November 20, 2020 Lacey 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 presiding over 3, 3 over 4, and so forth):

1. Contract Form,
2. Addenda (if any),
3. Proposal Form,
4. Special Provisions,
5. Technical Specifications, if included,
6. Contract Plans,
7. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction,
8. City of Lacey Development Guidelines and Public Works Standards, and
9. WSDOT Standard Plans for Road, Bridge and Municipal Construction

1-04.4(1) Minor Changes
(May 30, 2019 APWA GSP)

Delete the first paragraph and replace it with the following:

Payments or credits for changes amounting to \$15,000 or less may be made under the Bid item “Minor Change”. At the discretion of the Contracting Agency, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes. All “Minor Change” work will be within the scope of the Contract Work and will not change Contract Time.

1-04.5 Procedure, Protest, and Dispute by the Contractor
(January 19, 2022 APWA GSP)

Revise item 1 of the first paragraph to read:

1. Give a signed written notice of protest to the Engineer or the Engineer’s field Inspectors within 5 calendar days of receiving a change order or an Engineer’s Written Determination.

1-04.6 Variation in Estimated Quantities
(May 25, 2006 APWA GSP)

Supplement this Section with the following:

The quantities for “Utility Potholing”, “Controlled Density Fill”, “Imported Pipe Bedding” and “Bank Run Gravel for Trench Backfill” have been entered into the Proposal only to provide a common proposal for bidders. Actual quantities will be determined in the field as the work progresses, and will be paid at the original bid price, regardless of final quantity. These bid items shall not be subject to the provisions of 1-04.6 of the Standard Specifications.

1-04.6 Variations in Estimated Quantities
(December 30, 2022 APWA GSP Option B)

Revise the first paragraph to read:

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

1-05 CONTROL OF WORK

1-05.4 Conformity With and Deviations from Plans and Stakes

Supplement this section with the following:

Roadway and Utility Surveys

(July 23, 2015 APWA GSP, Option 1)

The Engineer shall furnish to the Contractor one time only all principal lines, grades, and measurements the Engineer deems necessary for completion of the work. These shall generally consist of one initial set of:

1. Slope stakes for establishing grading;
2. Curb grade stakes;
3. Centerline finish grade stakes for pavement sections wider than 25 feet; and
4. Offset points to establish line and grade for underground utilities such as water, sewers, and storm drains.

On alley construction projects with minor grade changes, the Engineer shall provide only offset hubs on one side of the alley to establish the alignment and grade.

1-05.4(2) Survey Control and Electronic Files

(August 10, 2010 Lacey GSP)

Add the following new section:

The Contractor shall re-establish the survey control used in design by using existing survey monuments and other control points as provided by the City.

When requested by the Contractor, the City will provide an electronic version of the construction plans (drawings), for use by the Contractor at the Contractor's own risk. In all cases, the approved paper construction plans are the official contract documents. If the Contractor wishes to use the electronic version of the construction plans for the purposes of providing surveying of the proposed improvements, it shall be the Contractor's responsibility to verify that any coordinates used from the electronic file match the station and offset location given in the contract construction plans. Construction plans are diagrammatic in nature. The coordinate locations of the various graphic elements within the electronic files may not necessarily be precisely shown with respect to their coordinate position. In all cases, the location callouts in the contract construction plans shall govern.

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 Inspections and Operational Testing **(October 1, 2005 APWA GSP)**

Delete this section and replace it with the following:

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.

1-05.12(1) One-Year Guarantee Period

(March 8, 2013 APWA GSP)

Add the following new section:

The Contractor shall return to the project and repair or replace all defects in workmanship and material discovered within one year after Final Acceptance of the Work. The Contractor shall start work to remedy any such defects within 7 calendar days of receiving Contracting Agency's written notice of a defect, and shall complete such work within the time stated in the Contracting Agency's notice. In case of an emergency, where damage may result from delay or where loss of services may result, such corrections may be made by the Contracting Agency's own forces or another contractor, in which case the cost of corrections shall be paid by the Contractor. In the event the Contractor does not accomplish corrections within the time specified, the work will be otherwise accomplished and the cost of same shall be paid by the Contractor.

When corrections of defects are made, the Contractor shall then be responsible for correcting all defects in workmanship and materials in the corrected work for one year after acceptance of the corrections by Contracting Agency.

This guarantee is supplemental to and does not limit or affect the requirements that the Contractor's work comply with the requirements of the Contract or any other legal rights or remedies of the Contracting Agency.

1-05.14 Cooperation with Other Contractors

(August 3, 2015 Lacey GSP)

Supplement this section with the following:

The Contractor shall coordinate residential refuse and recycling pick-up with Pacific Disposal (360) 923-0111. Construction activities shall be planned so that there is no interruption of services.

1-05.15 Method of Serving Notices

(December 30, 2022 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.

1-05.16 Water and Power

(October 1, 2005 APWA GSP)

Add the following new section:

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.

1-05.18 Record Drawings

(April 2, 2018 Lacey GSP Option B)

Add the following new section:

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

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

The preparation and upkeep of the Record Drawings is to be the assigned responsibility of a single, experienced, and qualified individual. The quality of the Record Drawings, in terms of accuracy, clarity,

and completeness, is to be adequate to allow the Contracting Agency to modify the computer-aided drafting (CAD) Contract Drawings to produce a complete set of Record Drawings for the Contracting Agency without further investigative effort by the Contracting Agency.

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

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

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

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

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

Making Entries on the Record Drawings:

Use erasable colored pencil (not ink) for all markings on the Record Drawings, conforming to the following color code:

Additions - Red
Deletions - Green
Comments - Blue
Dimensions - Graphite

Provide the applicable reference for all entries, such as the change order number, the request for information (RFI) number, or the approved shop drawing number.

Date all entries.

Clearly identify all items in the entry with notes similar to those in the Contract Drawings (such as pipe symbols, centerline elevations, materials, pipe joint abbreviations, etc.).

The Contractor shall certify on the Record Drawings that said drawings are an accurate depiction of built conditions, and in conformance with the requirements detailed above. The Contractor shall submit final

Record Drawings to the Contracting Agency. Contracting Agency acceptance of the Record Drawings is one of the requirements for achieving Physical Completion.

A lump sum price of \$5,000 has been included in the Proposal for this work. Any additional costs anticipated or incurred by the Contractor for the work shall be included in the various lump sum unit price bid items as found in the Proposal. Payment for this item will be made once Record Drawings have been submitted and approved.

1-06 CONTROL OF MATERIAL

1-06.1 Approval of Materials Prior to Use **(April 3, 2017 WSDOT GSP 1-06.1.OPT1.GR1)**

The second sentence of first paragraph is revised to read:

For each proposed material that is required to be submitted for approval using either the QPL or RAM process the Contractor will be allowed to submit for approval two material sources or manufacturers per material type at no cost. Additional material sources or manufacturers may be submitted for approval and will be processed at a cost of \$125.00 per material source or manufacturer submitted by QPL submittal and \$400.00 per material submitted by RAM. All costs for processing additional material sources or manufacturers will be deducted from monies due or that may come due to the Contractor. Subject to a request by the Contractor and a determination by the Engineer the costs for processing may be waived.

1-06.1 Approval of Materials Prior to Use **(January 4, 2016 Lacey GSP)**

The second sentence of first paragraph is revised to read:

The Contractor shall use the Qualified Product List (QPL), the Aggregate Source Approval (ASA) Database, or the City of Lacey Request for Approval of Material (COL RAM) form.

1-06.1(2) Request for Approval of Material (RAM)

The first paragraph is revised to read:

The COL RAM shall be used with all submittals. The COL RAM shall be prepared by the Contractor in accordance with the instructions and submitted to the engineer for approval before the material is incorporated into the Work.

Supplement this section with the following:

The Contractor shall submit sufficient information that describes the materials proposed as defined and described in these specifications and plans within 20 working days following the Notice to Proceed.

The City of Lacey has identified the following items as long lead items.

1. Light Poles

Long lead items shall be submitted within 10 working days of Notice to Proceed. The list above may not include all long lead items. The contractor is responsible for identifying all items and shall notify the Engineer of any additional items.

The Contractor shall submit one electronic of catalog cuts, shop drawings, and a material testing sample, as required for all items to be used in this contract for approval. The Contractor shall circle or highlight products and materials that are specific to this project, and cross out items that are not for this project.

All items not in exact compliance with the specifications must be noted as a change. The Contractor shall include an explanation, product specifications, sample articles, and any other items that will aid the Engineer in approving an item not in exact accordance with the specifications.

All submittals shall be submitted in Adobe Acrobat format and submittals that exceed 10 pages shall include a table of contents. Submittals that are not submitted in the format outlined may be rejected outright and the Contractor is required to resubmit in the correct format. The form and the submittal shall be sent in the same e-mail. Submittals that exceed 10 MB shall either be provided on a CD, a flash drive or via an internet link.

The Engineer will review submittals within 10 working days. The Contractor may request additional working days if approval or disapproval is not received in 10 working days. The Contractor may not request additional working days for failure to submit sufficient information to approve an item, or for rejection of an item not in accordance with the specifications.

Resubmittals shall be submitted within 5 working days from City's transmittal, to the contractor, of the Engineer reviewed submittal. If the submittal is "Rejected", the contractor shall resubmit the entire submittal. If the submittal is marked "Revise and Resubmit", the contractor shall submit items that are identified in the Engineer's comments.

Any material purchased or labor performed prior to such approval shall be at the Contractor's risk. The Contractor must receive all material approvals before the materials will be allowed on the project.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to be Observed (October 1, 2005 APWA GSP)

Supplement this section with the following:

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

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

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

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

implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

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

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

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

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

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

1-07.2(1) State Sales Tax — Rule 171

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

1-07.2(2) State Sales Tax — Rule 170

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

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

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

1-07.2(3) Services

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

1-07.6 Permits and Licenses

[\(January 2, 2018 WSDOT 1-07.6.OPT1.FR1\)](#)

Section 1-07.6 is supplemented with the following:

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

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

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

1-07.6 Permits and Licenses

[\(February 14, 2023 Lacey GSP\)](#)

Section 1-07.6 is supplemented with the following:

The Contractor shall be responsible for obtaining the permits listed below. The Contractor shall obtain any additional permits as necessary. All costs to obtain and comply with permits shall be included in the applicable Bid items for the Work involved.

NAME OF DOCUMENT	PERMITTING AGENCY
Electrical	City of Lacey

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan
(February 14, 2023 Lacey GSP)

The Contractor shall prepare a project-specific spill prevention, control, and countermeasures plan (SPCC Plan), and shall implement the plan for the duration of the project. No on-site construction activities may commence until the Contracting Agency accepts a SPCC Plan for the project. An SPCC Plan template and guidance information is available at <https://wsdot.wa.gov/engineering-standards/environmental-guidance/stormwater-water-quality>.

The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and other materials defined in Chapter 447 of the WSDOT Environmental Manual M 31-11. Occupational safety and health requirements that may pertain to SPCC Plan implementation are contained in, but not limited to, WAC 296-824 and WAC 296-843. The SPCC Plan shall address conditions that may be required by Section 3406 of the current International Fire Code, or as approved by the local Fire Marshal.

Implementation Requirements

The Contractor shall update the SPCC Plan throughout project construction so that the written plan reflects actual site conditions and practices. The Contractor shall update the SPCC Plan at least annually and maintain a copy of the updated SPCC Plan on the project site. The Contractor shall fully implement the SPCC Plan, as accepted and updated, at all times.

SPCC Plan Element Requirements

The SPCC Plan shall set forth the following information in the following order:

1. Responsible Personnel – Identify the names, titles, and contact information for the personnel responsible for implementing and updating the plan and for responding to spills.
2. Spill Reporting – List the names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a spill as referenced in the abovementioned template.
3. Spill Prevention – Describe the following items:
 - a. The contents and locations of spill response kits that the Contractor shall supply and maintain that are appropriately stocked, located in close proximity to hazardous materials and equipment, and immediately accessible.
 - b. Security measures for potential spill sources to prevent accidental spills and vandalism.
 - c. Site inspection procedures and frequency.
4. Spill Response – Outline the response procedures the Contractor shall follow for each scenario listed below, indicating that if hazardous materials are encountered or spilled during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. Include a description of the actions the Contractor shall take and the specific on-site spill response equipment that shall be used to assess the spill, secure the area, contain and eliminate the spill source, clean up spilled material, decontaminate equipment, and dispose of spilled and contaminated material:
 - a. A spill of each type of hazardous material present.
 - b. Stormwater that has come into contact with hazardous materials.
 - c. A release or spill of any unknown preexisting contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.

Payment

If no bid item for “SPCC Plan” is included in the proposal, any work described in this section shall be incidental to the project.

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

(December 30, 2022 APWA GSP)

1-07.18(1) General Requirements

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

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

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

D. The Contractor’s Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency’s insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor’s insurance and shall not contribute with it.

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

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

G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days’ notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

1-07.18(2) Additional Insured

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

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

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

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

1-07.18(3) Subcontractors

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

The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1 07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

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

1-07.18(4) Verification of Coverage

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

Verification of coverage shall include:

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

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

1-07.18(5) Coverages and Limits

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

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

1-07.18(5)A Commercial General Liability

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

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

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

Such policy must provide the following minimum limits:

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

1-07.18(5)B Automobile Liability

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

Such policy must provide the following minimum limit:

\$1,000,000	Combined single limit each accident
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1-07.18(5)C Workers' Compensation

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

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic

[\(January 5, 2015 WSDOT 1-07.23\(1\).OPT5.FR1\)](#)

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

Lane closures are subject to the following restrictions:

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.

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.

Lane closures are not allowed on any of the following:

1. A holiday,
2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After noon on the day prior to a holiday or holiday weekend, and
4. Before noon on the day after the holiday or holiday weekend.

1-07.24 Rights of Way **(July 23, 2015 APWA GSP)**

Delete this section and replace it with the following:

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

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

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

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

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

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private

property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-08 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:

- To review the initial progress schedule;
- To establish a working understanding among the various parties associated or affected by the work;
- To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
- To establish normal working hours for the work;
- To review safety standards and traffic control; and
- 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:

- A breakdown of all lump sum items;
- A preliminary schedule of working drawing submittals; and
- A list of material sources for approval if applicable.

1-08.0(2) Hours of Work **(December 8, 2014 APWA GSP)**

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 5 prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

1-08.0(2)A Lacey Hours of Work
(October 16, 2014 Lacey GSP Option A)

Add the following new section:

Lacey Municipal Code (LMC) Chapter 14.38.010, prohibits outside construction activities between the hours of 9:00 p.m. and 7:00 a.m. in or adjacent to residential zones of the City. A waiver to this ordinance will not be allowed, except in case of emergency, or where operations are necessary during such hours in order to promote the safety of the traveling public as shown in theses specifications or as determined by the Engineer.

1-08.1(7)A Subcontracting
(December 30, 2022 APWA GSP)

Delete the ninth paragraph, beginning with “On all projects, the Contractor shall certify...”.

1-08.3(2)A Type A Progress Schedule
(December 30, 2022 APWA GSP)

Revise this section to read:

The Contractor shall submit five (5) copies of a Type A Progress Schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

1-08.4 Prosecution of Work
(July 23, 2015 APWA GSP)

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

1-08.4 Notice to Proceed and Prosecution of Work

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

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

1-08.4(1) Order Of Work

(*****)

Add the following new section:

Prior to starting construction and issuance of notice to proceed by the City, the Contractor shall furnish the Contracting Agency with a schedule, sequence, and method of proceeding with the work. This schedule shall address all items herein and must be approved by the Contracting Agency prior to commencing any construction operations.

The following requirements shall be included into the project schedule:

The Contractor shall construct the Carpenter Road and Britton Parkway roundabout per the staging plans in the Traffic Control Plan. The Splitter islands shall be constructed as the last order of work. The Contractor may restrict all left turns at the intersection of Carpenter Road and Britton Parkway to construct the central island for 30 working days provided one continuous travel lane is available.

The Contractor may close the Carpenter Road and Britton Parkway intersection for paving.

1-08.5 Time for Completion

(March 13, 1995 WSDOT GSP 1-08.5OPT7.FR1)

This project shall be physically completed within ***120*** working days.

1-08.5 Time for Completion

(December 30, 2022 APWA GSP Option A)

Revise the third and fourth paragraphs to read:

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

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If Substantial Completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the Physical Completion of the contract; and (3) remaining for the Physical Completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the Completion Date of the Contract after all the Contractor's obligations under the Contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical Work on the project must be complete; and

2. The Contractor must furnish all documentation required by the Contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a Completion Date:

- a. Certified Payrolls (per Section 1-07.9(5)).
- b. Material Acceptance Certification Documents
- c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
- d. Final Contract Voucher Certification
- e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
- f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
- g. Property owner releases per Section 1-07.24

1-08.6 Suspension of Work **(February 15, 2023 Lacey GSP)**

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

The Contractor shall show procurement of the materials anticipated to be critical materials as activities in the Progress Schedule. If approved Progress Schedule indicates that the materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then contract time will be suspended upon physical completion of all critical work except that work dependent upon the critical materials. Items anticipated to be critical materials include but are not limited to:

Light Poles

Charging of contract time will resume upon delivery of the critical materials to the Contractor or 275 calendar days, whichever occurs first.

1-08.9 Liquidated Damages **(March 3, 2021 APWA GSP, Option B)**

Revise the second and third paragraphs to read:

Accordingly, the Contractor agrees:

1. To pay (according to the following formula) liquidated damages for each working day beyond the number of working days established for Physical Completion, and
2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

Liquidated Damages Formula

$$LD=0.15C/T$$

Where:

LD = liquidated damages per working day (rounded to the nearest dollar)

C = original Contract amount

T = original time for Physical Completion

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

1-09 MEASUREMENT AND PAYMENT

1-09.2(1) General Requirements for Weighing Equipment **(December 30, 2022 APWA GSP, Option 2)**

Revise item 4 of the fifth paragraph to read:

4. Test results and scale weight records for each day's hauling operations are provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027, Scaleman's Daily Report, unless the printed ticket contains the same information that is on the Scaleman's Daily Report Form. The scale operator must provide an AM and PM tare weight for each truck on the printed ticket.

1-09.2(5) Measurement **(December 30, 2022 APWA GSP)**

Revise the first paragraph to read:

Scale Verification Checks – At the Engineer's discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

1-09.9 Payments **(December 30, 2022 APWA GSP)**

Section 1-09.9 is revised to read:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of progress payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

Failure to perform any of the obligations under the Contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved.

Upon completion of all Work and after final inspection (Section 1-05.11), the amount due the Contractor under the Contract will be paid based upon the final estimate made by the Engineer and presentation of a Final Contract Voucher Certification to be signed by the Contractor. The Contractor's signature on such voucher shall be deemed a release of all claims of the Contractor unless a Certified Claim is filed in accordance with the requirements of Section 1-09.11 and is expressly excepted from the Contractor's certification on the Final Contract Voucher Certification. The date the Contracting Agency signs the Final Contract Voucher Certification constitutes the final acceptance date (Section 1-05.12).

If the Contractor fails, refuses, or is unable to sign and return the Final Contract Voucher Certification or any other documentation required for completion and final acceptance of the Contract, the Contracting Agency reserves the right to establish a Completion Date (for the purpose of meeting the requirements of RCW 60.28) and unilaterally accept the Contract. Unilateral final acceptance will occur only after the Contractor has been provided the opportunity, by written request from the Engineer, to voluntarily submit such documents. If voluntary compliance is not achieved, formal notification of the impending establishment of a Completion Date and unilateral final acceptance will be provided by email with delivery confirmation from the Contracting Agency to the Contractor, which will provide 30 calendar days for the Contractor to submit the necessary documents. The 30 calendar day period will begin on the date the email with delivery confirmation is received by the Contractor. The date the Contracting Agency unilaterally signs the Final Contract Voucher Certification shall constitute the Completion Date and the final acceptance date (Section 1-05.12). The reservation by the Contracting Agency to unilaterally accept

the Contract will apply to Contracts that are Physically Completed in accordance with Section 1-08.5, or for Contracts that are terminated in accordance with Section 1-08.10. Unilateral final acceptance of the Contract by the Contracting Agency does not in any way relieve the Contractor of their responsibility to comply with all Federal, State, tribal, or local laws, ordinances, and regulations that affect the Work under the Contract.

Payment to the Contractor of partial estimates, final estimates, and retained percentages shall be subject to controlling laws.

1-09.9 Payments

(November 20, 2020 Lacey GSP)

Section 1-09.9 is supplemented with the following:

Progress payments and the Final Contract Voucher Certification (FCVC) will be transmitted electronically to the Contractor for signature. The Contractor shall apply all signatures electronically using the software provided by the Contracting Agency. Within 21 days of execution of the Contract, the Contractor shall submit the names, email addresses, and text-message capable phone numbers for the authorized signers and shall bear the name, phone number and email of the officer providing this authorization. Delegation of authority to sign progress payments and the FCVC shall be by the officer authorized to sign the Contract.

1-09.11(3) Time Limitation and Jurisdiction

(December 30, 2022 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13(1) General

(January 19, 2022 APWA GSP)

Revise this section to read:

Prior to seeking claims resolution through arbitration or litigation, the Contractor shall proceed in accordance with Sections 1-04.5 and 1-09.11. The provisions of Sections 1-04.5 and 1-09.11 must be complied with in full as a condition precedent to the Contractor's right to seek claim resolution through binding arbitration or litigation.

Any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be resolved, as prescribed herein, through binding arbitration or litigation.

The Contractor and the Contracting Agency mutually agree that those claims or causes of action which total \$1,000,000 or less, which are not resolved by mediation, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

The Contractor and the Contracting Agency mutually agree that those claims or causes of action in excess of \$1,000,000, which are not resolved by mediation, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Arbitration General
(January 19, 2022 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-09.13(4) Venue for Litigation
(December 30, 2022 APWA GSP)

Revise this section to read:

Litigation shall be brought in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. It is mutually agreed by the parties that when litigation occurs, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.1 General
(January 3, 2017 Lacey GSP)

Supplement this section with the following:

Delays to traffic shall be held to a minimum. There shall be no restrictions or interruptions to traffic on Saturdays, Sundays or Holidays. In addition, there shall be no restrictions or interruptions to traffic after 12:00 noon on the day prior to a holiday or holiday weekend.

There shall be no delay to medical, fire, police, or other emergency vehicles with flashing lights or sirens. The Contractor shall alert all flaggers and personnel of this requirement.

The Contractor shall be responsible for removing the permanent traffic signs, as deemed necessary by the Engineer, and shall install and maintain any temporary signs necessary for the safety of the public.

The Contractor shall maintain pedestrian access at all times, without having pedestrians enter the travel lane.

All lane restrictions shall be held to a minimum time and length. Lane closures shall comply with the traffic control plans and these specifications. If the Contractor wishes to deviate from the plans, the Contractor shall submit a traffic control plan to the Engineer, at no additional cost, that complies with the MUTCD, and the Traffic Control Plans, for approval by the Engineer within (5) five working days before the proposed lane closure. If the Engineer determines that lane restrictions are causing congestion, the Contractor will be required to open any lanes, as determined by the Engineer, until the congestion is eliminated.

During non-working hours, Saturdays, Sundays, and Holidays, the Contractor shall keep all lanes open to traffic throughout the limits of the project with the lane and sidewalk area completely clear of all material, tools, personnel, and equipment as directed by the Engineer.

1-10.4(3) Reinstating Unit Items With Lump Sum Traffic Control **(August 2, 2004 WSDOT GSP)**

Section 1-10.4(3) is supplemented with the following:

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

"Flaggers", per hour.

"Construction Signs, Class A", per square foot.

"Portable Changeable Message Sign", per hour.

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description **(October 16, 2009 Lacey GSP)**

Supplement this section with the following:

The City of Lacey is a Tree City USA, and has deemed it necessary to protect all trees to the best of their ability. Only the trees that are evaluated by a certified Arborist as being diseased or detrimental to the project shall be removed as shown in the plans. The Contractor shall conduct a site review noting all trees within the construction zone prior to submitting a bid. Ease of construction, spoils, or stockpiling needs shall not justify tree removal.

A high visibility fence shall be installed around all trees and vegetation as required by the Engineer prior to beginning work. The Contractor shall be responsible for installing, maintaining and removing the high visibility fence as required.

Disposal of all organic waste shall be by Disposal Method No. 2. Disposal Method No. 1 and No. 3 will not be permitted in this contract. The City of Lacey encourages recycling of organic material at a certified organic recycling center.

The Contractor shall take all precautions necessary to protect the public, property, trees, and natural vegetation from harm. Any damage to utilities or other structures on public right-of-way or private property shall be restored by the Contractor or authorized agent at the Contractor's expense.

2-01.5 Payment

(October 16, 2009 Lacey GSP)

Modify this section with the following:

The unit contract price per acre or lump sum for “Clearing and Grubbing” shall be full pay for all work described in this section including “Roadside Cleanup”. If no bid item for “Clearing and Grubbing” or “High Visibility Fence” is included in the proposal, any work described in this section shall be incidental to the project.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description

(***** Lacey)

Supplement this section with the following:

The following items plus all materials resulting from incidental work including clearing; grubbing and roadside cleanup shall be removed from the job site, disposed of in a waste site or when noted on the plans, delivered to the City.

This work consists of but shall not be limited to the following items:

Pavement	Lane Markings (Buttons, Paint, Plastic, RPM)
Sidewalk	Traffic signal standards and equipment
Concrete	Foundations
Curb and Gutter	Fencing
Catch Basins	Manholes
Storm Sewer Pipe	Culverts
Storm Sewer Outfalls	Refuse
Water Pipe	Fire Hydrants
Water Valves and Fittings	Valve Boxes
Meter Boxes	Silt Fence
Street Lights	Roadside Cleanup
Rocks and Stumps	Air release valves

2-02.2 Video

(March 3, 2022 Lacey GSP)

Add the following new section:

The Contractor shall provide pre-construction video of the existing conditions for the construction area including all easements, streets, alleys, and driveways within the project area. Further, video shall include existing drainage, driveways, sidewalks, and other frontage improvements. The Contractor shall also provide pre-construction video of the existing conditions of each face of an existing structure (houses, garages, sheds, fences, etc.), within 30 feet of the construction area.

The Contractor shall provide a copy of the video, in electronic format , to the City prior to any construction.

All costs for providing and furnishing the pre-construction video shall be considered incidental to the Project and no other payment will be allowed.

2-02.3 Construction Requirements

(*** Lacey GSP)**

Supplement this section with the following:

Unless otherwise noted, catch basins and manholes shall be removed entirely.

Where shown on the plans, catch basins, manholes, and inlets may be removed to a point 5 feet below the subgrade and the cavity filled with gravel borrow compacted to 95% of maximum density. Where existing pipe is to be abandoned, the Contractor shall seal the pipe with commercial concrete.

The removal of an existing hydrant assembly shall consist of turning off the gate valve, removing the existing hydrant assembly, valve box and anything else that is within 2' of the finished grade. Cap or plug the existing valve after the existing hydrant assembly has been removed. The Contractor shall return the existing fire hydrant assembly to the City. If the existing hydrant is damaged due to the Contractor's negligence, the Contractor shall replace the hydrant with a new hydrant.

Street lights, barricades, and street signs shall be salvaged and delivered to the City of Lacey Shop located at 1200 College St. S.E.

The Contractor shall use due care and caution during removal and transportation of the salvaged material so that no damage occurs to the salvaged material. Any damage caused by the Contractor shall be deducted from the amount due.

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

(October 16, 2016 Lacey GSP)

Supplement this section with the following:

In removing pavement, sidewalks, and curbs, the Contractor shall:

1. Mark all cut lines in the field and have the Engineer approve them prior to commencing cutting operations. The Engineer reserves the right to adjust removal to the nearest construction joint.
2. Make a vertical saw cut between any existing pavement, sidewalk, or curb that is to remain and the portion to be removed.
3. All sawcuts shall be continuous and made with saws designed specifically for this purpose; no skip cutting, wheel cutting, or jack hammering will be allowed unless given prior approval by the Engineer.
4. Replace at no expense to the Contracting Agency any pavement designated to remain that is damaged during the removal of other pavement. All damaged sidewalks and curbs shall be replaced to the nearest existing joint.
5. Haul all broken-up pieces of pavement, sidewalks, and curbs to an off-project disposal site.

All transitions to existing asphalt or cement concrete driveways, parking lots, curb and gutter and walkways shall be vertically sawcut full-depth with straight, uniform edges. Existing asphalt pavement roadway edge may be cut with a wheel, provided the wheel cut is full depth and no damage occurs to the

pavement which is to remain. Neither impact tools nor pavement breakers may be used for trench crossing of existing pavement. Trench crossing of existing pavement shall be vertically sawcut.

When sawcutting the existing roadway is needed to widen the road to perform excavation, the Contractor shall take extra precaution to make a neat, uniform cut, and shall sawcut pavement to full depth, regardless of number of passes necessary. Compaction of asphalt near the sawcut is critical and a vertical, neat line sawcut is required. If in the opinion of the Engineer, the cut is not satisfactory due to Contractor's workmanship or equipment, or if the sawcut becomes damaged and irregular, the Contractor shall fix the problem to the satisfaction of the Engineer, at Contractor's own expense.

The Contractor may grind the existing pavement in lieu of excavation and haul. Spoils from grinding can be stockpiled and used and paid for per sections 4-04.3(12), 4-04.4 and 4-04.5. If the Contractor elects to grind and stockpile the existing pavement, all costs and expenses necessary to furnish all labor, equipment, tools and materials shall be incidental to other bid items and no additional compensation will be allowed.

2-02.5 Payment

(March 18, 2015 Lacey GSP)

Delete this section and replace with the following:

"Removal of Structures and Obstructions", lump sum shall be full compensation for all labor, equipment and materials necessary to complete the requirements of this section.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.3(7)C Contractor-Provided Disposal Site

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

The Contracting Agency has not provided a waste site for disposal of excess materials and debris.

2-03.3(14)C Compacting Earth Embankments

(October 29, 2010 Lacey GSP)

Supplement this section with the following:

The Contractor shall be required to compact all embankments in accordance with Method C as described in Section 2-03.3(14) C of the Standard Specifications.

2-03.3(14)D Compaction and Moisture Control Tests

(March 3, 2022 Lacey GSP Option A)

Supplement this section with the following:

The Contractor shall be responsible for scheduling and coordinating with the City's testing laboratory. No adjustment to the contract price or time for delays will be made if the contractor fails to schedule the needed testing.

The Contractor shall schedule a minimum of one density test for backfill for each 500 CY placed. In addition, the Contractor shall schedule a minimum of one density test for every 1,000 LF (per layer) of surfacing material placed.

For materials placed in a non-structural application outside the roadway prism such as slope flattening or shoulder dressing, acceptance for compaction may be based on visual inspection to the satisfaction of the engineer.

2-03.4 Measurement

(October 29, 2010 Lacey GSP)

Supplement this section with the following:

The quantity of the following items to be paid for on this project shall be quantities shown on the bid proposal:

“Roadway Excavation Incl. Haul”, per cubic yard.

“Embankment Compaction”, per cubic yard.

“

The quantities in the bid proposal are based on a computer generated earthwork calculated on the existing ground survey. The quantities do not incorporate expansion, clearing and grubbing, or construction methodology. These values are listed for the convenience of the Contractor in determining the volume of work involved as calculated by the Engineer and are not guaranteed to be accurate. The prospective bidders shall verify these quantities prior to submitting the bid. A digital copy of the survey is available to prospective bidders from the Contracting Agency at the Contractor’s request. No adjustments will be made in these quantities although the actual quantities may deviate from those listed.

2-05 TRENCH SAFETY SYSTEM

(October 16, 2009 Lacey GSP)

Add the following new section:

2-05.1 Description

This work consists of furnishing, utilizing, moving, and maintaining a trench safety system.

2-05.3 Construction Requirements

The Contractor shall comply with all applicable state laws, OSHA, WISHA requirements, and Department of Labor and Industries regulations governing trench excavation and pipe laying.

If extra excavation is used in lieu of, or in addition to shoring, cribbing, trench shields, or trench boxes, and select backfill material is required in the trench zone, then select backfill shall be used in the extra excavation zone.

2-05.4 Measurement

Trench safety system shall be paid for per lump sum regardless of the type, size and quantity used.

2-05.5 Payment

The lump sum contract price for “Trench Safety System” shall be full compensation for all labor, tools, equipment, and materials necessary to comply with the requirements stated above.

2-07 WATERING

2-07.3 Construction Requirements

[\(October 16, 2009 Lacey GSP\)](#)

Supplement this section with the following:

If the Contractor anticipates the use of City water, the Contractor shall apply for a water meter through the City of Lacey. Any damage rendered to the meter shall be repaired or replaced by the Contracting Agency and those costs deducted from monies due to the Contractor. All water used shall be metered and used sparingly for the entire length of the project. The Contractor will not be charged for water used on the project. The meter shall be returned promptly at the end of the project.

The Contractor is responsible for complying with backflow prevention requirements, which may include but are not limited to providing a certified air gap or reduced pressure backflow assembly (RPBA).

The Contractor shall use the water to keep the project site clean and to control dust during and after construction hours as determined by the Engineer.

2-07.4 Measurement

[\(October 16, 2009 Lacey GSP\)](#)

Delete and replace this section with the following:

The Contractor shall apply for a construction meter through the Contracting Agency. All water used shall be measured with the Contracting Agency supplied meter.

2-07.5 Payment

[\(October 16, 2014 Lacey GSP\)](#)

Delete and replace this section with the following:

The Contractor will not be charged for water used on this project. A construction meter will also be provided for a deposit and can be obtained at the City of Lacey Maintenance Service Center. Any costs to repair meters damaged by the Contractor shall be recovered from monies due the Contractor.

All costs to use or apply water as directed by the Engineer, including but not limited to supplying tank trucks, reduced pressure backflow assemblies (RPBA), and certification of approved backflow prevention methods, shall be considered incidental to the project and no other payment will be allowed.

2-09 STRUCTURE EXCAVATION

2-09.3(1)E Backfilling

[\(October 16, 2009 Lacey GSP\)](#)

Modify this section with the following:

Controlled Density Fill shall meet the following requirements:

1750# Sand,
1750# Pea Gravel,
230# Water,
141# Portland Cement,
6 ounces Water Reducing Agent per 100 lbs. cement.

The Controlled Density Fill will require 24 hours of cure time, or as directed by the Engineer. Prior to backfill, all appurtenances shall be covered with 11 mill plastic as directed by the Engineer. The Contractor shall have a steel plate cover placed and anchored over the trench until the Engineer determines the mixture is sufficiently cured, so that a temporary or permanent patch can be placed. This process shall be coordinated so that there will be minimum inconvenience to the public.

2-09.5 Payment

(October 16, 2009 Lacey GSP)

Modify this section with the following:

Structure Excavation Including Haul, and Shoring or Extra Excavation shall be incidental to the structure to be constructed unless a bid item is provided.

2-10 DITCH EXCAVATION

2-10.5 Payment

(October 16, 2009 Lacey GSP)

Delete and replace this section with the following:

Payment for ditch excavation shall be paid by including those quantities described in this section in the bid item "Roadway Excavation Incl. Haul".

For hauling, the Contracting Agency will pay the unit contract price for hauling excavated material (Section 2-04). If the pay item for excavation includes haul, the unit contract price per cubic yard shall cover all costs for hauling the material any distance required.

2-13 PRIVATE UTILITY COORDINATION AND CONSTRUCTION

(January 3, 2016 Lacey GSP)

Add the following new sections:

2-13.1 Description

(*****)

The Contractor shall provide a utility window to allow Public and private utilities, or their Contractors, to furnish all work necessary to adjust, relocate, replace, or construct their facilities. The Contractor shall not impede any work of the utilities during the utility window. The Contractor may complete other work during the utility window or request a working day suspension.

The Contractor shall adjust existing PSE Gas Valve Boxes to finished grade.

2-13.1(1) Utility Coordination

(***)**

The Contracting Agency has made commitments with several jurisdictions, public users, property owners, and private utilities that the Contractor shall incorporate into the schedule for this project. The following specific requirements shall be included into the project schedule:

Within the first 40 working days of the project, the Contractor shall prepare the site to include clearing and grubbing, rough grading, and installation of any new work needed to allow the utility contractors to install or relocate their facilities.

After the site is prepared, the Contractor shall provide a 40 working day utility window throughout the duration of this project for Public and private utilities, or their Contractors, to furnish all work necessary to adjust, relocate, replace, or construct their facilities. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the work for this project. If a state disaster is declared in the utility's service area, the working days and the utility window will be extended.

Throughout the duration of the utility window, other contractors and/or utilities will be working within the project limits. The Contractor shall schedule all work not to impede other contractors and/or utilities.

2-13.3(6) Gas Valve Box Adjustment

(October 29, 2010 Lacey GSP)

All existing gas valve boxes shall be adjusted to line and grade staked in the field or otherwise designated by the Engineer. The Contractor shall be responsible for coordination with Puget Sound Energy (PSE) for replacement of the existing gas valve boxes and lids if they are determined to be non-adjustable. PSE will provide new valve boxes and lids if the existing is determined to be unusable by the Engineer.

2-13.4 Measurement

(January 3, 2011 Lacey GSP)

Adjust Gas Valve Box shall be measured per each.

2-13.5 Payment

(October 29, 2010 Lacey GSP)

The unit contract price per each for "Adjust Gas Valve Box" shall be full pay for all labor, materials, tools, and equipment, necessary to remove, replace and adjust gas valve box to line and grade staked in the field. This work is dependent on Puget Sound Energy's acceptance of the bid. The Engineer reserves the right to delete this work. No extra compensation will be permitted if the Engineer elects to delete this work.

4-04 BALLAST AND CRUSHED SURFACING

4-04.3(12) Asphalt Grindings

(April 2, 2018 Lacey GSP)

Add the following new section:

The Contractor may grind the existing pavement in lieu of excavation and haul. Spoils from the grinding can be stockpiled and used in any locations that require Crushed Surfacing Base Course, as approved by

the Engineer. Grindings must be well ground and free of debris. Any large pieces 4" or greater of asphalt will be removed and disposed of at the Contractor's expense.

All grindings shall be proof rolled the entire length and width of the roadway with a truck weighing a minimum of 40,000 lb. Offset each trip of the roller by at most 2 tires width. Operate rollers at a speed between 2 and 6 miles per hour, as directed. Proof rolling shall be done in the presence of the Engineer.

The Engineer will visually inspect the asphalt grindings. If the Contractor elects to grind and stockpile the existing pavement, all costs and expenses necessary to furnish all labor, equipment, tools and materials shall be incidental to other bid items and no additional compensation will be allowed.

4-04.4 Measurement **(January 3, 2017 Lacey GSP)**

Supplement this section with the following:

Asphalt Grindings will be measured by the cubic yard. Measurement by cubic yard will be made in the hauling vehicle and multiplied 2 tons/cy to convert asphalt grindings into tons. The asphalt grindings used on the project will be paid as Crushed Surfacing Base Course.

5-04 HOT MIX ASPHALT

5-04.1 Description **(July 18, 2018 APWA GSP)**

Delete this entire section and replace it with the following:

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

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

5-04.2 Materials **(October 30, 2018 Lacey GSP)**

Delete this entire section and replace it with the following:

Materials shall meet the requirements of the following sections:

- Asphalt Binder 9-02.1(4)
- Cationic Emulsified Asphalt 9-02.1(6)
- Anti-Stripping Additive 9-02.4
- HMA Additive 9-02.5
- Aggregates 9-03.8
- Recycled Asphalt Pavement 9-03.8(3)B
- Mineral Filler 9-03.8(5)
- Recycled Material 9-03.21
- Portland Cement 9-01
- Sand 9-03.1(2).

(As noted in 5-04.3(5)C for crack sealing)
Joint Sealant 9-04.2
Foam Backer Rod 9-04.2(3)A

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

Reclaimed/recycled asphalt pavement and/or shingles (RAP and/or RAS) will not be allowed on this project.

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

Production of aggregates shall comply with the requirements of Section 3-01.
Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.2(2) Mix Design – Obtaining Project Approval **(July 18, 2018 APWA GSP)**

No paving shall begin prior to the approval of the mix design by the Engineer.

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

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

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

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

The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Approval of a mix design for “Commercial Evaluation” will be based on a review of the Contractor’s submittal of WSDOT Form 350-042 (For commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL’s) appropriate for the required use.

5-04.2(2) Mix Design – Obtaining Project Approval **(January 3, 2011 WSDOT GSP)**

Section 5-04.2(2) is supplemented with the following

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be **4.5** million.

5-04.2(2)A Changes to the Job Mix Formula

Delete this section

5-04.2(2)B Using Warm Mix Asphalt Processes **(July 18, 2018 APWA GSP)**

The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.
- Before using additives, obtain the Engineer’s approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.2(3) Fiber Reinforced HMA **(April 2, 2018 Lacey GSP)**

Add the following new section:

Aramid fibers will be added to the HMA mix at a minimum dosage 2.1 ounces of aramid fibers per (1) ton of asphalt.

Reinforcing fibers shall be one of the following products:

1. Forti-Fi Fiber Reinforcement by Alliance Geosynthetics:

Aramid-polyolefin fiber mix at a dosage of (1) pound of product per (1) ton of asphalt.

2. ACE Fiber Reinforcement:

Pure aramid fiber with wax treatment at a dosage of 4.2 ounces of product per (1) ton of asphalt.

3. Non-aramid fiber blends will not be considered acceptable alternatives. If an alternate aramid-based fiber blend is proposed, the proposed alternate must meet the same performance testing requirements as one of the products listed above and be approved by the Engineer. Indirect Tensile Strength and Aramid dispersion State Ratio tests are required. All testing must be performed by an AASHTO accredited laboratory or nationally recognized university testing lab.

No modifications to the HMA job mix formula are required. Submit product data sheet and manufacturer's instructions and general recommendations to the Engineer for approval.

Store aramid product in a dry environment and do not allow it to be in contact with moisture.

Aramid fibers shall meet the following properties:

Property	Measure
Material	Aramid
Form	Monofilament
Length	0.75 inches (+/- 10%)
Specific Gravity	1.44
Minimum Tensile Strength	400,000 psi

Polyolefin fibers shall meet the following properties:

Property	Measure
Material	Polyolefin
Form	Serrated
Length	0.75 inches (+/- 10%)
Specific Gravity	.91

Fiber reinforcing shall be mixed with the asphalt per the fiber manufacturer's instructions. The fiber manufacturer's representative shall be on site during mixing and production. This requirement can be waived if fiber manufacturer and asphalt producer can supply evidence of manufacturer's brand of fiber being successfully produced a minimum of three times at the asphalt plant to be used for the project.

Visually observe the reinforced HMA from the at the plant. Collect a small sample from the discharge chute during the first 50 tons of production. If there are one or more undistributed fiber clips or bundles, adjust mixing operations per manufacturer's recommendations to eliminate fiber bundles. If undistributed fiber clips or bundles cannot be eliminated, cease production until a remedy is identified.

Visually observe the reinforced HMA in first three trucks and every tenth truck thereafter at the point of discharge. Observation shall include using a shovel or other device. Look for proper distribution of aramid fibers and make mixing adjustments if needed. Remove any observed fiber balls from placed mixture and adjust operations per the manufacturer's recommendation to eliminate future fiber ball development.

Fiber Supply System

Introduce the aramid product as follows:

Batch Plant:

When a batch type plant is used, add the aramid product dosage to the aggregate in the weigh hopper. Increase the batch dry and wet mixing times to ensure the fibers are uniformly distributed prior to the injection of asphalt cement into the mixer.

Drum Plant:

1. Inject fibers through the RAP collar by placing fibers on the RAP belt or by feeding them with an automated dosing/blower tube system. Rate the feeding of fibers with the rate the plant is producing asphalt mix, and add to the mixing drum in a continuous way. If there is any evidence of fiber balls at the discharge chute, increase the mixing time and/or temperature or change the angle of the fiber feeder line to increase dry mixing time.
2. For manual feeding (allowed on Forti-Fi Fiber Reinforcement product only), place fibers on the RAP belt at intervals based on the plant production rate. Fibers should be contained in individual dosage packaging, such as a plastic bag which will quickly melt/dissolve in the drum, to protect the fibers from rain or wind while on the RAP belt and allow quick, accurate feeding by one person.
3. When using a blower tube/automated dosing system, add fibers continuously and in a steady uniform manner. Provide automated proportioning and control delivery within $\pm 10\%$ of the mass of the fibers required. Perform an equipment calibration to the satisfaction of the fiber manufacturer's representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following with the blower tube/automated dosing system:

- Low level indicators
- No-flow indicators
- A printout of feed rate status in pounds/minute
- A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.
- Manufacturer's representative's approval of fiber addition system

Mix the aramid fiber with the heated aggregate and RAP longer, if needed, to allow thorough distribution of aramid fibers at the end of the mixing process and to promote asphalt coating of individual strands of aramid fiber.

5-04.3 Construction Requirements

5-04.3(2) Paving Under Traffic

(April 2, 2018 Lacey GSP)

Delete this section and replace it with the following:

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

The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. Before closing an intersection, advance warning signs shall be placed and signs shall also be placed marking the detour or alternate route.

In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

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

The Contractor shall remove all pavement markings including paint, tape, thermoplastic and RPM's.

All costs in connection with performing the Work associated with these requirements shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3)Equipment

5-04.3(3)A Mixing Plant

(July 18, 2018 APWA GSP)

Delete this section and replace it with the following:

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

1. Equipment for Preparation of Asphalt Binder – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. Thermometric Equipment – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. Heating of Asphalt Binder – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
4. Sampling and Testing of Mineral Materials – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. Sampling HMA – The HMA plant shall provide for sampling HMA by one of the following methods:
 - a. A mechanical sampling device attached to the HMA plant.
 - b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment
(July 18, 2018 APWA GSP)

Delete this section and replace it with the following:

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

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

5-04.3(3)C Pavers
(July 18, 2018 APWA GSP)

Delete this section and replace it with the following:

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

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

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

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after the completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

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

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

(April 2, 2018 Lacey GSP, Option 2)

Delete this section and replace it with the following:

Use a material transfer device (MTD) or material transfer vehicle (MTV) to deliver the HMA from the hauling equipment to the paving machine for any lift in (or partially in) the top .30 feet of the pavement unless directed otherwise by the Engineer.

Use of an MTD/V is not required in the following locations:

- Irregularly shaped and minor areas
- Within the roundabout

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

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

To be approved for use, an MTV:

1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not be connected to the hauling vehicle or paver.
3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

To be approved for use, an MTD:

1. Shall be positively connected to the paver.
2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
3. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

5-04.3(3)E Rollers

(July 18, 2018 APWA GSP)

Delete this section and replace it with the following:

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in

crushing of the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Surfaces

(December 19, 2019 Lacey)

Delete this section and replace it with the following:

When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.

Preleveling of uneven or broken surfaces over which HMA is to be placed may be accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to avoid bridging across preleveled areas by the compaction equipment. Equipment used for the compaction of preleveling HMA shall be approved by the Engineer.

Before construction of HMA on an existing paved surface, the entire surface of the pavement shall be clean. All fatty asphalt patches, grease drippings, and other objectionable matter shall be entirely removed from the existing pavement. All pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and other foreign matter. All holes and small depressions shall be filled with an appropriate class of HMA. The surface of the patched area shall be leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

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

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

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

All vegetation including root structures and moss shall be removed in their entirety within the paved areas including adjoining curbs, gutters, and sidewalks. Further, all vegetation overgrowth shall be trimmed and removed 6 inches from back of proposed HMA edge limits as directed by the Engineer.

Driveway preparation shall include saw cutting, cutting, filling, and grading the transitional area required to provide a HMA approach between the edge of pavement and driveway regardless of the existing surface treatment or width. The Engineer shall mark in the field where the asphalt or concrete shall be sawcut. Typical driveway aprons for paved/concrete driveways are 18" unless shown longer on the plans. Typical driveway aprons for gravel driveways are 48" unless shown longer in the plans. All material that

must be removed from the driveway shall be hauled and disposed off the project site. All imported material required to grade and compact driveway bases shall be paid for by the unit bid item "Crushed Surfacing Top Course." All driveways shall require preparation. Temporary access shall be provided for all driveways prior to paving. There shall be no additional compensation for those driveways requiring more preparation than others.

Shoulder preparation shall include cutting, filling, and grading the shoulder to ensure a uniform, longitudinal pavement edge. Maximum distance shall be 12 inches from proposed edge of pavement surface to a maximum depth of 6 inches from edge of roadway finish grade. Backfill requirements beyond these limits shall be repaired at the Contractor's expense. All grading within drainage ditches or swales to establish or maintain existing flowlines shall also be included in shoulder preparation.

All excess asphalt joint filler shall be completely removed and all premolded and rubberized joint filler shall be removed to a minimum 1/2 inch below the surface of the existing pavement.

5-04.3(6) Mixing

(October 30, 2018 Lacey GSP)

Delete this section and replace it with the following:

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed the maximum recommended by the manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift.

If Recycled asphalt pavement (RAP) is allowed per section 5-04.2, RAP utilized in the production of HMA shall be sized prior to entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have been approved by the Engineer. After the required amount of mineral materials, RAP, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, and RAP is ensured.

5-04.3(7) Spreading and Finishing

(April 2, 2018 Lacey GSP)

Delete this section and replace it with the following:

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"	0.35 feet
HMA Class ¾" and HMA Class ½"	
wearing course	0.21 feet
other courses	0.33 feet
HMA Class ⅜"	0.17 feet

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

The Contractor shall complete the first lift over the entire length of the project, before the final lift will be allowed to be installed.

If traffic signal loops are required, these loops shall be installed prior to the final lift.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

(July 18, 2018 APWA GSP)

Delete this section and replace it with the following:

For HMA accepted by nonstatistical evaluation the aggregate properties of sand equivalent, uncompacted void content and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance

(July 18, 2018 APWA GSP)

Delete this section and replace it with the following:

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Engineer and may be made in accordance with this section.

HMA Tolerances and Adjustments

1. Job Mix Formula Tolerances – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

For Aggregates in the mixture:

a. First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/- 6%	+/- 8%
No. 8 Sieve	+/- 6%	+/- 8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

a. Aggregates –2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).

b. Asphalt Binder Content – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation **(July 18, 2018 APWA GSP)**

Add the following new section:

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots **(July 18, 2018 APWA GSP)**

Add the following new section:

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 800 tons, whichever is less except that the final subplot will be a minimum of 400 tons and may be increased to 1200 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per subplot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling **(July 18, 2018 APWA GSP)**

Add the following new section:

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASHTO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall to be tested.

Sampling and testing HMA in a Structural application where quantities are less than 400 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.
- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a Composite Pay Factor (CPF) shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing **(July 18, 2018 APWA GSP)**

Add the following new section:

Testing of HMA for compliance of Va will at the option of the Contracting Agency. If tested, compliance of Va will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors
(July 18, 2018 APWA GSP)

Add the following new section:

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a Composite Pay Factor (CPF) using the following price adjustment factors:

Table of Price Adjustment Factors	
Constituent	Factor “f”
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (Va) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments
(July 18, 2018 APWA GSP)

Add the following new section:

For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(9)C7 Mixture Nonstatistical Evaluation – Retests
(July 18, 2018 APWA GSP)

Add the following new section:

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original

acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, Va. The results of the retest will be used for the acceptance of the HMA in place of the original subplot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$500 per sample.

5-04.3 (9)D Mixture Acceptance – Commercial Evaluation **(July 18, 2018 APWA GSP)**

Delete this section and replace it with the following:

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(10) HMA Compaction Acceptance **(July 18, 2018 APWA GSP)**

Delete this section and replace it with the following:

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

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

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

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

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

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor’s request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a subplot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of the relative density of the subplot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the subplot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the subplot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)D HMA Compaction-Visual Evaluation

Delete this section and replace it with the following:

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots **(July 18, 2018 APWA GSP)**

Add the following new section:

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula

placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per subplot per WSDOT T 738.

The subplot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing **(July 18, 2018 APWA GSP)**

Add the following new section:

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each subplot, with one test per subplot.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments **(July 18, 2018 APWA GSP)**

Add the following new section:

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a subplot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92% a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction) **(July 18, 2018 APWA GSP)**

Delete this section and replace it with the following:

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(12)A1 Transverse Joints

(April 2, 2018 Lacey GSP)

Delete this section and replace it with the following:

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course. All joints must be flush and provide a smooth transition across the meet line.

A temporary wedge of HMA constructed on a 24H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The wedge shall be maintained until the paving is resumed. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

5-04.3(12)A2 Longitudinal Joints

(April 2, 2018 Lacey GSP)

Replace the first paragraph with the following:

This project will require Echelon paving, using side-by-side pavers in operation at the same time and slightly offset on multiple lanes to improve the longitudinal joint between pavers. Rollers behind the echelon pavers shall pass directly over the longitudinal joint while both sides are hot. Hot lap joints shall be constructed in the wearing course and shall be located at the lane lines between travel lanes. Cold joints will only be allowed at locations approved by the Engineer.

All other joints shall be an extended joint (Notched wedge) with a taper placed on the first paved lane to reduce joint air voids. An attachment shall be placed on the paver screed to form the mat edge into a tapered section. Notches on either end of the taper shall eliminate thin taper extremities. The notches shall be at least as deep as the nominal maximum aggregate size of the mix. The taper shall be spread out

over 1 foot and the hot lane shall overlap the cold lane notch by about 0.5 to 1 inch. The notched wedge joint shall provide a ramp for traffic transition between the cold lane and the yet unpaved portions of the hot lane.

Upon Completion of paving operations, all joints shall be sealed with PG 58H-22 asphalt binder.

5-04.3(14) Planing Bituminous Pavement **(April 2, 2018 Lacey GSP)**

Supplement this section with the following:

The planing plan must be approved by the Engineer and a preplaning meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planning submittals. Pavement planing shall be completed to the cross-slopes as shown on the Plans. The Contractor shall provide a smooth transition at the changes in cross-slopes as directed by the Engineer.

Locations of existing surfacing to be planed are as shown in the Drawings.

Where planing an existing pavement is specified in the Contract, the Contractor must remove existing surfacing material and to reshape the surface to remove irregularities. The finished product must be a prepared surface acceptable for receiving an HMA overlay.

Repair or replace any metal castings and other surface improvements damaged by planing, as determined by the Engineer.

A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.

After planing is complete, planed surfaces must be swept, cleaned, and if required by the Contract, patched and preleveled.

The Engineer may direct additional depth planing. Before performing this additional depth planing, the Contractor must conduct a hidden metal in pavement detection survey as specified in Section 5-04.3(14)A.

The Contractor can stockpile the grindings for use on the project as identified in section 2-02.3(3).

5-04.3(17) Roadway Pulverization **(October 30, 2018 Lacey GSP)**

Add the following new section:

Pavement pulverizing shall be performed with equipment of a type that has operated successfully on work comparable with that to be done under the contract and shall be approved by the Engineer prior to use.

Where indicated on the Plans, the existing pavement shall be pulverized in place from edge of pavement to edge of pavement between the limits staked by the Engineer. Asphalt concrete pavement shall be pulverized to a depth of three times the asphalt thickness. Care shall be taken not to disturb the adjacent concrete curb and gutter.

The Contractor shall process the pulverized material with water to remove material larger than 4" and grade to match existing crown, as shown in the plans or as directed by the Engineer. Upon completion of

the grading operation, the Contractor shall compact the material to 95% density in accordance with Section 2-03.3(14)D. Excess pulverized material, loose material and any large pieces 4" or greater of asphalt will be removed and disposed of at the Contractor's expense. Crushed Surfacing Top Course shall be placed and graded if needed, as directed by the Engineer, paid for under the bid item for Crushed Surfacing Top Course.

If the Contractor chooses to pulverize roadway where not indicated on the Plans, no compensation shall be made under the bid item "Roadway Pulverization". The demolition and removal of this pavement material shall be compensated under the lump sum bid item "Removal of Structures and Obstructions" and no other compensation shall be allowed.

The Contractor can stockpile the grindings for use on the project as identified in section 2-02.3(3).

5-04.3(18) Pre Planing Or Pulverizing Metal Detection Check

(October 30, 2018 Lacey GSP)

Add the following new section:

Before starting planing or pulverizing of pavements, and before any additional depth planing or pulverizing required by the Engineer, the Contractor must conduct a physical survey of existing pavement to be planed with equipment that can identify hidden metal objects.

Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monuments that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(19) Submittals - Paving Plan

(October 30, 2018 Lacey GSP)

Add the following new section:

The Contractor must submit a paving plan to the Engineer at least 5 Working Days in advance of the start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-paving briefing. When requested by the Engineer, the Contractor must provide the traffic control plan with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The traffic control plan must show where flaggers are proposed.

At a minimum, the plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's work. Briefly describe the sequencing of traffic control consistent with the proposed work sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's work.
2. Names and locations of HMA Supplier facilities to be used, and locations of temporary parking and staging areas.
3. List of all equipment to be used for paving.

4. Description (geometric or narrative) of the scheduled sequence of work, and intended area for each day's work, must include the directions of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection scheduling and sequencing.

5. Approximate times and days for starting and ending daily operations.

5-04.3(20) Pre-Paving Briefing

(October 30, 2018 Lacey GSP)

Add the following new section:

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, Metro transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. The actual times of starting and ending daily operations.
2. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other contractors who may operate in the Project Site.
3. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
4. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and to paving.
5. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed
6. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monuments, monitoring wells, street car rail, and castings, before planning, see Section 5-04.3(14)B2.
7. Description of how flaggers will be coordinated with the planing, paving, and related operations.
8. When to start applying tack and coordinating with paving.
9. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.
10. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(21) Paving Operations Supervisor

(April 2, 2018 Lacey GSP)

Add the following new section:

The Contractor shall identify a Paving Operations Supervisor (POS) at the Preconstruction Conference. The POS shall be employed by the Paving Contractor, shall have direct and immediate control of the paving operations on the Project at all times, and shall perform no other duties on the project. No part of the paving operations shall commence or continue without the physical presence of the POS on-site. The POS shall act as the main point of contact in the field to the Engineer and shall execute all requests by the Engineer promptly and immediately.

Specific duties include, but are not limited to the following:

Ensures all paving operations meet the requirements of Section 5-04.

Ensures all iron is marked and properly lowered prior to pavement planing operations.

Ensures paving schedule is communicated to the Engineer 72 hours in advance of paving operations commencing. The Engineer shall be responsible for delivering paving notices to affected business owners and residents. Any changes to the paving schedule must also be communicated to the Engineer 72 hours in advance of the change.

Ensures existing surfaces to be paved are prepared in accordance with Sec. 5-04.3(4) a minimum of two (2) hours prior to paving. Specific attention shall be given to surface cleanliness, match lines to adjoining pavement are vertical and smooth, and matching to existing driveways and rolled gutters are prepared. In the event that preparation of existing surfaces are behind schedule, paving operations may be halted and rescheduled at the Engineer's request if, in his judgment, the delay of paving shall result in a less than satisfactory end product or inconvenience to the public. All costs resulting from paving rescheduling shall be borne by the Contractor.

Ensures all tack coating is completed in accordance with Sec. 5-04.3(4).

5-04.3(22) Temporary Patching

(April 2, 2018 Lacey GSP)

Add the following new section:

All excavations within or across streets, driveways, or failure of existing pavement that will be exposed to traffic shall be temporarily patched by the end of the working day or as directed by the Engineer. The patch shall be constructed of a minimum of 0.17 feet of either Commercial HMA or as directed by the Engineer. The Contractor shall maintain all temporary patches until such time as the permanent pavement is in place.

5-04.3(26) Utility Access

(November 20, 2020 Lacey GSP)

Add the following new section:

When lowering and raising valves the valve riser pipes must remain free of debris. Cap the valve riser pipe to prevent debris from entering the riser and to provide access to the operating nut.

The contractor is responsible for tracking exact locations of all valves and manholes to be lowered or raised. Before asphalt is placed over a valve, metal must be placed directly above the valve location for the purpose of locating the valve with a metal detector. Once asphalt has been placed over a valve or manhole, the location of that valve or manhole must be marked on the asphalt within 3 working days. The location marks must be maintained until the valves are raised. Channelization near valves or

manholes must be complete before they are raised. All valves and manholes must be raised within 20 working days after each time they are paved over. The cost of raising new valves and manholes is incidental to the cost for that bid item. The cost for raising existing valves and manholes will only be paid once for each location, no additional compensation will be allowed if the contractor has to raise the same valve/manhole twice. See sections 7-05 and 7-12 for additional information on raising valves and manholes.

5-04.4 Measurement

(October 17, 2022 Lacey GSP)

Supplement this section with the following:

“Fiber Reinforced HMA Cl. PG ” will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

Roadway Pulverization shall be measured by the square yard of roadway pulverized.

Crack Sealing shall be measured by the linear foot of crack sealed.

No unit of measure shall apply to the lump sum price for Preparation of Existing Surfaces.

No unit of measure shall apply to the lump sum price for Driveway and Shoulder Preparation.

Crushed Rock for Shoulder Grading shall be measured per ton of material required to complete a smooth transition from the edge of pavement to the existing shoulder grade.

Topsoil Type A for Shoulder Grading shall be measured per cubic yard of material required to complete a smooth transition from the edge of pavement to the existing shoulder grade.

The quantities in the bid proposal for Planing Bituminous Pavement are based on a computer generated earthwork calculation from the existing ground survey. The quantities do not incorporate expansion, clearing and grubbing, or construction methodology. These values are listed for the convenience of the Contractor in determining the volume of work involved as calculated by the Engineer and are for estimating purposes only. The prospective bidders shall verify these quantities prior to submitting the bid. A digital copy of the survey is available to prospective bidders from the Contracting Agency at the Contractor's request. No adjustments will be made in these quantities although the actual quantities may deviate from those listed.

5-04.5 Payment

(November 20, 2020 Lacey GSP)

Supplement this section with the following:

The unit Contract price per ton for all HMA bid items shall also include Paving Operations Supervisor (POS) and the removal of excess tack coat of asphalt from existing surfaces, including, but not limited to existing pavement markings. Pavement markings shall be restored to a pre-construction condition or better. No additional compensation shall be given to the Contractor for installing new pavement markings if existing pavement markings cannot be restored to a pre-construction condition or better as directed by the Engineer.

If no bid item for “HMA for Pre-leveling Cl. __ PG __ ” is included, all materials, equipment, and labor necessary to pre-level the existing pavement prior to paving shall be fully compensated by the bid item “HMA Cl. __ PG __ ” and “Fiber Reinforced HMA Cl. PG ” and no other pay shall be allowed.

The unit Contract price per ton for “Fiber Reinforced HMA Cl. PG ” shall be full compensation for all costs, including fiber and anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

7-04 STORM SEWERS

7-04.1 Description

[\(January 3, 2017 Lacey GSP\)](#)

Supplement this section with the following:

This work shall consist of constructing debris barriers, trash racks, special fittings, joint materials, dewatering, bypass pumping, and testing.

7-04.2 Materials

[\(October 29, 2010 Lacey GSP\)](#)

Delete the first paragraph of this section and replace with the following:

Pipe used in this project shall meet the requirements of the following sections:

Solid Wall PVC Storm Sewer Pipe	9-05.12(1)
Ductile Iron Sewer Pipe	9-05.13
Corrugated Polyethylene Storm Sewer Pipe	9-05.20
Safety Bars	9-05.18

7-04.3 Construction Requirements

[\(October 29, 2010 Lacey GSP\)](#)

Supplement this section with the following:

The Contractor shall furnish, construct, and install the debris barriers as shown in the Plans or as designated by the Engineer.

7-04.4 Measurement

[\(October 30, 2018 Lacey GSP\)](#)

Supplement this section with the following:

“Connect to Existing Storm Main” will be measured per each location called out in the plans

7-04.5 Payment

(October 30, 2018 Lacey GSP)

Delete this section and replace with the following:

“Connect to Existing Storm Main”, per each.

The unit contract price for "Connect to Existing Storm Main" shall be full pay for providing all labor, tools, equipment, and materials necessary to connect to the existing main. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing main or the quantity of connecting pipes or other materials needed. If no such item exists all costs shall be incidental to the project and no additional compensation shall be allowed.

“___ Inch Diameter Storm Sewer Pipe”, per linear foot.

The unit contract price per linear foot for “___ Inch Diameter Storm Sewer Pipe”, shall be full compensation for all labor, material, and equipment to furnish, place, assemble, and install storm sewer line, complete in place, including all wyes, tees, caps, plugs, trash racks, debris barriers, special fittings, joint materials, commercial concrete, adjustment of inverts to manholes, dewatering, bypass pumping, and testing. Further, all excavation, hauling, disposal, compaction, temporary patching and other required earthwork shall be included.

“___ Inch Diameter D.I. Storm Sewer Pipe”, per linear foot.

The unit contract price per linear foot for “___ Inch Diameter D.I. Storm Sewer Pipe”, shall be full compensation for all labor, material, and equipment to furnish, place, assemble, and install ductile iron (D.I.) storm sewer line, complete in place, including all wyes, tees, caps, plugs, trash racks, debris barriers, special fittings, joint materials, commercial concrete, adjustment of inverts to manholes, dewatering, bypass pumping, and testing. Further, all excavation, hauling, disposal, compaction, temporary patching and other required earthwork shall be included.

Trash racks required on the end of existing pipes shall be incidental to the overall storm system and new storm sewer pipe identified herein.

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

7-05.3(1)A Adjust Manhole

(January 7, 2019 Lacey GSP)

Add the following new section:

All manholes and Type 2 catch basins within the paved area, except those which are called out to be raised to grade, shall be adjusted flush to the new pavement surface. No wood adjustment of any kind will be allowed.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.3(1)B Raise Manhole To Grade

(January 7, 2019 Lacey GSP)

Add the following new section:

Where shown on the plans or where directed by the Engineer, existing manholes and Type 2 catch basins shall be raised to the grade as staked or as directed by the Engineer. The Contractor shall supply and install new manhole rings, frames, and covers as part of raising the manhole to grade. The finished installation shall conform to the detail shown in plans. No wood adjustment of any kind will be allowed.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.3(1)C Elevate Manhole

(January 7, 2019 Lacey GSP)

Add the following new section:

Where shown on the plans or where directed by the Engineer, existing manholes and Type 2 catch basins shall be elevated to grade with new precast section(s) as staked or otherwise designated by the Engineer. The Contractor shall supply and install new precast sections with steps, rings, frames, and covers as part of elevate manhole. The finished installation shall conform to the detail shown in plans. No wood adjustment of any kind will be allowed.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.3(1)D Raise Catch Basin to Grade

(January 7, 2019 Lacey GSP)

Section 7-05.3(1)D is added with the following:

Where shown on the plans or as directed by the Engineer, existing catch basins shall be raised to the grade as staked or as directed by the Engineer. The Contractor shall remove and replace adjacent curb and gutter as required. Further, the Contractor shall supply and install concrete riser sections, and new frame and grate. The finished installation shall conform to the detail shown in plans. No wood adjustment of any kind will be allowed.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.3(5) Catch Basin Assembly
(January 3, 2017 Lacey GSP)

Section 7-05.3(5) is added with the following:

Contractor shall furnish and install East Jordan Iron Works Catch Basin Assembly, or approved equal, on all catch basins and storm sewer manholes unless otherwise indicated on the construction plans. Assemblies must be ductile iron and manufactured in the USA. Where a cover, grate or curb inlet is indicated in the plans, the Contractor shall furnish and install the indicated item.

7-05.3(6) Saddle Manhole w/ Cast-in-Place Base
(March 18, 2015 Lacey GSP)

Section 7-05.3(6) is added with the following:

Connections to existing sanitary sewer mains where no manhole is present shall be accomplished by installing a saddle manhole with a cast-in-place base in accordance with the Contract Plans.

The Contractor shall verify invert elevations prior to construction.

7-05.4 Measurement
(October 30, 2018 Lacey GSP)

Supplement this section with the following:

“Connect to Existing Manhole” will be measured per each location called out in the plans.

7-05.5 Payment
(October 30, 2018 Lacey GSP)

Supplement this section with the following:

The unit contract price per each for manholes and catch basins shall be full pay for furnishing all labor, tools, equipment, and materials required to place the structure including excavation, haul, backfill, testing, and all accessories, such as rings, covers, grates, steps, grate inlets, trash racks, beehive grates and debris cages, removable silt trap tees, GU liners, inside drops, outside drops and all other items needed to install the manhole complete in place in accordance with the plans and these specifications in conformity with the lines and grades staked.

“Adjust Manhole,” per each.

“Raise Manhole to Grade”, per each.

“Elevate Manhole”, per each

The unit Contract price per each for “Adjust Manhole”, “Raise Manhole to Grade”, and “Elevate Manhole” shall be full pay for all costs necessary to furnishing and installing the unit complete in place, including restoration of adjacent areas.

“Catch Basin Type ___ – ___ In. Diam. w/Oil Water Baffle,” per each

In addition to the unit price description for catch basins above, the unit Contract price per each for “Catch Basin Type ___ – ___ In. Diam. w/Oil Water Baffle” shall be full payment for all costs necessary to install the catch basin. The Oil Water Baffle, nuts, bolts, brackets, supports, pipe adapters, and the hardware required to fasten the separator to the catch basin shall be stainless steel and constructed in accordance with the City’s Standard Plan.

“Connect to Existing Manhole”, per each.

The unit contract price per each for “Connect to Existing Manhole” shall be full pay for furnishing all labor, tools, equipment, and materials required to connect to existing manhole in place, including concrete, concrete collars and sealants. Further, all excavation, haul, backfill, testing, and accessories shall be included in the unit contract price. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing manhole or the quantity of pipes connecting to the manhole. Items not specifically identified on the plans but necessary to properly connect to manhole shall be considered incidental and no other compensation shall be allowed.

“Saddle Manhole____Inch Diam. Type 1”, per each.

The payment for the items specified above shall be full pay for furnishing all labor, materials, tools, and equipment, necessary or incidental to furnishing and installing the unit complete in place.

“Low Point Drain____Inch Diam.”, per each

The unit contract price per each for low point drains shall be full pay for furnishing all labor, tools, equipment, and materials required to place the structure including excavations, haul, backfill, testing, and all accessories, such as rings, covers, steps, valves, valve boxes, pipe and all other items necessary for the unit to be installed complete in-place.

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.1 Description

[\(December 31, 2014 Lacey GSP\)](#)

This section is revised to read:

This work includes installing culverts, storm sewers, sanitary sewers, and water mains. The contractor shall also follow Section 7-02, 7-04, 7-09 or 7-17 as it applies to the specific kind of Work.

7-08.2 Materials

[\(October 16, 2009 Lacey GSP\)](#)

Supplement this section with the following:

Bank Run Gravel for Trench Backfill shall be in accordance with Section 9-03.19.
Controlled Density Fill shall be in accordance with Section 2-09.3(1)E.
Imported Pipe Bedding shall be in accordance with Section 9-03.16.

7-08.3 Construction Requirements

7-08.3(1) Excavation and Preparation of Trench

[\(October 30, 2018 Lacey GSP\)](#)

Supplement this section with the following:

The contractor shall locate and preserve all existing utilities per RCW 19.122. Utility locations shown on the plans depict the physical features that were visible at the time of the survey. The City of Lacey is not responsible for the location of underground utilities that are marked or not marked in the field by other utility providers. Utility service laterals are not typically shown on plans or locatable and the contractor shall anticipate such services. The City will locate the meters and the mains. For service laterals, pursuant to RCW 19.122.030, the City will indicate a presence of an un-locatable service lateral and if requested can meet with the contractor or provide copies of available records. The Contractor shall have a crimping

tool available during excavation to crimp any broken water services. Before commencing work, the contractor shall coordinate with One-Call services to determine the location of all utilities.

The Contractor shall pothole all apparent conflicts between existing utilities and proposed construction as approved by the Engineer. The Contractor shall notify Engineer of location and approximate time to complete prior to potholing. The Contractor shall notify the Engineer of any conflicts with the existing utilities and proposed work at least 3 days prior to proceeding with work. Potholing of the utilities shall be completed a minimum distance of 300 feet in front of pipe laying operations. No adjustment to the contract price or time will be made if the contractor fails to follow this specification. Potholing for Utility Crossings and Connections shall be performed by the Contractor using vacuum excavation truck or other device approved by the Engineer. If the Contractor potholes prior to approval no compensation shall be made for the potholing.

The Contractor shall deflect pressurized pipe at the joints no greater than the maximum allowable deflection as determined by the pipe or fitting manufacturer to avoid conflicts with crossing utilities. Vertical bends and vertical thrust blocking shall be avoided by deflecting pipe either upwards or downwards prior to the utility crossing.

7-08.3(1)A Trenches

(December 31, 2014 Lacey GSP)

Section 7-08.3(1)A is supplemented with the following to the fourth paragraph:

All material excavated from trenches shall not be piled on the roadway.

7-08.3(1)C Bedding the Pipe

(February 25, 2015 Lacey GSP)

Section 7-08.3(1)C is supplemented with the following

If native material meets the requirements of 7-08.2 the Contractor shall use all suitable native material prior to using imported pipe bedding or bank run gravel. All material shall be approved by the Engineer prior to placement. If the Contractor places imported material prior to approval, no compensation shall be made for the imported material.

7-08.3(3) Backfilling

(October 30, 2018 Lacey GSP)

Supplement this section with the following:

For backfilling trenches for longitudinal runs of pipe, the Contractor shall use all suitable native material prior to using bank run gravel and/or controlled density fill. All native backfill material shall be approved by the Engineer prior to placement. If the Contractor places imported material prior to approval, no compensation shall be made for the imported material. All backfill material shall be compacted and tested according to Section 2-03.3(14)D.

For transverse runs of pipe including the service lines within the roadway prism, the Contractor shall use controlled density fill unless approved otherwise by the Engineer. All native material shall be excavated, hauled and disposed of offsite. All exceptions shall be approved by the Engineer.

At the end of each workday, the Contractor shall install a lift of temporary asphalt cold mix on top of the trench backfill, flush with the existing pavement. No trench excavation shall be exposed to traffic without a temporary asphalt cold mix sealing the existing pavement surface. If approved by the Engineer, the

Contractor may choose to use HMA for Pavement Repair Cl. ½" PG 64-22 for permanent pavement repair if a bid item for this work has been included in the Proposal. All costs associated with providing and removal of temporary asphalt cold mix shall be incidental to the bid item for the pipe being installed and no other compensation will be allowed.

7-08.3(3)A Controlled Density Fill
(December 31, 2014 Lacey GSP)

Section 7-08.3(3)A is added with the following:

The Contractor shall use controlled density fill (CDF) as shown in the Plans or directed by the Engineer.

Controlled Density Fill shall meet the following requirements:

1750# Sand,
1750# Pea Gravel,
230# Water,
141# Portland Cement,
6 ounces Water Reducing Agent per 100 lbs. cement.

The Controlled Density Fill will require 24 hours of cure time, or as directed by the Engineer. Prior to backfill, all appurtenances shall be covered with 11 mill plastic as directed by the Engineer.

7-08.3(3)B Steel Plating for Pipe Trench
(February 25, 2015 Lacey GSP)

Section 7-08.3(3)B is added with the following:

The Contractor shall install steel plating over the trench per the plans to allow for CDF to fully cure and allow vehicle traffic to pass during non-working hours. The steel plating shall remain complete over the trench until the pavement repair is complete. This process shall be coordinated so that there will be minimum inconvenience to the public. All costs for all labor, materials, and equipment to furnish, place, assemble, install, maintain and remove the steel plates and associated materials shall be included in the unit contract price per foot of pipe installed and no additional compensation shall be allowed.

7-08.3(5) Pipe Abandonment
(April 30, 2015 Lacey GSP)

Add the following new section:

The Contractor shall abandon pipes where shown on the Plans or directed by the Engineer. For abandonment, removal, handling and disposal of asbestos cement piping, refer to Section 7-09.3(19)D of these Special Provisions. All abandonments shall be done after all new utility mains and service connections are installed unless authorized by the Engineer. Abandonments shall include all excavation, pipe cutting and removal, fittings, concrete plugging, and backfilling. Some abandonments require specific fittings as indicated on the Plans. All fittings required to complete the abandonment shall be included in the cost for the abandonment. Potholing per 7-08.3(1) to verify required fittings shall be done as directed by the Engineer. Pipe abandonments shall be completed in cooperation with the engineer in order to minimize disruption of utility service to the residents. If water services will be interrupted follow the requirements of 7-09.3(19)B.

All pipes to be abandoned shall have the first 2 linear feet of abandoned pipe filled/plugged with Pumpable Controlled Density Backfill (CDF). The Contractor shall use a Line Pumper to place the

required CDF mix. The Contractor shall use Holroyd Company's Mix # CDF50P or approved equal.. The inspector shall inspect the abandonment prior to backfilling.

In the case of an abandonment associated with a connection to an existing main, no payment shall be made for the bid item "Pipe Abandonment". The Contractor shall include all costs with these associated abandonments under the "Connect to Existing Water Main", "Connect to Existing Reclaimed Water Main", "Connect to Existing Gravity Sewer Main", or "Connect to Existing Sanitary Sewer Main" pay item. In addition, payment for "Pipe Abandonment" will only be paid for the locations and quantities called out on the plans or as directed by the Engineer.

7-08.3(6) Water Main/Sanitary Sewer Service Crossings **(February 25, 2015 Lacey GSP)**

Add the following new section:

Notify the Engineer if the waterline is less than 18 inches above sanitary sewer. The minimum cover as shown on the plans may be reduced as approved by the Engineer to maintain minimum vertical separation.

The Contractor shall install the longest standard length of water pipe so that the joints will fall an equal distance from any sewer crossing. In some cases where minimum separation cannot be maintained, it may be necessary to encase the water main as directed by the Engineer. No concrete shall be installed unless specifically directed by the Engineer.

Costs to cut and place water pipe as specified shall be incidental to the water pipe line and no other pay will be allowed.

7-08.3(7) Connections to Existing Mains **(October 30, 2018 Lacey GSP)**

Add the following new section:

The Contractor shall be responsible for determining the scope of work for connection to existing mains.

It shall be the Contractor's responsibility to field verify the location and depth of the existing main and the fittings required in accordance with 7-08.3(1) to make the connections to the existing mains including any pipe abandonment associated with the connections to existing mains. Connect to existing mains shall be completed in cooperation with the engineer in order to minimize disruption of service to the residents. All taps shall be a minimum of 36" away from the bell joint unless otherwise approved by the engineer.

Temporary blow-off assembly required for temporary or permanent release of air, chlorination or flushing purposes shall be provided by the Contractor as a part of the connection to existing main.

In the case of a live tap connection no payment shall be made for the bid item, "Connect to Existing Water Main". The Contractor shall include all costs associated with live taps under "_____ Inch Tapping Valve With Tapping Sleeve" pay items.

Payment for "Connect to Existing _____" will only be paid for the locations and quantities called out on the plans or as directed by the Engineer. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing main or the quantity of connecting pipes or other materials needed.

7-08.3(8) Detectable Marking Tape **(January 4, 2016 Lacey GSP)**

Add the following new section:

All pipeline installed under this contract will be identified by a continuous color coded tracer marker. For pressure lines it shall be buried 12 inches to 18 inches below finished grade, and for sewer lines it shall be buried 24 inches to 30 inches below finished grade. The marker shall be imprinted every 30 to 40 inches in permanent black ink indicating the type of line buried below and shall also have the word "Caution" prominently shown.

The tracer marker shall be plastic non-biodegradable and have a metallic core or backing which can be detected by a standard metal detector.

In addition to the detectable marking tape a U.S.E coated 12 gauge tracer wire shall be taped to all mains and service lines. The wire shall be brought up and tied to all valves and meter boxes. The tracer wire shall be looped up into all valve boxes per the plans. A low voltage grease-type splice kits, or better shall be used on all tracer wire connection points. After the wire nut is used to connect the wire together an overhand knot shall be tied just outside the connection to prevent it from coming apart. All service and mainline tracer wires shall be properly connected. A tracer wire magnesium anode shall be installed at all dead ends of the tracer / locate system. On long stretches of pipe anodes may be required at a minimum spacing of 1000'. The anode type shall be Copperhead Anode Part# ANO-14, 1.5# x 1.315"Dx18.5"L or approved equal. When connecting a new main or a new service to an existing main, the new tracer wire shall be connected to the existing tracer wire if available.

Special high strength locate wire may be required for directional drilling where the wire is allowed to be pulled in with the pipe or conduit. High strength wire shall be Neptco Trace-Safe 1800 lb. strength or approved equal and shall be connected with the wire manufacturer's connections.

Continuity or locate testing of the wire will be done by the City. The contractor shall give 72 hours notice for continuity testing by the City. The testing shall be conducted prior to paving or final restoration of landscape areas. The locating device will be connected to the tracer wire at any or all Gate Valves and Services and tracer wire shall transmit an acceptable signal strength as determined by the City for a minimum of 300 feet. Contractor will locate and repair any failed connections. The wire shall be furnished and installed by the Contractor.

Color coding of tape and wire shall be as follows:

- a) Water – Blue
- b) Sewer – Green
- c) Reclaimed – Purple
- d) Electrical conduits – Red
- e) Communication Conduits - Orange

Installation of the pipeline tracer marker and 12 gauge coated copper wire is considered incidental to the construction of the pipe and conduits and no other compensation will be allowed.

7-08.3(9) Concrete Thrust Blocking **(February 25, 2015 Lacey GSP)**

Add the following new section:

Install thrust blocking at bends, tees, dead ends, and crosses and as shown in the plans and as directed by the Engineer. Thrust Blocking shall be commercial concrete poured against undisturbed earth. An 11 mil

plastic barrier shall be placed between all thrust blocks and fittings. The calculations for thrust blocking are as follows:

Thrust at fittings in pounds at 225 pounds per square inch of water pressure.

Pipe Diameter	90° Bend	45° Bend	22-1/2° Bend	11-1/4° Bend	Dead End or Tee
4"	3,600	2,000	1,000	500	2,600
6"	8,000	4,400	2,300	1,200	5,700
8"	14,300	7,700	4,000	2,000	10,100
10"	22,300	12,100	6,200	3,100	15,800
12"	32,000	17,400	8,900	4,500	22,700
14"	43,600	23,600	12,100	6,100	30,800
16"	57,000	30,800	15,700	7,900	40,300
18"	72,000	39,000	19,900	10,000	51,000

SAFE SOIL BEARING LOADS:

Soil	Pounds per Square Foot
Muck, Peat	0,000
Soft clay	1,000
Sand	2,000
Sand and gravel	3,000
Sand and gravel cemented with clay	4,000

Ecology blocks may be used for thrust blocking if approved by the Engineer.

Installation of thrust blocking is considered incidental to the construction of the pipe and no other compensation will be allowed.

7-08.4 Measurement

(October 30, 2018 Lacey GSP)

Supplement this section with the following:

“Imported Pipe Bedding” will be measured per ton.

“Bank Run Gravel for Trench Backfill” will be measured per ton.

“Utility Potholing”, will be measured per hour.

“Pipe Abandonment” will be measured per each, for each section called out on the Plans.

“Controlled Density Fill” will be measured by the cubic yard for the quantity of material placed.

“Connect to Existing Water Main” will be measured per each location called out in the plans.

“Connect to Existing Sanitary Sewer Force Main” will be measured per each location called out in the plans.

“_____ Inch Pipe Encasement” shall be measured by the linear foot of pipe casing actually installed.

7-08.5 Payment

(October 30, 2018 Lacey GSP)

Supplement this section with the following:

“Bank Run Gravel for Trench Backfill” per ton and “Imported Pipe Bedding” per ton.

The unit contract price per ton for "Bank Run Gravel for Trench Backfill" and "Imported Pipe Bedding" shall be full compensation for all labor, material and equipment to furnish, place and compact the backfill. Native material used for backfill shall be considered incidental to the pipe installation and no additional compensation shall be allowed.

Payment shall be based on actual amount of imported bedding or bank run gravel for trench backfill used. The Engineer reserves the right to adjust the bid proposal quantity as required.

There will be no additional compensation made for the removal and wasting of trench excavation that is unsuitable for backfill.

If no bid item for "Bank Run Gravel for Trench Backfill" or "Imported Pipe Bedding" is included, any work described in these sections shall be included in the unit contract price per foot of pipe installed and no additional compensation shall be allowed.

"Utility Potholing", per hour shall be full compensation for all labor, material and equipment necessary to excavate, backfill, and restore the utility location(s) required by the Engineer and determine its vertical and horizontal location. Utility potholing will only be paid for work approved by the Engineer in advance.

If no bid item for "Utility Potholing" is included, any work described in this section shall be incidental to the project.

"Pipe Abandonment", per each.

The unit contract price per each for "Pipe Abandonment" shall be full pay for providing all labor, tools, equipment and materials necessary to abandon the specified piping including the plug material.

If no bid item for "Pipe Abandonment" is included, any work described in this section shall be incidental to the project.

"Controlled Density Fill", per cubic yard.

If no bid item for "Controlled Density Fill" is included, any work described in this section shall be incidental to the project.

"Connect to Existing Water Main", per each.

The unit contract price for "Connect to Existing Water Main" shall be full pay for providing all labor, tools, equipment, and materials necessary to connect to the existing main. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing main or the quantity of connecting pipes or other materials needed. If no such item exists all costs shall be incidental to the project and no additional compensation shall be allowed.

"Connect to Existing Sanitary Sewer Force Main", per each.

The unit contract price for "Connect to Existing Force Main" shall be full pay for providing all labor, tools, equipment, and materials necessary to connect to the existing force main. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing main or the quantity of connecting pipes or other materials needed. If no such item exists all costs shall be incidental to the project and no additional compensation shall be allowed.

The unit contract price per linear foot of "_____ Inch Pipe Encasement" shall be full compensation for all labor, material, tools and equipment to furnish, place, assemble, and install pipe casement, complete in place, including but not limited to pipe, all fittings including casing spacers, end seals and other fittings not shown on the Plans, joint materials, special requirements, commercial concrete or controlled density fill, and dewatering.

7-09 WATER MAINS

7-09.1 Description

(January 3, 2017 Lacey GSP)

Supplement this section with the following:

Various transition couplings, flanged coupling adapters, transition couplings with follower flanges and gaskets, and other miscellaneous couplings and fittings may be required for performance under this project.

It shall be the Contractor's responsibility to determine what specific couplings, adapters, and fittings that will be used to make connections shown on the plans. The Engineer has shown specific existing material types, and nominal sizes using the best information available. The Engineer has not determined the specific dimensions of existing materials. The Contractor shall submit a sketch showing configuration and materials of the proposed connection for review and approval.

Where vertical bends or pipe ends are required, the pipe and fittings shall be restrained on each side of the bend for a distance as recommended by the manufacturer.

7-09.2 Materials

(March 3, 2022 Lacey GSP)

Supplement this section with the following:

All pipe for water mains shall have flexible gasket joints and shall comply with one of the following two types unless otherwise specified on the plans:

Ductile iron pipe conforming to AWWA C 151 Standard Thickness Class 52 and have a cement mortar lining conforming to AWWA C 104. All pipes shall be joined using non-restrained joints that shall be rubber gaskets, push on type or mechanical joint, conforming to AWWA C 111.

PVC C900 pipe conforming to the latest revision of the following specifications, blue or white PVC Compound ASTM D1784 Class 12454B, Gasket ASTM F477, Manufacturing ASTM D2241. Pipe shall be certified NSF and meet requirements of Dimension Ratio 14.

All pipe, 12 inches or larger in diameter shall be ductile iron pipe unless PVC is approved by the Engineer.

Pipe restraints shall not be used as a substitute for thrust blocking unless approved by the engineer.

When restrained fittings are called out on the plans the pipe must be restrained a minimum of 2 joints either side of the fitting (90°, tee, etc.), minimum 25' each direction, or as directed by the engineer.

Ductile iron pipe, use restrained joint pipe with "Field Lok" type gaskets rated to 350 p.s.i and tested in accordance with ANSI/AWWA C111/A21.11, TR Flex as furnished by U.S. Pipe, Piranha as furnished by Romac, or Gripper Gasket LLC.

PVC pipe 10 inches or less in diameter, use PVC C900/RJ Restrained Joint Pipe Certa-Lok by CertainTeed Corporation, Eagle Loc 900 by JM Eagle or Diamond Lok-21 by Diamond Plastics. The plastic pipe shall conform to the latest revision of the following specifications, PVC Compound ASTM D1784 Class 12454, Gasket ASTM F477, Manufacturing ASTM D2241. Pipe shall be certified NSF and meet requirements of Dimension Ratio 14.

PVC pipe shall be restrained using bell joint restraint devices that have a working pressure of at least 200 psi with a minimum safety factor of 2:1 and shall be EBAA Iron, Inc., MEGALUG series 2800, Uni-Flange Series 1390, Romac Industries, Inc., U.S. Gripper, or approved equal.

PE Pipe: All 2 inch and smaller diameter pipe shall be NSF Approved, PE3408 blue polyethylene pipe manufactured from virgin materials. Pipe shall meet the following specifications:

- ANSI/AWWA C901
- ASTM D1248, ASTM D 3350, ASTM D 2239, ASTM D 3035 and ASTM D 2737,
- Pressure Class 200, SIDR - 7(Standard Inside Dimension Ration-Pressure Rated),
- Cell classification 345464C,

Pipe shall be manufactured by Interstate Plastics, Philips Driscopipe, Eagle Pacific, Superlon Plastics, U.S. Poly or approved equal.

All fittings for ductile iron pipe or PVC pipe shall be ductile iron compact fittings conforming to AWWA C 153 or conforming to AWWA C 110 and C 111. All shall be cement mortar lined conforming to AWWA C 104. Plain end fittings shall be ductile iron if mechanical joint retainer glands are installed on the plain ends. All fittings shall be flanged or restrained mechanical joint.

Mechanical joint fittings shall be equipped with a mechanical joint restraint device. The mechanical joint restraint device shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1 and shall be EBAA Iron, Inc., MEGALUG, Ford Uni-Flange Series 1400, Romac Industries, Inc., U.S. Gripper, or approved equal.

All pipe shall be new and in good condition with no visible signs of UV damage, fading or other defects.

7-09.3(19)B Maintaining Service

(December 31, 2014 Lacey GSP)

Supplement this section with the following:

Where existing water services must be interrupted, the Contractor shall notify the Engineer as to the date, time and duration of the interruption, a minimum of 72 hours (3 working days) prior to the interruption. The Contractor shall field verify pipe diameter and fittings prior to requesting a service interruption. The City will notify customers involved or affected by the water service interruption. The Contractor shall make every effort to schedule water main construction with a minimum interruption of water service. Water service can not be interrupted before 9:00 am. Existing pipe shall be cut and connection ready to be made by 11:00 am or the shutdown must be rescheduled.

7-09.3(19)D Asbestos Cement Water Main

(April 30, 2015 Lacey GSP)

Add the following new section:

Cutting, tapping, connecting to, or abandoning an Asbestos Cement Water Main shall be in accordance with the rules and regulations set forth by the Washington State Department of Labor and Industries, and as directed by the Engineer. All costs of complying with current regulations shall be included in the unit contract price for "Connect to Existing Water Main", "Pipe Abandonment", and "_____ Inch Tapping Valve With Tapping Sleeve" as applicable.

Remove Asbestos Cement Water Pipe

The Contractor shall remove asbestos cement water pipe from the site as shown in the Plans. Costs for removal of any fittings and appurtenances attached to the AC pipe shall be incidental to the pay item "Remove Asbestos Cement Water Pipe". State certified hazardous removal specialists or sub-contractor must be hired to perform the removal. The Contractor shall notify Department of Labor and Industries and the Olympic Air Pollution Control Authority and acquire all required permits, and shall coordinate with the Engineer, prior to beginning the removal work. It shall be the Contractor's responsibility to furnish all necessary safety equipment and protective clothing and to protect the adjacent environment in accordance with applicable environmental and safety laws and regulations. Removed pipe, conduits and debris shall be properly handled, transported, and disposed. The Contractor shall submit to the Engineer documentation from certified hazard disposal site showing the chain of custody where asbestos cement pipe is disposed.

Abandon Asbestos Cement Water Pipe

Asbestos Cement Pipe with more than 2 feet of cover from finished grade or where shown on the plans or as directed by the Engineer shall be abandoned in-place per 7-08.3(5).

Asbestos Handling and Disposal

Prior to performance of any contract work, the Contractor shall obtain all permits from, and provide notification to, the Washington State Department of Labor and Industries, the U.S. EPA, the local air pollution control agency, and other permitting and regulatory agencies with jurisdiction over the work involving asbestos as the law requires.

Prior to commencing asbestos related work, the Contractor shall provide the Engineer with written verification of approvals and notifications that have been given and/or obtained from the required jurisdictional agencies, and the Contractor's schedule for all work involving asbestos removal. The schedule shall include the sequencing and scheduling of asbestos related work, and coordination with subcontractors. The Contractor shall notify the Engineer when all approvals have been received and notifications have been made, as required by the agencies involved.

The Contractor shall ensure the safety of all workers, visitors to the site, and the general public in accordance with all applicable laws, rules, and regulations.

The Contractor shall designate a Washington State Certified Asbestos Supervisor (CAS) to personally supervise the asbestos removal and to ensure that the handling and removal of asbestos is accomplished by certified asbestos workers, pursuant to Washington State Department of Labor and Industries standards. The Contractor shall ensure that the removal and disposal of asbestos meets the requirements of EPA regulation 40 CFR Part 61, local health department regulations, and all other applicable regulations.

7-09.3(24) Disinfection of Water Mains

(April 2, 2018 Lacey GSP)

Modify this section with the following:

The Contractor shall provide extra safeguards to prevent contamination, rocks, sand or foreign matter from accumulating in the pipe.

Unless otherwise approved by the Engineer, the method for disinfecting water mains shall be by dry Calcium Hypochlorite conforming to ANSI/ AWWA B300 and NSF/ANSI 61 as defined in Section 7-09.3(24)D of the WSDOT Standard Specifications and AWWA C651-14 Sec. 4.1.3 and Sec. 4.3. If adhesives are used to secure chlorine tablets to the pipe interior, they must meet the requirements of NSF/ANSI 61 and AWWA C651-14 Sec. 4.3.3.

Pipe and fittings used in connections to existing mains shall be less than one pipe length (generally less than 20 ft), and spray disinfected, swabbed or immersed for disinfection as per AWWA C651-14 Sec. 4.10 and 4.11 (1% chlorine solution).

Bacteriological testing shall be done by the City per AWWA C651-14 Sec. 5.1 Option A or B. Option B may not be able to be used if the pressure in the line is too low to allow the sample tap to run continuously for 15 minutes without opening the system valve. Bacteriological testing must be scheduled with the Engineer at least 3 days in advance and cannot be done on Fridays. Results are typically provided within four (4) working days but may take up to (7) working days. If the samples fail to produce acceptable results, the main shall be re-chlorinated by the continuous-feed or slug method until satisfactory results are obtained per AWWA C651-14.

The Contractor shall flush the new main. Flushing mains shall require the assistance of City utility personnel and shall be coordinated with the Engineer 3 working days in advance.

7-09.3(24)A Flushing

(December 31, 2014 Lacey GSP)

Modify this section by deleting the first sentence of the fourth paragraph and replacing it with the following:

The Contractor shall be responsible for disposal of treated water flushed from mains and shall neutralize the wastewater for protection of aquatic life in the receiving water and their associated surface and ground water tributaries, before disposal into any natural drainage channel, i.e., receiving water, waters of the State, including wetlands.

7-09.4 Measurement

(April 30, 2015 Lacey GSP)

Supplement this section with the following:

“Blow-off Assembly for Extendable Main” shall be measured per each.

“Remove Asbestos Cement Water Pipe” shall be measured per linear foot.

7-09.5 Payment

(October 30, 2018 Lacey GSP)

Supplement this section with the following:

The pay item in quotes is revised to read, “_____ Inch Water Main.”

The unit contract price for “_____ Inch Water Main” per linear foot shall be full pay for furnishing all labor, materials, tools and equipment, necessary to install the water main, complete in-place, including but not limited to pipe, couplings, adaptors, crosses, tees, bends, reducers, caps, plugs, restrained joint fittings, bend markers, and other fittings not specifically identified on the plans. Further, all excavation, bedding, backfilling with native material, compacting, temporary patching, formed thrust blocking, testing, flushing, and disinfecting shall also be included in the unit contract price. Items not specifically identified on the plans but necessary to properly install the water main shall be considered incidental to the water main and no other compensation shall be allowed.

“Blow-Off Assembly for Extendable Main”, per each.

The unit contract price per each for "Blow-Off Assembly for Extendable Main" shall be full pay for furnishing all labor, materials, tools and equipment, necessary to the cap on the new water main, thread and install required valves, valves boxes, brass pipe, bends, couplings and other fittings not specifically called out on the plans.

Temporary blow-off assembly required for temporary or permanent release of air, chlorination or flushing purposes shall be provided by the Contractor as a part of the new water main. The unit contract price for "___ inch Water Main" shall be full pay for providing all labor, tools, equipment, and materials necessary to abandon the pipe including temporary blow-off assembly.

The payment for bid item "Remove Asbestos Cement Water Pipe" shall be full pay for disposal, certified labor, materials, tools, equipment, including safety and protective equipment to protect labor necessary to remove, transport, and dispose of asbestos cement water pipe, fitting and appurtenances to an approved disposal site. The cost of all permits required for the removal and disposal of this material is included in this bid item.

7-12 VALVES FOR WATER MAINS

7-12.2 Materials

[\(April 2, 2018 Lacey GSP\)](#)

Supplement this section with the following:

All valves shall be non-rising stem, resilient wedge gate valves conforming to AWWA C515 unless otherwise specified and shall be American AVK, Clow, EJ Flowmaster, Kennedy, M & H, Mueller, Waterous Series 2500. The minimum cover over the valve, measured from the valve operator nut to finished grade, shall be 20 inches. Gate valves 14 inches and larger that are unable to provide 20 inches of cover over the valve shall be factory equipped with a bevel gear actuator for horizontal installation as directed by the engineer. The bevel gear actuator shall be rated for buried installations.

Butterfly valves shall meet all the requirements of AWWA C504 Class 150B and shall be Allis Chalmers, Kennedy, Linseal III, M&H, Mueller, Pratt Groundhog.

Valves shall be bolted to the tee and the cross with flanged ends. Joint materials for flanges shall be 1/8 inch thick one piece, cloth inserted rubber gaskets conforming to AWWA C107-78.

Bolts for all flanged and mechanical joints shall be high strength, low alloy steel bolts only, meeting the current provisions of American National Standard ANSI/AWWA C111/A 21.11 for rubber gasket joints for cast iron or ductile iron pipe and fittings.

Valve boxes shall be East Jordan Iron Works #248 or Olympic Foundry VB-950, 6-3/4 inch OD with recessed handle type iron cover marked "LACEY WATER."

Tapping sleeves shall be stainless steel with ductile iron flange and shall be Romac "SST" or approved equal.

Two inch air and vacuum release valve shall be a two inch ARI D-040. Fiberglass enclosure shall be Vent Guard Model No. AVG1824, Beige in color, manufactured by Hot Box, Inc. (800) 736-0238. An insulation pouch shall be placed over the air release assembly. The 18" x 24" insulation pouch shall be beige in color with the opening on the 18" side, and manufactured by DeKorra Products LLC

Valve insertions shall be Romac InsertaValve or Hydra-Stop Insta-Valve Plus and be completed by an experienced installer.

7-12.3(3) Raise Valve Box to Grade

(November 20, 2020 Lacey GSP)

Add the following new section:

Where shown on the plans or where directed by the Engineer, existing valve boxes shall be raised to the grade as staked or otherwise designated by the Engineer. The Contractor shall supply and install new valve boxes and covers as part of raising valve boxes to grade. The finished installation shall conform to the detail shown in plans.

All new and existing valve boxes located in any unpaved area shall have a concrete pad poured or placed entirely around each valve box. The pad shall be a minimum of 36 inches by 36 inches for each valve box. The concrete shall be commercial concrete or better with a minimum thickness of 8 inches.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

See Section 5-04.3(26) Utility Access for additional requirements.

7-12.3(4) Valve Insertion

(December 31, 2014 Lacey GSP)

Add the following new section:

The valve insertions shall be a Romac InsertaValve or Hydra-Stop Insta-Valve Plus Valve Assembly and Sleeve. The water main material type is FILL IN TYPE. Prior to valve insertion, the Contractor shall ensure that there is enough cover over the pipe for a valve box to be installed flush to existing surface. No interruption of water service shall be allowed.

7-12.3(4) Tapping Concrete Cylinder Pipe (CCP)

(December 31, 2014 Lacey GSP)

Add the following new section:

The following materials shall be minimally required to perform the tap on the concrete cylinder pipe:

- 3/8" steel saddle cylinder cut to radius/curve of pipe to be tapped
- 150lb steel flange follower
- 3/16" steel collar follower plate
- 1/4" pipe thread fitting attached to collar follower plate for air test of weld
- 1/4" pipe plug

The following procedure shall be followed when tapping the concrete cylinder pipe:

1. Pre weld 150lb flange collar to square end of 3/8" steel saddle cylinder.
2. Chip away concrete outer layer to expose steel water pipe and steel wire wrap.
3. Tack weld steel wire wrap rods to steel water main pipe prior to cutting and bending back.
4. Clean and mark area for weld.
5. Weld on 3/8" steel saddle with 3 rows of weld.

6. Weld on 3/16" steel follower plate with 3 rows of weld on each seam.
7. Air test weld through 1/4" pipe fitting on follower plate
8. Bend back and weld down steel wrap rods to pipe and follower plate evenly.
9. Bolt on flanged tapping valve and perform tap.
10. Repair/finish concrete on water main with cement mortar.

7-12.5 Payment

(April 2, 2018 Lacey GSP)

Supplement this section with the following:

"Raise Valve Box to Grade," per each.

"_____ Inch Gate Valve," per each.

The payment for the various items specified above shall be full pay for furnishing all labor, materials, tools, and equipment necessary to install the unit complete in place on the water main, including trenching, concrete pads and concrete or asphalt restoration of adjacent areas, disinfecting, testing, blocking of valve, valve box and marker post.

"_____ Inch Air and Vacuum Release Valve," per each.

The unit contract price for per each for "_____ Inch Air and Vacuum Release Valve" shall be full pay for furnishing all labor, materials, tools and equipment, necessary to install the air/vacuum release valve, complete in-place, including but not limited to pipe, valves, couplings, adaptors, bends, reducers, box and concrete foundation, and other fittings not specifically identified on the plans.

"_____ Inch Tapping Valve with Tapping Sleeve," per each.

"_____ Inch Tapping Valve with Tapping Sleeve on CCP," per each.

The payment for the various items specified above shall be full pay for furnishing all labor, materials, tools, and equipment necessary to install the unit complete in place on the water main, including any size tapping sleeve required for the connection, trenching, jointing, welding, preparation, concrete pads, disinfecting, testing, blocking of valve, valve box and marker post.

"_____ Inserted Valve," per each.

The unit contract price per each for "_____ Inserted Valve" shall be full pay for furnishing all labor, materials, tools and equipment, necessary to install the inserted valve, complete in-place, including but not limited to the pipe sleeve, pipe tap, valve, valve box, excavation and backfill, including concrete pads and other materials required to install the inserted valve not specifically identified in the plans.

Restoration of asphalt for "_____ Inch Tapping Valve with Tapping Sleeve", "_____ Inch Tapping Valve with Tapping Sleeve on CCP" and "_____ Inserted Valve" will be measured and paid as "HMA for Pavement Repair Cl.____PG____" in accordance with the provisions of Section 5-04.

Restoration of concrete for "_____ Inch Tapping Valve with Tapping Sleeve", "_____ Inch Tapping Valve with Tapping Sleeve on CCP" and "_____ Inserted Valve" will be measured and paid as "Cement Conc. Sidewalk" in accordance with the provisions of Section 8-14.

"Lift Station Wash Down Hydrant Reconnection", per each.

The unit contract price for the above bid item shall be full compensation for all labor, material, and equipment to reconnect the existing wash down hydrant service complete up to the existing RPBA device including, but not be limited to, service saddle, tapping the pipe, 6" threaded brass nipple, 2" threaded gate valve, valve box, service line, and all miscellaneous couplings, fittings, and adapters to install the service line and connect to the existing setup.

7-14 HYDRANTS

7-14.2 Materials

(March 3, 2022 Lacey GSP)

Modify this section with the following:

Fire hydrants shall be Waterous Pacer, Mueller Centurion, M & H Reliant Style 129S, Kennedy K-81, or EJIW 5CD250 conforming to AWWA C 502. The valve opening shall be 5 1/4-inch diameter. Hydrants shall be mechanical joint, 4-1/2 feet standard bury with two 2-1/2 inch outlets and one pumper port, and shall have a 1.25-inch pentagonal operating nut (counter clockwise opening). All hydrants shall be outfitted with a 4-1/2" NST by 5" Storz adapter with cap.

Some locations may require other than the 4-1/2 feet standard bury. Contractor shall be responsible for determining actual required bury and provide proper standpipe height.

Blow-off Hydrants shall be Eclipse MainGuard Model No. 78. Pipe and fittings for blow-off hydrant installation shall conform to the requirements of Section 7-15. The factory 2.5" cap shall be replaced with a plastic/nylon style cap with 2.5" NST thread.

7-14.3(1) Setting Hydrants

(December 31, 2014 Lacey GSP)

Supplement this section with the following:

A 6 foot wide cleared area, centered along the pipe, shall extend from the edge of pavement to 3 foot past the new hydrant, not to exceed the right-of-way line. The clearing may include trimming of trees and shrubs to an overhead height of 10 feet as directed by the Engineer. Upon completion of fire hydrant installation, the cleared area shall be graded and restored as directed by the Engineer.

7-14.5 Payment

(February 14, 2023 Lacey GSP)

Supplement this section with the following:

The unit contract price for all items in this section shall also include, but not be limited to, trench excavation and backfill, gravel backfill, fill and grading 3' around hydrant and between hydrant and edge of roadway, painting, extensions, fittings, ductile iron spool between the main and hydrant, Storz adapter, Megalug restraining joints, and blue hydrant marker.

"Blow-Off Hydrant Assembly", per each.

The unit contract price per each for "Blow-Off Hydrant Assembly" shall be full pay for furnishing all labor, materials, tools and equipment, necessary to the cap on the new water main, thread and install required valves, valves boxes, brass pipe, bends, couplings and other fittings not specifically called out on the plans.

7-15 SERVICE CONNECTIONS

7-15.2 Materials

(November 20, 2020 Lacey GSP)

Supplement this section with the following:

Service pipe from the main to the new meter shall be the appropriate size shown in the table below.

Meter Size	Pipe Diameter
5/8" Single Meter	1-1/2"
5/8" Double Meter	1-1/2"
1"	1-1/2"
2"	2"

One and one-half and two inch diameter service lines shall be NSF Approved, PE4710 blue polyethylene pipe manufactured from virgin materials. Pipe shall meet the following specifications:

- ANSI/AWWA C901
- ASTM D1248, ASTM D 3350, ASTM D 2239, ASTM D 3035 and ASTM D 2737,
- Pressure Class 200, SIDR - 7(Standard Inside Dimension Ration-Pressure Rated),
- Cell classification 345464C,

Pipe shall be manufactured by Interstate Plastics, Philips Driscopipe, Eagle Pacific, Superlon Plastics, U.S. Poly or approved equal.

Service pipe from the new 5/8" meter to the old 5/8" meter location shall be minimum 1" diameter polyethylene plastic pipe minimum pressure Class 200. Service pipe greater than 100 ft. in length from new meter to old meter location shall be 1-1/2" diameter until it is connected to existing service line. The Contractor shall identify the diameter of the existing service line to remain in-place at the old meter location and provide the required fittings necessary for the transition.

Service Saddle shall be ductile iron with double stainless steel straps or bands. All clamps or bands shall have rubber gaskets and I.P. threaded outlets (Ford FS202, Romac 202S or approved equal.)

1-1/2" Corporation Stop shall be all brass, "ball valve" type, male iron pipe thread inlet by pack joint outlet conforming to AWWA C800, Ford FB1101, Mueller E25029, AY McDonald 74704B-1.5" or approved equal. 2" Corporation Stop shall be Ford FB 11017G, Mueller H9969, AY McDonald 74704B-2" or approved equal.

1-1/2" Curb Stop shall be all brass, "ball valve" type, pack joint inlet by female iron pipe thread outlet conforming to AWWA C800, Ford B61, Mueller E25171, AY McDonald 76101-1.5" or approved equal. 2" Curb Stop shall be Ford FOB61-777, Mueller B20283, AY McDonald 76101-2" or approved equal.

"U" Branch Piece for 5/8" double meter shall be all brass, 1" male iron pipe thread inlet by two 3/4" male iron pipe outlets conforming to AWWA C800 (Ford U88-43-7.5, Mueller MH15364GFWD, AY McDonald 708UMM 1"x3/4"x7.5" or approved equal.

Stainless steel inserts shall be used with all pack joint fittings. Further, all bushings, reducers, nipples, couplings, adaptors, and fittings required to make service connections shall be all brass conforming to AWWA C800 manufactured by Ford or approved equal.

Meter setters shall be all copper, Ball valve style with locking wing and check valve. The Contractor shall remove and reinstall the existing meter in the new setter after testing of new water main and service

line. The Contractor shall use care in removing and reinstalling the existing meter. All fittings and meters shall be kept clean and free of dirt or foreign material and sprayed with a light bleach / chlorine solution prior to installation. Services shall be flushed at the customer hose bib after final meter installation to clear the service line, remove air and to verify good flow. All costs for replacing a broken meter due to the Contractor's neglect shall be borne by the Contractor.

Meter Size	Meter Setter
5/8" Single Meter	Ford VH 72-15W or Mueller B2404-R2EF15 or AY McDonald AY-720-215WCD
5/8" Double Meter	Ford VH 72-15W (2 ea) or Mueller B2404-R2AG15 (2ea) or AY McDonald AY-720-215WCD (2ea)
1" Meter	Ford VBH 74-15W or Mueller B2404-R2AG15 or AY McDonald AY-720-415WCDD
1-1/2" Meter	Ford VBH 76-15HB or Mueller B2423-29900015-15 with high by-pass or AY McDonald AY-720R615WDF
2" Meter	Ford VBH 77-15HB or Mueller B2423-29900015-2 with high by-pass or AY McDonald AY-720R715WDF

Meter boxes shall be placed in non-traffic or non-parking areas whenever possible. Meter boxes and lids shall be Christy Fibrelyte. Covers with reader doors in them will not be allowed. Meter boxes may be placed in traffic/parking areas if shown on the plans or as directed by the engineer. In these areas the meter boxes shall be Old Castle or Christy reinforced concrete with a steel H20 traffic rated cover marked water.

Meter Size	Meter Box	Meter Box
5/8" Single Meter	Christy Fibrelyte FL30T-12	Christy Fibrelyte FL30-D with "City of Lacey" in the lid
5/8" Double Meter	Christy Fibrelyte FL36T-12	Christy Fibrelyte FL36-D with "City of Lacey" in the lid
1" Meter	Christy Fibrelyte FL36T-12	Christy Fibrelyte FL36-D with "City of Lacey" in the lid
1-1/2" Meter	Christy Fibrelyte FL36T-18	Christy Fibrelyte FL36-D with "City of Lacey" in the lid
2" Meter	Christy Synertech SYN2436T-18	Christy Synertech SYN2436T with "City of Lacey" in the lid

Imported service line bedding shall meet the requirements of Section 9-03.16. See Section 7-08 "Imported Pipe Bedding" for measurement and payment of service line bedding.

7-15.3 Construction Requirements **(December 31, 2014 Lacey GSP)**

Supplement this section with the following:

The Contractor shall locate and verify the size and type of existing services. The approximate locations of the existing services are shown on the Plans. Existing services may be located on private property, close to buildings, in backyards, or other complex construction locations.

The Contractor shall notify private property owners 24 hours prior to any scheduled water outage. In addition, the Contractor shall knock on the door of the house affected one hour before the outage and notify the homeowner of the outage. Disruption of existing services shall be minimized.

Service line from the new water main to the new meter setter, including the new meter setter, shall be bedded with imported service line bedding. The service line from the new meter setter to the connection to the existing service line shall be bedded with suitable native material as directed by the Engineer.

The Contractor shall take special care with the work on private property. The Contractor shall verify with the Engineer and/or Property Owner final service line route that will minimize damage to landscaping or improvements, and restore all damaged items to a condition equal to or better than the original condition. For service lines crossing under sidewalks, driveways, or landscaped areas, the Contractor shall layout new service line routes prior to excavation for approval by the Engineer. Service line routes should minimize removal of asphalt, concrete, and mature landscaping.

7-15.3(2) Connection To New Water Main **(January 3, 2017 Lacey GSP)**

Add the following new section:

Service lines between the new water main and the existing service line past the existing meter setter shall be installed prior to testing and disinfecting the new water main. Disinfect fittings and pipe prior to installation.

Installation/replacement of a service to a new water main shall include the following:

- install new service line to new meter setter and box,
- install new service line from new meter setter to existing meter service,
- verify each individual existing water service is disconnected,
- remove old service to include; meter, meter box, setter, and any associated appurtenances,
- reinstall existing meter in new meter setter,
- connect new service line to existing service line on the property side of the old service (no jumpers will be allowed at existing setters).
- coordinate with the customer to flush the service line at the customer's outside faucet and verify all faucets are functioning

If after abandoning the old water main(s) it is determined that a customer is without water and a service was not shown on the plans at that particular location, the Contractor shall within 24 hours install a new service connection as directed by the Engineer.

7-15.3(3) Connection To Existing Water Mains **(January 3, 2017 Lacey GSP)**

Add the following new section:

Disinfect fittings and pipe prior to installation.

Connection of a service to an existing water main shall include the following:

- locate, excavate, and connect to the existing water main,

- install new service (with or without meters as identified on the plans),
- verify each individual existing water service is disconnected (unless meter credit is noted),
- remove old service to include; meter, meter box, setter, and any associated appurtenances (unless meter credit is noted),
- install a service line from the new service to the existing service line on the property side of the old service (unless meter credit is noted).

If after abandoning the old water main(s) it is determined that a customer is without water and a service was not shown on the plans at that particular location, the Contractor shall within 24 hours install a new service connection as directed by the Engineer.

7-15.3(4) Pushing or Drilling of Water Service Pipe **(January 3, 2017 Lacey GSP)**

Add the following new section:

For service lines crossing existing pavement roadway or as directed by the Engineer new service lines shall be pushed or drilled using approved methods. The Contractor may elect to push or bore service lines beneath existing pavement or mature landscaping as approved by the Engineer.

All pushed or bored lines shall be cased in a PVC or steel sleeve of appropriate size to accept water service line. The Contractor shall “window” existing utilities at expected crossing conflicts to ensure clearance while pushing the service line. The Contractor shall be responsible for any damages including but not limited to existing underground utilities during construction activities.

If shown on the plans or directed by the Engineer, the Contractor shall make a maximum of three (3) attempts to successfully push or directional drill each service line. If after three attempts per service line, the soil conditions do not allow for service line install, the Contractor shall be allowed to open-cut excavate the service line route and install the service line.

All costs for pushing or boring operations shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

7-15.3(5) Repair of Existing Water Service **(January 3, 2017 Lacey GSP)**

Add the following new section:

If while pushing or excavating, an existing service line is broke. The Contractor shall follow the course of action as stated below:

- Immediately call or notify the Engineer
- Crimp service line if possible,
- If needed, assist the Engineer or City of Lacey Water repair crew to throttle down the water main,
- Disinfect all fittings and pipe prior to installation. Excavate and repair broken service line while under the direct supervision of the Engineer or wait for assistance from the City of Lacey Water repair crew,
- Flush repaired service line at setter with the assistance of the Engineer until water flow becomes clean, inspect and flush setter and meter, reconnect old service line to meter setter (if applicable) and resume service to residence. Flush hose bib at residence or building until air is removed and water runs clear.

7-15.3(8) Adjust Water Meter **(April 30, 2015 Lacey GSP)**

Add the following new section:

The Contractor shall adjust the setter, water meter, and meter box to finished grade as shown on the plans or where directed by the Engineer.

7-15.5 Payment **(October 16, 2016 Lacey GSP)**

Supplement this section with the following:

- “___ Inch Single Meter Service Connected to Existing Water Main”, per each.
- “___ Inch Double Meter Service Connected to Existing Water Main”, per each.
- “___ Inch Single Meter Service Connected to New Water Main”, per each.
- “___ Inch Double Meter Service Connected to New Water Main”, per each.

The unit contract price for the above bid items shall be full compensation for all labor, material, and equipment to furnish and install the meter service(s) complete including, but not be limited to, service saddle, tapping the pipe, corporation stops, service lines, meter, meter setter or tandem setter, pressure reducing valve(s), meter box, and all miscellaneous couplings, fittings, and adapters to install the service lines and connect to the existing service. Furthermore, pushing, boring, or directional drilling of new service line including encasement, repair of broken utility and service lines, and lawn and landscape restoration per service install is included.

Progress payment of 50% shall be allowed once service line(s) is installed up to existing meter setter(s) and water main and service lines are flushed and tested. Complete and final payment shall be allowed once residence(s) has full use of new system and repair of lawn and landscaping is completed.

For purposes of payment, there will be no distinction made for the difficulty of disconnecting the old meter and reconnecting to the new meter or the length of service line required for each new meter service.

“Adjust Water Meter”, per each.

The payment for the items specified above shall be full pay for furnishing all labor, materials, tools, and equipment, and disposing of removed materials necessary or incidental to furnishing and installing the unit complete in place.

- “___ Inch Single Service Pressure Reducing Valve with Tandem Setter”, per each.
- “___ Inch Double Service Pressure Reducing Valves with Tandem Setters”, per each.

7-17 SANITARY SEWERS

7-17.1 Description **(October 29, 2010 Lacey GSP)**

Supplement this section with the following:

Various transition couplings, flanged coupling adapters, transition couplings with follower flanges and gaskets, and other miscellaneous couplings and fittings may be required for performance under this project.

It shall be the Contractor's responsibility to determine what specific couplings, adapters, and fittings that will be used to make connections shown on the plans. The Engineer has shown specific existing material types, and nominal sizes using the best information available. The Engineer has not determined the specific dimensions of existing materials.

7-17.2 Materials

(November 20, 2020 Lacey GSP)

Delete this section and replace with the following:

Gravity Sewer Pipe - Pipe used for gravity sewer shall meet the requirements of WSDOT Section 9-05.12(1) Solid Wall PVC Sanitary Sewer Pipe. All pipe shall be white or green in color.

PVC Pressure Pipe – All pipe less than 4 inches in diameter shall be Schedule 80 PVC, ASTM D1784. All pipe 4 through 12 inches in diameter, shall be PVC C900 DR 14, meeting the requirements of WSDOT Section 9-30.1. A combination of solvent weld and PVC threaded schedule 80 fittings may be required to properly plumb the pump discharge piping to and through the valve vault. All pipe shall be grey, green or white in color. No sewer pipe installed in this project shall be blue.

HDPE (High density Polyethylene Pipe) Pressure Pipe- All HDPE pipe shall be Hi density ASTM D 3350, SDR 11 4710 socket welded or butt fusion welded and be sized by inside pipe diameter (see table below). IPS HDPE pipe shall be used; however, in cases where the required inside diameter of the pipe cannot be obtained using IPS HDPE, ductile iron pipe size (DIPS HDPE) pipe may be required. All HDPE pipe used for sewer shall be green or black with a green stripe manufactured on the pipe.

Table: Typical Sizes And Dimensions For Iron Pipe Size (IPS) PE3408
High Density Polyethylene (HDPE) Pipe

PRESSURE RATING		DR 11 (160 PSI)		
NOMINAL SIZE	ACTUAL O.D.	MINIMUM WALL THICKNESS	AVERAGE I.D.	WEIGHT LB/LF
2"	2.375"	0.216"	1.917"	0.639
3"	3.500"	0.318"	2.825"	1.387
4"	4.500"	0.409"	3.633"	2.294
5"	5.375"	0.489"	4.339"	3.272
5"	5.563"	0.506"	4.491"	3.505
6"	6.625"	0.602"	5.348"	4.971
7"	7.125"	0.648"	5.752"	5.750
8"	8.625"	0.784"	6.963"	8.425
10"	10.750"	0.977"	8.678"	13.089
12"	12.750"	1.159"	10.239"	18.412
14"	14.000"	1.273"	11.302"	22.199
16"	16.00"	1.455"	12.916"	28.994
18"	18.00"	1.636"	14.531"	36.696
20"	20.00"	1.818"	16.145"	45.304
22"	22.00"	2.000"	17.760"	54.818
24"	24.00"	2.182"	19.375"	65.237
26"	26.00"	2.364"	20.989"	76.563
28"	28.00"	2.545"	22.604"	88.795
30"	30.00"	2.727"	24.218"	101.934

Note:

Average inside diameter calculated using nominal OD and minimum wall plus 4% for use in estimating fluid flows. Actual ID will vary.

Pipe Restraint - Where pipe is specified as restrained joint pipe 4 inches through 10 inches in diameter, use PVC C900/RJ Restrained Joint Pipe Certa-Lok by CertainTeed Corporation, Eagle Loc 900 by JM Eagle or Diamond Lok-21 by Diamond Plastics. The plastic pipe shall conform to the latest revision of the following specifications, PVC Compound ASTM D1784 Class 12454, Gasket ASTM F477, Manufacturing ASTM D2241. Pipe shall be certified NSF and meet requirements of Dimension Ratio 14.

Pipe Restraint - Where specified as restrained joint pipe larger than 10 inches in diameter, the pipe shall be restrained using bell joint restraint devices that have a working pressure of at least 200 psi with a minimum safety factor of 2:1 and shall be EBAA Iron, Inc., MEGALUG series 2800, Uni-Flange Series 1390, Romac Industries, Inc., U.S. Gripper, or approved equal.

Ductile Iron Pipe - All ductile iron pipe shall conform to ANSI/AWWA C151/A21.51. Thickness class 52 specifications. Ductile iron pipe for sewer shall be ordered as bare pipe without cement lining and without outside coating. The pipe shall be lined on the inside to a minimum of 35 mils thick with Protecto 401 or 15 mils thick with 3M ScotchKote 134 fusion bonded epoxy. The pipe shall be coated on the outside to a minimum of 20 mils thick with Ceramawrap Ceramic Epoxy or 15 mils thick with 3M ScotchKote 134 fusion bonded epoxy. Coatings shall be applied according to the manufacturers' requirements by a certified applicator of the product. Coatings shall not be applied to pipe, fittings or valves in the field by the contractor.

Ductile Iron Fittings for sewer mains - All ductile iron pipe fittings shall be compact ductile iron style and shall be ordered bare (without cement lining or outer coating) and then be coated with epoxy rated for sewer by a professional coating firm. Coatings applied by the fitting manufacturer shall be excepted pending approval of the coating material submitted. Coatings/linings shall be Protecto 401, Ceramawrap or 3M ScotchKote 134 per the Ductile iron pipe specifications shown above. Mechanical joint (MJ) fittings shall be installed with an approved mechanical joint restraint device. The mechanical joint restraint device shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1 and conform to ANSI A21.10 and AWWA C110. Products shall be EBAA Iron, Inc., MEGALUG Series 2000PV, Romac Industries, Inc., U.S. Gripper, or approved equal.

Eccentric Plug Valves for sewer mains – Valves 3” through 12” shall have a round full port opening (100% pipe area), comply with AWWA C517 specifications and be constructed of cast or ductile iron. Flanged valves shall be drilled to ANSIB16.1, Class 125 specifications and mechanical Joint valves shall comply with ANSI/AWWA C111/A21.11 specifications. Valves shall be eccentric quarter turn with resilient encapsulated plug, have 95% nickel seat, u-cup stem seal and permanently lubricated stainless steel bearings. Valves shall be 175psi working pressure. 3” and 4” valves shall be standard ¼ turn operation. Valves 6” and larger shall have a totally enclosed, sealed and permanently lubricated worm gear actuator with stainless shaft. Valves for buried service shall have a gear box and be designed for underground applications. Buried valves shall be fitted with standard 2” square hub operator. 3” and 4” valves installed in vaults shall be supplied with hand lever bar to attach to hub. Valves 6” and larger in vaults shall be supplied with hand wheel operator attached to gear box. Plug valves for sewer service shall be coated by the manufacturer on the inside and outside with the manufacturers epoxy coating rated for sewer. Valves shall conform to AWWA C509-80 and be Crispin 800 series, Pratt -Ballcentric, or Milliken - Millcentric.

PVC Ball Valves – 2” and smaller PVC ball valves shall be Schedule 80 PVC or Poly true union valves with red handle. Cepex, Spears, KBI or approved equal. Valves shall be threaded FIPT x FIPT Style. Valves shall be bolted to tees and the crosses with flanged ends. Joint materials for flanges shall be 1/8 inch thick one piece, cloth inserted rubber gaskets conforming to AWWA C107-78, rated for sewer service. Bolts, nuts and hardware for all flanged and mechanical joints in the wetwell and valve vault shall be 316 stainless steel only, meeting the current provisions of American National Standard ANSI/AWWA C111/A 21.11 for rubber gasket joints for cast iron or ductile iron pipe and fittings.

Valve boxes shall be EJ Ironworks or Olympic Foundry VB-950, 6-3/4 inch OD with recessed handle type iron cover marked "CITY OF LACEY SEWER".

All pipe shall be new and in good condition with no visible signs of UV damage, fading or other defects.

7-17.3(2) Cleaning and Testing

7-17.3(2)A General

(March 3, 2022 Lacey GSP)

The first sentence shall be deleted and replaced with the following:

All sewer force mains and appurtenances shall be tested in sections of convenient length under a hydrostatic pressure of not less than 175 psi for 15 minutes.

Supplement this section with the following:

All pipe installed shall be tested in accordance with WSDOT Section 7-09.3(23).

All sanitary sewer pipe, including laterals, shall be high-velocity cleaned, televised and approved prior to paving. Hydrant flushing lines is not an acceptable method of cleaning. If rocks or other debris are found in manholes, the Contractor shall re-clean the sewer pipe.

7-17.3(2)H Television Inspection

(March 3, 2022 Lacey GSP)

Delete this section and replace with the following:

The television inspection shall be completed with a CCTV color camera recorded in standard DVD format. CCTV inspection crawler shall be equipped with a flow depth indicator, such as a 1-inch steel bar or ball, to measure the magnitude of pipe vertical fluctuation. If multiple television inspections of the same pipe are required, they shall be completed in the same direction each time.

Television inspection shall meet related Pipeline Assessment and Certification Program (PACP) codes developed by NASSCO, Inc. Television inspection of pipelines shall be performed by experienced personnel trained in identifying structural and operational defects, obstacles and service connections by closed circuit color television. Personnel shall be PACP-trained and certified field technicians. No sags or bellies in the pipe shall be greater than 1/2 inch in depth.

The Contractor shall supply one paper copy and one electronic copy of the pipe inspection form for each pipe reach televised. Two copies of electronic video files shall be provided in DVD format. The Contractor shall submit DVDs and written reports for review within three (3) working days after line televising. The written report must note any areas that are not in compliance with the plans and specifications. Acceptance of the line will be made after the television inspection video and report has been reviewed and approved by the Engineer. Allow the Engineer (5) working days to review the video and report before scheduling paving.

Acceptance of the line will be made after the television inspection DVD has been reviewed and approved by the Engineer.

The cost incurred in making all television inspections shall be included in the unit contract price per foot of pipe installed and no additional compensation shall be allowed.

7-17.4 Measurement

(October 30, 2018 Lacey GSP)

Section 7-17.4 is supplemented with the following:

“Side Sewer Connection – Gravity” shall be measured per each.

“Side Sewer Stub – Force Main” shall be measured per each.

“Side Sewer Stub – Gravity” shall be measured per each.

No specific unit of measurement shall apply to the lump sum item for “Dewatering Sewer Trench.”

“Pig Launch Port Assembly” shall be measured per each.

“___ Inch Plug Valve” shall be measured per each.

“___ Inch Ball Valve” shall be measured per each.

“Connect to Existing Sewer System” shall be measured per each location called out on the plans.

7-17.5 Payment

(October 30, 2018 Lacey GSP)

Section 7-17.5 is supplemented with the following:

“___ Inch Diameter Sewer Pipe”, per linear foot.

The unit contract price per linear foot for “___ Inch Diameter Sewer Pipe”, shall be full compensation for all labor, material, and equipment to furnish, place, assemble, and install sewer line, complete in place, including all wyes, tees, caps, plugs, clean outs, special fittings, joint materials, commercial concrete, bend markers, adjustment of inverts to manholes, dewatering, bypass pumping, cleaning, televising inspection and testing. Further, all excavation, hauling, disposal, compaction, temporary patching and other required earthwork shall be included.

“___ Inch Diameter Force Main Sewer Pipe”, per linear foot.

The unit contract price per linear foot for “___ Inch Diameter Force Main Sewer Pipe”, shall be full compensation for all labor, material, and equipment to furnish, place, assemble, and install force main sewer pipe, complete in place, including tees, bends, caps, reducers, special fittings, thrust blocking, dewatering, testing, and connection to existing system. Further, all excavation, hauling, disposal, compaction, temporary patching and other required earthwork shall be included.

“Side Sewer Stub – Force Main”, per each.

“Side Sewer Stub – Gravity”, per each.

The unit contract price per each of the various items specified above shall be full pay for furnishing all labor, materials, tools, and equipment, necessary or incidental to furnishing and installing the unit complete in place on the sewer main, including trenching and temporary patching, but not be limited to all miscellaneous couplings, fittings, wyes, the 6” sewer lateral, the cleanout, the 1 ¼” service, the valves, the service box as shown on the plans, and other items necessary for the unit to be installed complete in-place.

“Side Sewer Connection – Gravity”, per each.

The unit contract price per each of the various items specified above shall be full pay for furnishing all labor, materials, tools, and equipment, necessary or incidental to furnishing and installing the unit complete in place on the sewer main, including trenching and temporary patching, but not be limited to, service saddle, tapping the pipe, service lines, setters, boxes, and all miscellaneous couplings, fittings, and adapters to install the service lines and connect to the existing service, jointing, testing, blocking of valves, valve boxes, wyes, and other items necessary for the unit to be installed complete in-place. For purposes of payment, there will be no distinction made for the difficulty of disconnecting the old service and reconnecting to the new service or the length of service line required for each new service.

“Connect to Existing Sewer System”, per each.

The unit contract price per each for “Connect to Existing Sewer System” shall be full pay for furnishing all labor, tools, equipment, and materials required to connect to existing system in place, including but not be limited to concrete, concrete collars and sealants. Further, all excavation, haul, backfill, testing, accessories, and removal of manholes shall be included in the unit contract price. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing sewer system or the quantity of connecting pipes or other materials needed. Items not specifically identified on the plans but necessary to properly connect to system shall be considered incidental and no other compensation shall be allowed.

“Connect to Existing Sanitary Sewer Force Main”, per each.

The unit contract price per each for “Connect to Existing Sanitary Sewer Force Main” shall be full pay for furnishing all labor, tools, equipment, and materials required to connect to existing force main in place. Further, all excavation, haul, backfill, testing, and accessories shall be included in the unit contract price. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing sewer force main. Items not specifically identified on the plans but necessary to properly connect to main shall be considered incidental and no other compensation shall be allowed.

" _____ Inch Air and Vacuum Release Valve,-Sewer" per each.

The unit contract price for per each for “_____ Inch Air and Vacuum Release Valve” shall be full pay for furnishing all labor, materials, tools and equipment, necessary to install the air/vacuum release valve, complete in-place, including but not limited to pipe, valves, couplings, adaptors, bends, reducers, box and concrete foundation, and other fittings not specifically identified on the plans.

"Dewatering Sewer Trench", lump sum.

The lump sum contract price for “Dewatering Sewer Trench” shall be full pay for submitting a Dewatering Plan, and all Work required to dewater the sewer trench during construction and keep the work area dry during construction and backfilling as specified.

"Pig Launch Port Assembly," per each.

The unit contract price per each for "Pig Launch Port Assembly," shall be full compensation for all labor, material, and equipment to furnish and install manholes, valves boxes, pipe supports, covers, caps, and other appurtenances not otherwise compensated for by other bid items. Further, all excavation, hauling, disposal, compaction and other required earthwork shall be included.

" _____ Inch Plug Valve," per each.

The payment for " _____ Inch Plug Valve", shall be full pay for furnishing all labor, materials, tools, and equipment, necessary or incidental to furnishing and installing the unit complete in place on the sewer main, including trenching, jointing, testing, blocking of valve, valve box and other items necessary for the valve to be installed complete in-place.

" _____ Inch Ball Valve," per each.

The payment for " _____ Inch Ball Valve", shall be full pay for furnishing all labor, materials, tools, and equipment, necessary or incidental to furnishing and installing the unit complete in place on the sewer main, including trenching, jointing, testing, blocking of valve, valve box and other items necessary for the valve to be installed complete in-place.

“Abandon Community Septic System and Drain Fields”, lump sum.

The lump sum contract price for “Abandon Community Septic System and Drain Fields”, shall be full pay for providing all labor, tools, equipment and materials necessary to complete the requirements of this section and abandon the specified community septic system and associated piping.

All costs to furnish and install concrete pads shall be incidental to the unit contract price for each item and no other pay shall be allowed.

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.3 Construction Requirements

8-01.3(1) General

(May 28, 2020 WSDOT GSP)

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

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

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

1. Installing, adaptively managing, and maintaining temporary erosion and sediment control BMPs to assure continued performance of their intended function. Damaged or inadequate BMPs shall be corrected immediately.
2. Updating the TESC Plan to reflect current field conditions.
3. Inspecting and reporting on all areas disturbed by construction activities, all on-site erosion and sediment control BMPs, and all storm water discharge points every calendar week and within 24 hours of runoff events in which storm water discharges from the site or as directed by the Engineer.
4. Submit to the Engineer no later than the end of the next working day following the inspection a TESC Inspection Report that includes:
 - a. When, where, and how BMPs were installed, maintained, modified, and removed.
 - b. Observations of BMP effectiveness and proper placement.
 - c. Recommendations for improving future BMP performance with upgraded or replacement BMPs when inspections reveal TESC BMP deficiencies.
 - d. Identify for each discharge point location whether there is compliance with state water quality standards in WAC 173-201A for turbidity and pH.

Inspection of temporarily stabilized, or inactive sites may be reduced to once every calendar month if allowed by the Engineer.

8-01.3(9)A2 Silt Fence

(October 16, 2014 Lacey GSP)

Supplement this section with the following:

If the Engineer determines that site conditions dictate additional silt fence throughout the duration of the project, the Contractor shall immediately install additional silt fence as directed by the Engineer.

8-01.3(9)D Inlet Protection

(November 20, 2020 Lacey GSP)

Delete the first paragraph and replace with the following:

All catch basins and inlets within 500 ft of the project limits, downstream or affected by construction activities shall have inlet protection and as required by the Engineer. Inlet protection devices shall be installed prior to beginning clearing, grubbing, or earthwork activities.

8-01.4 Measurement

[\(April 30, 2015 Lacey GSP\)](#)

Supplement this section with the following:

All items required for erosion control shall be included in the lump sum bid item “Erosion/Water Pollution Control” unless a specific bid item is included in the proposal.

Modify this section with the following:

No specific unit of measure shall apply to the lump sum item “ESC Lead”

8-01.5 Payment

[\(November 20, 2020 Lacey GSP\)](#)

Modify this section with the following:

“Silt Fence”, per linear foot.

“High Visibility Silt Fence”, per linear foot

The unit contract price per linear foot shall be full pay for all equipment, labor and materials to install, maintain, remove and dispose of the silt fence as shown in the Plans and as directed by the Engineer.

The lump sum contract price for “ESC Lead” shall be full compensation for all labor, material, tools, and equipment necessary to meet the requirements of Section 8-01.3(1)B to include conduct site inspections, stormwater sampling, report preparation, report submittal, lab work, and personnel certification.

Delete “Erosion/Water Pollution Control”, by force account and add the following bid item:

“Erosion/Water Pollution Control”, lump sum.

The lump sum contract price for “Erosion/Water Pollution Control” shall be full compensation for all labor, material, and equipment necessary to implement, install, maintain and remove all erosion and water pollution control items including removal and disposal of sediment, stabilization and rehabilitation of soil disturbed by these activities, and any additional Work deemed necessary by the Engineer to control erosion and water pollution and all Work required for compliance with the Construction Stormwater General Permit (CSWGP) including annual permit fees. The requirements for the ESC Lead shall also be included in this lump sum bid item if no bid item is included in the proposal. The Contractor shall bear full responsibility for erosion/water pollution control in all sources of material, disposal sites, and haul roads.

8-02 ROADSIDE RESTORATION

8-02.2 Materials

[\(October 29, 2010 Lacey GSP\)](#)

Materials shall meet the requirements of the following publication:

American Standard for Nursery Stock, ANSI Z60.1-2004, American Nursery and Landscape Association.

Plant varieties shall be as specified in the plant material list and be true to botanical name as listed in the latest edition of "Standardized Plant Names" as adopted by American Joint Committee of Horticulture Nomenclature.

Plants shall be nursery-grown unless otherwise indicated. Plants are required to be from stock acclimated to project site environmental conditions, having been consistently cultivated and grown under site conditions. No cold storage plants will be permitted. Grafted trees shall be done within 3 inches of ground level. Plant material conditions shall meet the following requirements:

Be fresh, well foliated, in prime condition when in leaf and exhibiting normal habit of growth.
Have all leaders and buds intact, free of disease, injury, insects, insect eggs, larvae and indications of strawberry root weevil.
Be free of seeds; weeds, weed roots and other such contaminants.

The Contractor shall notify the Engineer 3 days prior to delivery of any plants. The Engineer will approve all plants before unloading. Any plants that are rejected shall be removed from the project site immediately and replaced with acceptable plants.

Ball and burlapped (B&B) stock is required to have a natural ball sufficient to ensure survival and healthy growth.

Bare root (BR) material is required to have sufficient, intact root systems to ensure survival and healthy growth.

Container-grown plants are required to have sufficient growth to hold the earth intact when removed from containers, but shall not be root-bound.

Geotextile root control system shall be NDS Root Barrier Panel Model No. EP-2450 or Engineer approved equal.

8-02.3(4) Topsoil **(November 20, 2020 Lacey GSP)**

Supplement this section with the following:

The Contractor shall thoroughly scarify the subgrade by tilling, disking or harrowing after the subgrade elevation has been established as indicated on the Plans. If the construction includes a roundabout, the Contractor shall scarify the existing subgrade a minimum of 24 inches deep in the center island of the roundabout to break up the base material of the existing road prior to installation of the topsoil.

Topsoil shall be placed at 12" depth in planter strips, and 18" depth in medians, and a minimum of 42" inches below the top of curb in the roundabout island unless otherwise shown in the Plans.

Final grading shall include raking, floating, dragging, and rolling to remove all surface irregularities and to provide a firm, smooth surface with positive drainage. Imported topsoil shall not be placed more than 3 days prior to permanent seeding.

8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation **(November 20, 2020 Lacey GSP)**

Section 8-02.3(5) is supplemented with the following:

Planting area preparation will be required in all landscaped areas. Planting area preparation shall include removal of existing vegetation, construction debris, all visible rocks or other detrimental material from planter strips located within the project limits before adding soil amendments to the imported topsoil for the roadside planting areas, uniformly tilling the soil amendments into the top 8"-12" of soil, using a rototiller or similar machine, grading the blended soils, and then thoroughly watering down.

Planting area preparation in the roadside includes preserving and protecting existing trees. Where noted on plan, Engineer shall identify and mark existing trees to be saved. Following marking, Contractor shall provide and place Engineer approved high visibility orange plastic fence around critical root zones of each marked tree or tree groupings. Do not begin construction activity on the roadsides until all plastic mesh fencing is in place, and approved by the Engineer.

Identify existing trees that are to be removed, that were not removed during roadway construction, prior to starting planting. Obtain approval to remove existing trees from Engineer. Contractor to provide, install and maintain tree protection throughout project duration.

All planting area preparation shall be conducted under favorable weather conditions only. Soil shall not be worked when excessively dry or wet. Engineer reserves the right to stop any work taking place when conditions are considered detrimental to soil structure or plant growth.

All planting areas shall be weed free and approved by the Engineer before starting rototilling (with soil amendments distributed over designated surface areas) and after rototilling has been completed. All beds shall then be approved by the Engineer for fine grading, before starting any planting operations.

All planting surface areas shall be left with a firm, uniform surface, free of weeds and undulations or other irregularities. Remove all rocks, clods, and debris from all planting surfaces, unless otherwise specified on the plans or directed by the Engineer.

Preliminary grading shall be done in such a manner as to anticipate the finished grades after placement of topsoil, soil amendments and bark mulch (if specified). Excess soil shall be removed or redistributed before application of soil mix, fertilizer, and mulch. Where soil is to be replaced by plants and mulch, allowance shall be made so that when finish grading has begun, there shall be no deficiency in the specified depth of mulched planting beds.

The Contractor shall bear final responsibility for proper surface drainage of the site and the features thereon. Any discrepancy in the drawings or specifications, obstructions on the site, or prior work done by another party which the Contractor feels precludes establishing proper drainage, shall be brought immediately to the attention of the Engineer in writing for correction or relief of said responsibility.

8-02.3(7) Layout of Planting, Lawn and Seeding Areas **(January 3, 2017 Lacey GSP)**

Delete this section and replace with the following:

All location layout and staking will be the responsibility of the Contractor.

Tree and plant locations shown shall be considered approximate unless otherwise noted or shown with specific distance. Tree locations may be adjusted, with prior Engineer approval, so that the tree does not interfere with sightline requirements, street signs, irrigation, overhead utilities, or any other apparatuses such as utilities.

Do not locate or plant any tree within 15 feet of a streetlight. Do not locate or plant any tree within 3 feet of a utility vault, 2.5 feet of back-of-sidewalks or back-of-curbs, and 15 feet of a fire hydrant.

In mixed planting areas, trees shall be planted first, followed by the larger shrubs, low shrubs, and then groundcover material.

The Contractor shall layout all trees and plants in the approximate location for approval by the Engineer. All coordination shall be done with the Engineer.

8-02.3(8) Planting **(March 3, 2022 Lacey GSP)**

Supplement this section with the following:

The Contractor shall make required field adjustments as directed by the Engineer without additional cost and to avoid obstructions. Plants not properly planted or temporarily heeled-in will be rejected and shall be removed from the site.

Maintenance shall begin following the installation of each plant and shall continue until project acceptance. Work includes, but is not limited to, watering, weeding, cultivating, tightening, and repairing guys, removal of dead materials, resetting plants to proper grades or upright positions and other operations necessary to ensure proper growth and survival of all plant material.

If it is discovered that Common horsetail (*Equisetum Arvense*) has been imported with plant material, the Contractor shall remove the tree or shrub in its entirety including the rootball and surrounding soil, and replace the tree or shrub in-kind.

Before excavation, plants to be installed shall be placed as indicated on Planting Plan. The Engineer shall check locations of all plants in the field and shall indicate the exact position before actual planting operation proceeds.

Set trees and shrubs in center of pits, plumb and straight. Plant at such a level that after settlement, the crown of the plant will be slightly above finish grade.

Set plants in backfill mixture to such depth that the top of the plant ball will be slightly above finished grade. Backfill the remainder of the hole and soak thoroughly. Water the backfill until saturated to the full depth of the hole.

A mound of earth shall be formed as directed around each tree and shrub so as to produce a shallow basin to retain water, the diameter to exceed the diameter of the root spread at planting. Plants shall be watered in place during and after backfilling.

Prune plants only at time of planting and according to standard horticultural practice to preserve the natural character of the plant. All pruning shall be done under supervision of Engineer. Remove all dead wood, suckers, and broken or badly bruised branches, unless plants are deemed to be unacceptable and rejected by the Engineer. Use only clean, sharp tools.

Immediately after planting operations are complete, all planting beds and plant pits shall be dressed off so as to achieve a neat and presentable appearance. Planting operations shall be identical for all plants to be planted. Refer to Plans, specifications and directions from Engineer.

If applicable, Contractor shall plant trees, shrubs, and groundcover material in non-irrigated areas between October 1, and January 31.

Plant bare root and live cutting material during winter dormancy (November 30 and February 1) unless otherwise directed by the Engineer. Install live cuttings the same day as harvest or cutting from parent material.

Notify the Engineer a minimum of 48-hours before beginning any roadside planting-related work.

8-02.3(9) Seeding, Fertilizing and Mulching

(November 20, 2020 Lacey GSP)

Supplement this section with the following:

The Contractor shall provide water or irrigation to all seeded areas as often as conditions dictate depending on weather and soil conditions. Water will be provided as described in Section 2-07.

Seed shall be broadcast with approved hydraulic seeding equipment, in combination with wood cellulose fiber mulch, soil stabilizer and fertilizer distributed uniformly over designated areas. Half of seed shall be sown with sower moving in one direction, the other half with sower moving at right angles to first sowing. Hydroseeding operator shall remove all seed mulch in its entirety from adjoining paving, structures and plants

Fertilizer shall be applied over the surface of plant basin. Install fertilizer tablets as specified.

All trees shall have an application of beneficial mycorrhizal fungi applied at time of planting in accordance with the manufacturer's recommendations.

8-02.3(9)A Dates For Application of Seed

(November 20, 2020 Lacey GSP)

Delete the second paragraph of this section and replace with the following:

In areas receiving automatic irrigation, seeding may occur between May 15 and September 1. Actual planting shall be performed only when weather and soil conditions are suitable and in accordance with locally accepted practice and/or approved by the Engineer.

8-02.4 Measurement

(October 16, 2023 Lacey GSP)

Supplement this section with the following:

Topsoil, compost and mulch will be measured by the cubic yard.

Tree stakes, fertilizer, headers, planting area preparation, planting area weed control, and tree protection will be incidental to the "unit costs" of plantings as specified.

PSIPE (Plant Selection Including Plant Establishment) for one (1) year will be measured for each plant on the project.

The measurements for each plant will be made for the size and type of plant shown in the plans.

8-02.5 Payment

(October 16, 2023 Lacey GSP)

This section with the following:

Payment will be per each for all plant bid items included in the bid proposal under the Botanical and Common Name for each plant. The unit contract price per each for each plant shall be for full compensation for all labor, material and equipment necessary to install and maintain all items as specified complete. Price shall also include but not be limited to preparation, delivery, planting, protecting, pruning, rebar ties, tree stakes, guying, wrapping, rubber tree tie, fertilizer, pre-emergent and post-emergent herbicides, and geotextile root control system as shown in the Plans. "PSIPE", (Plant Selection Including Plant Establishment) per Lump Sum shall be incidental to each plant on the project.

All plants include Plant Selection Including Plant Establishment to obtained, propagated, and grown, partial payments will be made as follows after inspection by the Engineer:

Payment of 5 percent of the unit Contract price, per each, when the plant materials have been contracted, propagated, and are growing under nursery conditions. The Contractor shall provide the Engineer with certification that the plant material has been procured or contracted for delivery to the project for planting within the time limits of the project. The certification shall state the location, quantity, and size of all material.

Payment will be increased to 15 percent of the unit Contract price, per each, upon completion of the initial weed control and planting area preparation Work.

Payment will be increased to 60 percent of the unit Contract price per each for the contracted plant material in a designated unit area when planted.

Payment will be increased to 70 percent of the unit Contract price per each for contracted plant material at the completion of the initial planting.

Payment will be increased to the appropriate percentage upon reaching the following plant establishment milestones:

June 30th	80 percent
September 30th	90 percent

Completion of first-year plant establishment or after 100 percent all replacement plants have been installed, whichever is later

Plant establishment milestones are achieved when planting areas meet conditions described in Section 8-02.3(13).

Excavation for the roadside planting areas will be considered incidental to the bid item for topsoil placement.

The following bid items shall be full pay for furnishing all labor, materials, tools and equipment, necessary to scarify the subgrade, install, rake, remove debris such as rocks and organic material and shape the material as shown in the plans:

"Topsoil Type A", per cubic yard,
"Fine Compost", per cubic yard,
"Medium Compost", per cubic yard,
"Coarse Compost", per cubic yard,

“Soil Amendment”, per cubic yard,
“Pond Liner”, per cubic yard,
“Bark or Wood Chip Mulch” per cubic yard.

The unit contract price per acre for "Seeding, Fertilizing, and Mulching", shall be full compensation for all labor, material, tools and equipment necessary to place, protect, irrigate and maintain all items as specified.

The Contractor shall receive payment of 60 percent of the unit contract price, per acre, upon the completion of the initial hydroseeding. Payment shall be increased to 100 percent of the unit contract price, per acre, upon the point where the first mowing is required, as determined by the Engineer. All partial payments shall be limited to the actual area of weed free healthy vigorous growth.

Partial payments shall not constitute acceptance of the area, nor shall the ownership or title transfer to the Contracting Agency. Areas found not acceptable at any stage shall be rejected and replaced at the Contractor's expense. Previous partial payments made for areas rejected will be deducted from future payments due the Contractor.

8-03 IRRIGATION SYSTEMS

8-03.3 Construction Requirements

[\(March 3, 2022 Lacey GSP\)](#)

Delete the first paragraph of this section and replace with the following:

The Contractor shall design and construct the irrigation system, including water service taps, for all areas required to be irrigated as shown on the Plans. Contractor shall have the proposed irrigation design independently reviewed by a competent irrigation design specialist as approved by the Engineer (i.e. Landscape Architect, Certified Landscape Irrigation Auditor, etc.). All deficiencies identified by the independent reviewer shall be corrected prior to submitting the design to the Engineer for final approval. The independent review shall be documented by the Contractor, indicating the name of the reviewer and date the review occurred, and submitted to the Engineer as part of the final review. All costs for the independent design review will be the responsibility of the Contractor and no additional compensation shall be allowed. The design shall be submitted a minimum of 30 days before starting irrigation installation work with Engineer approval.

The design shall be submitted to the Engineer as either an electronically produced (CADD) drawing(s) or on mylar plan(s). Contractor may request the Engineer provide an electronic drawing file (AutoCAD) or plastic mylar site plan(s), as base files for the contractor-provided irrigation design.

During construction, the Contractor shall prepare and maintain a Record Drawing as-constructed (prints) of the irrigation system(s) on-site at all times. The Contractor shall update the prints weekly and make them available to the Engineer, upon request for review and inspection. Updates shall include all work completed to date including changes in design. Upon completion of the irrigation system, the prints shall be given to the Engineer for review. The Contractor will be required to complete all Record Drawing changes and corrections, then finalize the prints, and deliver to the Engineer upon completion.

The Contractor shall include the following requirements for the irrigation system design:

1. Use point-of-connection and sleeves as shown on the Plans.
2. Provide 100% water coverage to all irrigated areas.

3. Irrigate seeded areas, shrub areas, and street trees (with grates) using separate remote control valve zones.
4. Field verify the points-of-connection for the roadsides and the locations of water and electrical service lines prior to starting irrigation construction.
5. Verify available water service line hydro-static water pressure and available flow (system operation: 10 p.m.-6 a.m.) prior to starting irrigation construction, and report findings/concerns to the Engineer immediately upon discovery.
6. Include remote control valve wire, automatic controllers, and electrical service connections in the irrigation design.
7. Provide head-to-head coverage and design using matched precipitation rate heads.
8. Provide a low-flow, drip irrigation system that will deposit water uniformly throughout the planted beds.
9. All tree wells shall be isolated into separate zones
10. Show all mainline and lateral pipe sizes, remote control and isolation valves, sprinkler heads, drip zones, and other equipment.
11. At each valve location show Valve I.D. number.
12. Drainage out of the lowest heads on sprinkler zones shall not occur when the system shuts off.
13. Individual irrigation zones shall have matching manufacturer make and model sprinkler heads or dripline emitters with matched precipitation rates and performance characteristics.
14. Never exceed manufacturer's recommendation for maximum velocities and flow rates.
15. Locate irrigation equipment for convenient operation and maintenance. All underground equipment, excluding pipe, shall be installed in irrigation valve boxes and vaults.
16. Install thrust blocking on mainlines three inches in diameter or greater.
17. Take care to minimize the potential for vandalism, especially with the temporary on-grade irrigation components, during and after construction to the maximum extent possible.

8-03.3(1) Layout of Irrigation System (October 29, 2010 Lacey GSP)

Delete the first sentence of this section and replace with the following:

The Contractor shall stake the irrigation system according to the design and receive approval of staked locations from the Engineer prior to construction.

8-03.3(3) Piping (January 3, 2017 Lacey GSP)

Supplement this section with the following:

All pipes shall have a 12" minimum separation from sidewalks, curbs, walls, and fences. Parallel pipes shall have 3" minimum separation. Pipe depths shall be as follows:

1. PVC pipe on pressure side of irrigation control valve, control wires and quick-coupling valves (pressure mainlines): 18" minimum cover.
2. Pipe on non-pressure side of irrigation control valve (lateral lines): 12" minimum cover.
3. Sleeving: 24" minimum cover.
4. Drip tubing shall be a minimum of 6" below finished grade.

Seal all threaded joints with Teflon tape. No PVC pipe shall be threaded or connected to a threaded fitting without an adapter. Keep pipe free from dirt or debris at all times. Cover ends of pipe when not in progress of installation. Cleaning of cutting burrs is mandatory.

Connect pipe using two-step solvent weld process. Do not move or handle pipe for a minimum of 15 minutes while solvent welds are curing. No water shall be permitted in pipe until a period of at least 10 hours has elapsed for solvent weld setting and curing. The joints shall be allowed to cure at least 24 hours before pressure is applied to the system.

Avoid all proposed and existing tree locations when installing remote control valves and irrigation pipe lines. If necessary, obtain Engineer's approval to adjust equipment locations to avoid damaging the root systems of protected trees, or utilities. Valve boxes shall be placed no closer than 24" from back of curb and 12" from sidewalks placed parallel to adjacent concrete flatwork. Grouped or manifolded remote control valves shall be spaced evenly to present a neat appearance.

Enclose all valves in individual valve boxes. Use valve box extensions as required. Valve boxes shall have a one cubic foot minimum drain rock sump. Valve bonnet packings and bolts shall be checked and tightened. Provide sufficient room to service all equipment.

Install the subterranean tubing with the water outlets facing upward whenever possible. Offset outlets to form a triangular pattern throughout the tubing layout. In irregular areas, some water outlets may end up too close to fixed improvements and may have to be capped-off.

8-03.3(3)A Sleeves

(October 29, 2010 Lacey GSP)

Supplement this section with the following:

Irrigation lines shall be sleeved under all asphalt and concrete.

Irrigation sleeve sizes and locations shall be incorporated in the Contractor-designed irrigation system plans. The Contractor shall try to incorporate irrigation sleeving within or adjacent to electrical sleeve trenches. Sleeves shall be extended a minimum of 12 inches beyond the edge of curbs, walks, walls and/or other paved surfaces. Cap and identify sleeve ends. Plug ends of sleeves to prevent soil from entering ends.

The Contractor shall ensure that all sleeves are installed prior to paving or other hardscape is complete. If it is determined that any sleeves are not installed prior to paving, the Contractor shall bore or push the sleeves as required at no additional cost.

8-03.3(5) Installation

(March 3, 2022 Lacey GSP)

Delete the first, second, third and fifth paragraphs of this section. Supplement this section with the following:

Shrub heads, unless otherwise specified, shall be placed on swing joints approximately at finished grade.

Final position of the valve boxes, capped sleeves, and quick coupler valves shall be between ½" and 1" above finished grade or mulch.

Quick Couplers

All quick couplers shall be installed on triple swing joints and at the lowest elevation point of the mainline. Minimum riser size shall match the quick coupler inlet. Set top of all quick couplers 2" below finished grade in specified enclosures.

Dripline Irrigation

Each zone to have a shut off valve, disk filter, electric control valve and pressure regulator assembly. Drip systems shall be end feed PVC header type.

Sprinklers

All ½" inlet spray heads shall be installed on flexible swing pipe. All ¾" and 1" rotor heads shall be installed on triple swing joints. Minimum riser size shall match the sprinkler inlet. Set tops of all heads flush with final finish grade. Set all heads perpendicular to finish grade and 2" back from curbs and walks unless otherwise noted.

Disc Filter

Install the disc filter, horizontally level, below grade and before or after the remote control valve as indicated in the installation details. The position of the disc filter in the valve box shall be off-center to allow for periodic removal of the disc element for servicing. Include a minimum of 1 cubic foot of ¾" minus gravel in the bottom of the valve box.

8-03.3(6) Electrical Wire Installation

[\(October 29, 2010 Lacey GSP\)](#)

Supplement this section with the following:

Install one common ground wire, one control valve wire and three spare wires in each direction from the automatic controller to the furthest automatic control valve grouping (looped to each valve) on each run. The wires shall be run and looped around each control valve grouping and continue to the furthest automatic control valve grouping. If an automatic control valve grouping branches off a main run, it too will be required to have a separate common ground wire, one control valve wire and three spare wires to the valve grouping. A wire label shall be placed on each wire at the control valve and at the controller. Splices will be permitted only at junction boxes, valve boxes, or at control equipment. A minimum 2 feet of excess conductor is to be left at all splices, terminals, and control valves.

The splices shall be made with Spears DS 400 neatly coil two (2) feet of cable slack at each RCV solenoid connection within access boxes.

Label all zones on chart inside controller door as to area locations with plastic label tape.

Wiring may be installed in the same trench as the water pipe. Sharp bends or kinks in the wiring shall not be permitted. Wires shall be unreel in place alongside or in the trench, and shall be carefully placed along the bottom of the trench. Under no condition shall the cable be unreel and pulled into the trench from one end.

Not less than one foot of cable slack shall be left on each side of all splices. The slack cable shall be placed in the trench in a series of "S" curves.

Control wires are to be taped together at 5 foot intervals with electrical tape. Do not tape wire to pipe. Keep space between wire and pipe. Tie a loose 20" wire loop at all changes of direction greater than 30 degrees. Untie all loops after all connections have been made.

Sleeve all control wire that does not run with irrigation piping. Include one bare copper locator wire (#14) parallel to each irrigation pipeline that does not otherwise have control wires in trench. When backfilling around valve box, ensure that spare wires are exposed in valve box.

8-03.3(8) Adjusting System

[\(October 29, 2010 Lacey GSP\)](#)

Supplement this section with the following:

The Contractor shall remove all valve box covers and operate each zone of the system as directed by the Engineer. The Contractor shall demonstrate that the irrigation system is complete, fully operational, and free of defects.

8-03.3(10) As Built Plans
(October 29, 2010 Lacey GSP)

Supplement this section with the following:

The Contractor shall furnish Record Drawings of the complete irrigation system in accordance with the following conditions:

1. One (1) set of 22"x 34" mylar plans showing the irrigation system as designed and installed.
2. All actual locations of valves, master valves, flow sensor, gate valves, risers, piping and sleeving shall be shown. Dimension from easily identified permanent features such as buildings, curbs, fences, walks or property lines.
3. Drawings shall be to scale with all notations neat in appearance.
4. Turn the record drawings over to the Engineer for review and approval prior to final payment.

8-03.3(11) System Operation
(October 29, 2010 Lacey GSP)

Supplement this section with the following:

The Contractor shall physically demonstrate to the Engineer, complete system operation including required coverage. Any deficiencies or modifications identified shall be corrected by the Contractor prior to acceptance of the irrigation system.

The Contractor shall coordinate activation of controller with the Engineer to assure electronic communication with the City of Lacey's Central Control System. Test the zone activation from the Central Control System as directed by the Engineer; numerous tests should be expected. The Contractor shall provide two keys for each control cabinet.

8-03.3(13) Irrigation Water Service
(October 29, 2010 Lacey GSP)

Delete this section and replace with the following:

The Contracting Agency will supply and install water meter(s) for the irrigation system at no cost to the Contractor. If not shown in the Plans, the Contractor shall design the irrigation system to utilize any point on the existing water system.

The water service (not including the meter) shall be furnished and installed as part of the irrigation system.

The water meter(s) will be installed by the Contracting Agency. It shall be the Contractor's responsibility to contact the Engineer to schedule the water meter installation performed by the Contracting Agency. The Contractor shall provide a minimum of 30 calendar days prior notice to the Engineer for the desired date for installation to ensure no service installation delays.

8-03.3(14) Irrigation Electrical Service

(October 29, 2010 Lacey GSP)

Delete this section and replace with the following:

The Contractor shall utilize the illumination electrical services for electrical service connection for the irrigation system. The bid item for irrigation system shall include the circuit breaker, conduit, and wiring from the service disconnect to the irrigation controller.

8-03.4 Measurement

(October 29, 2010 Lacey GSP)

Supplement this section with the following:

“Irrigation System” shall have no unit of measure as it will be lump sum.

“Irrigation System Modification and Adjustment” shall be measured per each for each individual irrigation system that is modified and restored. No compensation shall be made for an irrigation systems outside the project limits damaged by the Contractor.

No unit of measure shall apply to the lump sum price for “Irrigation System – Wetland Mitigation Site”.

8-03.5 Payment

(October 29, 2010 Lacey GSP)

Delete the third and fourth paragraphs and replace with the following:

The lump sum contract price for “Irrigation System” shall include all labor, materials, and equipment to design and install the irrigation system including excavation, backfill, water service connections, piping, valving, sleeving, controls, electrical service requirements and connections, activation with the Central Control System, hand-held remote radio, testing, record drawings, and other items for a complete operational irrigation system. The Contracting Agency will pay for the water connection fees and install the new water meter in the Contractor installed and furnished water service.

8-04 CURBS, GUTTERS, AND SPILLWAYS

8-04.3 Construction Requirements

(October 16, 2023 Lacey GSP)

Supplement this section with the following:

This work shall be constructed as shown in the plans. Gutter Pans at catch basin grates shall meet WSDOT Standard Plan F-10.16-00 Cement Concrete Curb and Gutter Pan.

Concrete Scuppers shall be constructed as shown in the plans.

8-04.4 Measurement

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

Cement concrete valley gutters will be measured per linear foot.
Modified cement concrete traffic curb will be measured per linear foot.
Extruded Curb will be measured per linear foot.
Concrete Scupper shall be measured per each.

8-04.5 Payment

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

“Cement Concrete Valley Gutter”, per linear foot.
“Modified Cement Concrete Traffic Curb”, per linear foot.
“Extruded Curb”, per linear foot.
“Concrete Scupper” shall be measured per each

The unit contract per linear foot price for shall be full pay for all labor, equipment and materials to construct the items in accordance with the Plans.

8-05 LAWN AND LANDSCAPE RESTORATION

(October 16, 2014 Lacey GSP)

Add the following new section:

8-05.1 Description

The Contractor shall take every precaution to preserve and protect existing lawn and landscape areas. Only those landscaped areas necessary for construction shall be disturbed. All lawn areas and landscaping damaged or removed shall be repaired as directed by the Engineer. Lawn areas damaged or removed shall be restored with sod as directed by the Engineer.

8-05.3 Construction Requirements

The Contractor shall repair any vegetation, fencing, culverts, ditch sections, or any other objects or structures that are not covered by a specific bid item. Restoration shall return anything damaged by construction to their original condition or to a condition superior to the original condition. The Contractor shall be responsible to evaluate the site prior to bidding this project to determine the areas to be affected by the particular construction method or machinery proposed to be used.

8-05.4 Measurement

No unit of measure shall apply to the lump sum price for Lawn and Landscape Restoration.

8-05.5 Payment

“Lawn and Landscape Restoration”, lump sum.

The lump sum contract price for “Lawn and Landscape Restoration” shall be full pay for all labor, materials, and equipment to restore the project site to condition equal to, or superior to the original condition.

If no bid item for “Lawn and Landscape Restoration” is included, any work described in this section shall be incidental to the project.

8-13 MONUMENT CASES

8-13.3 Construction Requirements

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

The concrete shall be placed on firm undisturbed earth and unyielding foundation. The monument shall be constructed following the completion of all asphalt paving. All monuments shall be installed as shown in the Plans and as staked by the Engineer. Case and cover shall be supplied by the Contractor.

The Contractor shall request monument caps 5 working days in advance of monument installation work. The Engineer will punch the bronze plug marker upon completion of the installation. The Contractor shall notify the Engineer 72 hours prior to installation, so the Engineer can aid in the placement.

8-13.3(1) Surface Monument

(October 29, 2010 Lacey GSP)

Add the following new section:

The Contractor shall construct and install cast-in-place surface monuments as shown in the Plans and as staked by the Engineer. The Contractor shall request monument caps 5 working days in advance of monument installation work.

The concrete shall be placed on undisturbed earth, or firm and unyielding foundation. The monument shall be constructed following the completion of all asphalt paving. The Engineer will punch the bronze plug marker upon completion of the installation. The Contractor shall notify the Engineer 72 hours prior to installation, so the Engineer can aid in the placement of the marker cap.

8-13.3(2) Adjust Monument Case Cover

(August 10, 2010 Lacey GSP)

Add the following new section:

All monument case covers in paved areas shall be adjusted flush to the new pavement surface with the appropriately sized paving riser.

8-13.4 Measurement

(October 29, 2010 Lacey GSP)

Supplement this section with the following:

Surface monuments shall be measured by the unit for each surface monument furnished and set.

8-13.5 Payment

(October 29, 2010 Lacey GSP)

Modify this section with the following:

“Surface Monument”, per each.

“Monument Case and Cover”, per each.

“Adjust Monument Case and Cover”, per each.

The unit contract price per each shall be full compensation for all labor, equipment, tools, and materials required to complete the work as specified.

8-14 CEMENT CONCRETE SIDEWALKS

8-14.1 Description

(March 31, 2015 Lacey GSP)

Supplement this section with the following:

Where applicable in this section “concrete sidewalks” shall read “concrete sidewalks and driveways” unless a bid item is provided. Depth shall be as shown in the Plans. The minimum driveway depth shall be 6 inches. The Contractor shall match color, texture, and material of existing sidewalks and driveways.

All ADA requirements will be strictly enforced including ramps and slopes as shown in the plans. Sidewalk and Bus Pads shall not exceed 2% cross slope.

If a sign is to be installed in concrete, the Contractor shall place a breakaway sleeve in the concrete as shown on the Plans and as directed by the Engineer. The sleeve shall be cleared of all debris. The sign shall be installed by others.

8-14.1(1) Textured Concrete

(March 31, 2015 Lacey GSP)

Add the following new section:

For approval of the Contractor’s mix design, the attainment of the required compressive strength at 28days will be a minimum of 4000 psi as determined from the results of testing two 6 inch by 12 inch cylinders tested in accordance with WSDOT Test Methods 801 and 811. Once a mix design has been approved, it shall not be varied during the project.

Colors shall be blended to achieve a final non-uniform color. The Contractor shall provide a 3x3 foot test panel with the proposed colors and textures for each of the applications for approval. The Engineer will evaluate these panels with existing concrete completed throughout the City to ensure a consistent color and texture. Once a pattern and color have been approved, they shall not be varied during the project.

Reinforcement shall be securely fastened and supported.

Concrete shall be pigmented throughout the mix with the base color. Powdered release agent shall then be applied to give desired highlights. Release agents shall be heavy-duty quality suitable for high automobile traffic areas. Concrete shall then be stamped with inconsistencies in the pattern. After a curing period of 4 days, the concrete shall be pressure washed to remove remaining release agent.

Upon initial curing, the Contractor shall use a high pressure water blaster to clean the surface and allow it to dry.

A weatherproofing concrete sealer and a clear acrylic sealer with moss control shall then be applied to the finished surface of the textured concrete in accordance to the manufacturer’s specifications.

8-14.2(2) Concrete Paving Pattern B – Truck Apron
(March 31, 2015 Lacey GSP)

Section 8-14.2(2) is added with the following:

Concrete mix shall be Class 4000. The concrete shall have a thickness as shown in the plans. Running courses of pattern shall be parallel to the service pull off.

Paving Pattern Type: Running Bond Cobble

Colors: Base Color – Classic Gray

Release Agent Color – Deep Charcoal

8-14.2(4) Concrete Paving Pattern C – Islands/Medians
(March 31, 2015 Lacey GSP)

Add the following new section:

Concrete mix shall be Class 4000. The concrete shall have a thickness as shown in the Plans. The exact width may vary in the medians. Depending upon the manufacturer submitted, the intent is to have one pattern width inside the median that does not exceed 2 feet and the long edge of brick shall be parallel to the traveled way.

Paving Pattern Type: Running Bond Brick

Colors: Base Color – Brick Red

Release Agent Color: Deep Charcoal

8-14.3(5)A New Ramp Detectable Warning
(March 31, 2015 Lacey GSP)

Add the following new section:

Detectable warning panels shall meet state and federal guidelines for ADA truncated dome detectable warning on curb ramps. The panels shall be constructed of reinforced high strength (minimum 9000 psi) concrete or a glass and carbon reinforced composite, which shall be colorfast and UV Stable. The panels shall be a slip resistant per ASTM D 2047 modified greater than 0.80 wet or dry and water resistant detectable warning panels and thermoplastic retrofits shall be “Standard Interstate Yellow” in color and be integrally pigmented into the product by the manufacturer.

8-14.4 Measurement
(April 2, 2018 Lacey GSP)

Supplement this section with the following:

Cement concrete sidewalks shall be measured by the square yard of finished surface outside of the ramp pay limits and will not include the surface area of the curb ramps (i.e. the sidewalk quantities indicated on the Plans are for informational purposes only and include the ramp area). Cement Concrete sidewalks shall include cement concrete bike ramps, and bus pads.

Measurement of the Cement Concrete Curb Ramps will include the 12:1 ramp regardless of length, landing, and detectible warning pattern and will be measured per each for the ramp. Sidewalk will not be measured or paid for within the ramp area. Median refuge areas shall be measured as (2) each Cement Concrete Curb Ramps.

Textured concrete for “Concrete Paving Pattern ____-____” per square yard, shall be measured by finished surface at the depth specified including the concrete sealer.

8-14.5 Payment

(April 2, 2018 Lacey GSP)

Supplement this section with the following:

The unit contract price for “Cement Conc. Sidewalk” per square yard shall be full pay for furnishing all materials, equipment, and labor to construct the sidewalk, and bus pads complete in-place, to include forms, and concrete. Further, the Contractor shall make all excavations including haul and disposal, regardless of depth required, for constructing the sidewalk to the lines and grades shown, and shall include all costs associated with maintaining pedestrian access through the construction area with crushed surfacing top course or other material as approved by the Engineer.

The unit contract price for “Cement Conc. Curb Ramp”, per each shall be full pay for furnishing all materials, equipment, and labor to construct the ramp or median refuge area as shown in the Plans regardless of type complete in-place, to include forms, concrete, and detectable warning pattern tiles. Further, the Contractor shall make all excavations including haul and disposal, regardless of depth required for constructing the ramp or median refuge area to the lines and grades shown, and shall include all costs associated with maintaining pedestrian access through the construction area with crushed surfacing top course or other material as approved by the Engineer.

The unit contract price for “Ramp Detectable Warning Retrofit”, per each shall be full pay for furnishing all materials, equipment, and labor to retrofit an existing concrete ramp or asphalt landing, complete in-place, to include surface preparation, concrete grinding, with a detectible warning thermoplastic application and other work.

The unit contract price for “Concrete Paving Pattern _____”, per square yard for cement concrete paving surfaces regardless of the pattern type required and shall be full pay for furnishing all materials, tools, equipment, labor, forms, clean-up, pattern stamps, base colors, color hardener, curing solutions, weatherproofing sealers, surface retarder, and all items required to complete the concrete work as specified. Payment for test samples and removal of test samples shall be incidental. Concrete samples, whether approved or not, shall not be removed from the project site unless otherwise approved by the Engineer.

8-20 ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, INTELLIGENT TRANSPORTATION SYSTEMS, AND ELECTRICAL

8-20.1(3) Permitting and Inspection

(November 20, 2020 Lacey GSP)

Add the following new section:

The Contractor shall obtain an Electrical Permit prior to performing any work on this project. Regular electrical inspections shall be scheduled by the Contractor.

All costs to obtain the Electrical Permit and comply with the requirements, shall be incidental to the project and no other compensation will be allowed.

8-20.3(5)B Conduit Type

(November 20, 2020 Lacey GSP)

Modify this section with the following:

Conduit shall be schedule 40 polyvinyl chloride (PVC) of the size shown in the on the plans. Each spare conduit shall contain a 1/8 inch diameter nylon pull cord which shall be tied off at both ends.

8-20.3(5)E Method of Conduit Installation

(October 16, 2023 Lacey GSP)

Modify this section with the following:

8-20.3(5)E2 Conduit Plowing

(October 16, 2023 Lacey GSP)

Delete this section.

8-20.3(5)E3 Boring

(October 16, 2023 Lacey GSP)

Delete this section.

8-20.3(6) Junction Boxes, Cable Vaults And Pull Boxes

(October 16, 2016 Lacey GSP)

Supplement this section with the following:

All new junction boxes, cables vaults, and pull boxes shall have locking lids per WSDOT Standard Plans.

Existing junction boxes within this project shall be adjusted as necessary.

No Logo is required on pull boxes. The cover marking shall identify "Lacey ITS"

All existing junction boxes within the project limits shall receive two one-inch tack welds between the lid and the frame. One weld will be located adjacent to the lifting hole and the other directly opposite the lid.

8-20.3(10) Services, Transformer, Intelligent Transportation System Cabinet

(November 20, 2020 Lacey GSP)

Supplement this section with the following:

The service shall be a 200 amp Millbank West aluminum cabinet with anodized aluminum finish, or approved equal. The service cabinet shall comply with all current PSE requirements

The service interiors will accept plug-in breakers (Bryant, G.E., Westinghouse, ITE, Crouse-Hinds), and copper bussed interior which has provisions for a minimum of twelve full one inch poles. The unit shall include the following additional equipment; a service disconnect which accepts a meter with a 5th jaw in the nine o'clock position, two mercury relays, one test switch, one photocell socket, and all other associated requirements.

Traffic signal cabinet branch circuit breakers shall be 30 amp and lighting branch circuit breakers shall be 30 amp minimum.

The Contractor shall be required to install the service on a pad mount base as shown in the plans per Lacey Standards.

The Contractor shall be responsible to provide for and make the necessary arrangements for connection to the PSE transformer. The Contractor shall provide the conduit and conductor of the size required per PSE standards from the service cabinet to the transformer.

8-20.3(13)B Luminaire Relocation

(November 20, 2020 Lacey GSP)

Add the following new section:

The Contractor shall relocate all luminaires as shown on the plans to new foundations. Intercept the existing conduit and conductor and extend to a new j-box adjacent to the new foundation. The Contractor shall remove and dispose of the existing foundation, conduit and other related items.

8-20.3(13)D AC Powered LED Stop Sign

(*** Lacey GSP)**

Add the following new section:

Fabricate, furnish, and install light emitting diode (LED), embedded stop signs consisting of embedded LED lights on new sign pole. This LED embedded stop sign function is to warn motorists of stop condition to flash sequentially.

Provide signs that meet MUTCD. Provide sign substrate that meets WSDOT Standard Specifications 9-28. Provide reflective sheeting on stop sign that meets AASHTO Type D or ASTM Type XI. Provide 36" x 36" sign with embedded LED lights. Provide high powered 1 W LEDs wired in a manner that all LEDs continue to flash in the event of failure of an individual LED. Sign must output 550 candelas at daytime peak ensuring sign is daylight visible. Circulatory Technology:

Sealed PCB Technology. Micro-controller Circuitry. 24 Hour Operation
AC Specifications: 120 volt.

8-20.5(5)A Payment

(*** Lacey GSP)**

Section 8-20.5 is supplemented by the following:

All costs to obtain the Electrical Permit and comply with the requirements shall be incidental to the project and no other compensation will be allowed.

Payment will be made on the systems as follows:

All costs for installing a service providing power to both the signal, signs and illumination shall be included in the contract price for the signal system.

“Illumination System”, Lump Sum

“AC Powered LED Stop Sign”, per each

The lump sum unit price shall be full pay for furnishing all labor, materials, tools, and equipment necessary for the construction of the complete electrical system, modifying existing systems, or both, as shown in the plans and herein specified including excavation, backfilling, concrete foundations, sign pole, conduit, wire, breakers, adjusting junction boxes, restoring facilities destroyed or damaged during construction, salvaging existing materials, and for making all required tests. All additional materials and labor, not shown in the plans or called for herein and which are required to complete the fully operational electrical system, shall be included in the lump sum contract price.

8-21 PERMANENT SIGNING

8-21 Permanent Signing

(*** Lacey GSP)**

Delete this section and replace with the following:

All permanent sign posts and signs shall be installed by others, with the exception of signs installed on the traffic signal system. The Contractor shall request signs a minimum of 8 weeks prior to needing the signs for traffic control.

If a sign post is to be installed in concrete, the Contractor shall install a breakaway sleeve in the concrete as shown on the plans and as directed by the Engineer. The sleeves shall be supplied by the Contracting Agency and shall be level with the existing area and cleared of debris. All signing shall be erected on a 2-3/8 inch OD round galvanized steel sign post. Installation of sleeves shall be incidental to the concrete in which it is installed.

8-21.1 Description

(April 4, 2016 Lacey GSP)

Supplement this section with the following:

This work consists of furnishing and installing permanent barricades.

8-22 PAVEMENT MARKING

8-22.2 Material

(October 16, 2016 Lacey GSP)

Modify this section with the following:

Material for all plastic lines shall be Type A – Liquid hot applied thermoplastic at 120 mil thickness.

Material used for all plastic stop lines, plastic yield line, plastic entry line, plastic crosswalk lines, circulating lane line, plastic traffic arrows, plastic traffic letters, plastic legends, plastic symbols, and all plastic lines within the circulating lanes of the roundabout shall be Type B – Pre-formed fused thermoplastic at 120 mil thickness.

8-22.3 Construction Requirements

(October 17, 2022 Lacey GSP)

Supplement this section with the following:

Stop Line shall be a solid white line 24 inches wide or as shown in the plans.

Yield Line symbol (Sharks Teeth) shall be a triangle 24 inches wide and 36 inches tall or as shown in the plans.

Entry Lane Line shall be used to supplement the Yield Line Symbol for roundabouts on each approach. Entry Lane Line shall be a 24 inch wide dashed line with a 3 foot solid line and a 4 foot gap. The Entry Lane Line will be considered a Crosswalk Line.

Circulating Lane Line is the wide lane line for the roundabout. Where the plans identify a dashed circulating lane line this shall be an 8 inch wide dashed line with a 3 foot solid line and a 4 foot gap. The Circulating Lane Line will be considered a Wide Lane Line.

The roundabout symbol identified with the traffic arrow shall be considered part of the Traffic Arrow.

Crosswalk Line is a series of solid white lines, 24 inches, and a minimum of 6 feet long or as shown in the plans. All Crosswalk lines shall be parallel to the direction of travel conforming to details in the plans and Standard Plans.

Bicycle Legend is the bike lane grouping of the 2 by 4 foot BSF bicycle symbol and the 6 foot bicycle lane arrow.

Buffered Bike Lane consists of two solid white lines, 4 inches wide, separated by an 8 inch gap.

Parking Delineation Symbols shall be a 4 inch cross or tee.

Pavement must be dry prior to placing preformed thermoplastic pavement marking material. Preformed thermoplastic cannot be applied to a wet or damp surface or during precipitation. Once precipitation has stopped, the preformed thermoplastic can be applied to bituminous asphalt if the road surface has been dried thoroughly with all moisture removed.

Before preformed thermoplastic is placed, test the pavement to determine if moisture is present using a propane fueled heat gun. The moisture test must be observed by the Engineer before work begins. If moisture is present use a propane fueled heat gun to remove the moisture by passing heat over the area continuously. If the area is able to be dried and no moisture remains proceed with the application. If the area is unable to be dried, do not apply the material at that time. Any material installed that does not comply with this specification will be considered defective and no payment will be made.

8-22.4 Measurement

(October 17, 2022 Lacey GSP)

Modify this section with the following:

The measurement for the following items shall be as follows:

“Plastic Yield Line Symbol” per each, shall be each triangle.

“Plastic Crosswalk Line”, per linear foot.

“Plastic Bicycle Warning Symbol”, per each.

“Plastic Bicycle Legend”, per each, shall be the combination of the bicycle symbol and arrow. If only one of the two symbols is used, it will be measured as a Plastic Bicycle Legend.

“Buffered Bike Lane”, per linear foot. The measurement for “Buffered Bike Lane” will be based on a marking system capable of simultaneous application of two 4-inch lines with one 8-inch space. No additional measurement will be made when more than one line can be installed in a single pass.

“Plastic Parking Delineation Symbol”, per each.

No unit of measure shall apply to the lump sum price for “Remove Pavement Marking”.

8-22.5 Payment

(January 4, 2016 Lacey GSP)

Supplement this section with the following items:

- “Plastic Yield Line Symbol” per each
- “Plastic Crosswalk Line”, per linear foot.
- “Plastic Bicycle Warning Symbol”, per each.
- “Plastic Bicycle Legend”, per each.
- “Plastic Parking Delineation Symbol”, per each.

The lump sum price for “Remove Pavement Marking” shall be full pay to remove all pavement markings that conflict with the proposed channelization or HMA overlay as shown on the Plans and as directed by the Engineer. Pavement marking shall include raised pavement markers, plastic and painted lines, arrows, letters, and symbols as required.

8-50.2 PROJECT CLOSEOUT

(April 2, 2018 Lacey GSP)

Description

This work shall consist of completing all miscellaneous items of work in accordance with the Plans and these Specifications that are required to achieve Completion and Final Acceptance, as identified by the Engineer and the Contracting Agency. This work may include but is not limited to punch list items, record drawings, O&M Manuals, training, material acceptance documents, copies of the approved “Affidavit of Prevailing Wages Paid” for the Contractor and all Subcontractors, and any other work required in these Plans and Specifications that has not been completed.

Measurement

No unit of measurement shall apply to the lump sum price for “Project Closeout”.

Payment

“Project Closeout”, lump sum.

The unit contract price per lump sum for “Project Closeout” includes all compensation for all costs of completing the miscellaneous items of work identified by the Contracting Agency prior to final acceptance of the Project. A fixed lump sum price has been included in the Proposal for this work. Any additional costs anticipated or incurred by the Contractor for the work shall be included in the various lump sum and unit price bid items as found in the Proposal. Neither partial payment, nor additional compensation shall be allowed

9-03 AGGREGATES

Add the following new Section:

9-03.16 Imported Pipe Bedding

[\(April 30, 2015 Lacey\)](#)

Bedding material for pressure mains and services shall be clean sand/gravel mixture free from organic matter and conforming to the following gradation:

Sieve Size	Percent Passing
3/4" square	100
3/8" square	70-100
U.S. No. 4	55-100
U.S. No. 10	35-95
U.S. No. 20	20-80
U.S. No. 40	10-55
U.S. No. 100	0-10
U.S. No. 200	0-3

Bedding material for gravity mains and stubs/or laterals shall be clean sand/gravel mixture free from organic matter and conforming to the following gradation:

Sieve Size	Percent Passing
3/8" square	85-100
U.S. No. 4	10-30
U.S. No. 8	0-10
U.S. No. 16	0-5

All percentages are by weight

9-03.21 Recycled Materials

[\(April 30, 2015 Lacey\)](#)

Section 9-03.21 is supplemented with the following:

Recycled materials will not be used unless approved by the Engineer.

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.2(1) Topsoil Type A

[\(March 3, 2022 Lacey GSP\)](#)

Supplement this section with the following:

Topsoil Type A shall be composed of a three way winter mix consisting of 2 parts soil, 2 parts compost, 3 parts sand.

Soil shall be classified as gravelly sand, well-graded sand, poorly graded sand, or silty sand.

Compost shall be a weed free well decomposed, humus-like material derived from the decomposition of grass clippings, leaves, branches, wood, and other organic materials. Compost shall be produced at a permitted solid waste composting facility. Composts containing shavings, cedar sawdust, or straw will not be permitted.

Sand shall consist of 100 percent passing the 3/8 inch sieve, minimum 95 percent passing the #4 sieve, and maximum of 5 percent passing the #100 sieve.

Topsoil shall meet the following requirements:

Screen Size (approximate particle size)	5/8" maximum
Maturity measure (C:N ratio)	30:1
Total Nitrogen	0.5% minimum
PH range	5.5-8.0
Foreign matter by dry weight	1% maximum

The Contractor shall provide a sample of the topsoil and a laboratory analysis with recommendations from the laboratory for desired additives for the Engineers approval. The Contractor shall incorporate any additives recommended by the laboratory.

9-14.2 Seed

[\(November 20, 2020 Lacey\)](#)

Supplement this section with the following:

There shall be several types of mixes used on this project. The list of approved seed varieties are specifically identified list below. They shall be applied at the given rates. Source identified seed shall be fourth generation or earlier. Non-Source Identified seed shall meet or exceed Washington State Department of Agriculture Certified Seed Standards. Seeds shall be certified "Weed Free", indicating there are no noxious or nuisance weeds in the seed.

Lawn Mix - shall be applied at 200 pounds per acre and the maximum weed seed shall be no more than 0.5%. Grass seed of the following composition, proportion, and quality shall be applied as follows:

Kind and Variety of Seed	Percent By Weight	Minimum Pure Seed	Minimum Germination
Equal Mix 3-Perennial Ryegrasses	60%	98%	90%
One Chewing Fine Fescue	20%	98%	90%
One Creeping Red Fescue	20%	98%	90%

Approved Seed Type:

Perennial Ryegrasses

Fiesta 4	Manhattan 5	Grand Slam GLD	Karma
SR 4650	Karma	Banfield	Sideways
Thrive	Wicked	Pavilion	Dasher 3
Tetradark			

Creeping Red Fescue

Salsa	Cindy	Jasper	Salem
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Chewing Fescue

Tiffany
Weekend

Shadow II
Tamara

Treasure E
Enjoy

Longfellow
Victory

9-14.3 Fertilizer

(October 16, 2009 Lacey)

Supplement this section with the following:

Fertilizer for seeded areas shall be 1 pound nitrogen from ammonium sulfate, 0.5 pound water insoluble organic nitrogen, 2 pounds of phosphorous, and 2 pounds of potassium per 1,000 square feet, or a 10-20-20 turf fertilizer mix at 435 pounds per acre with 60 pounds of water insoluble organic nitrogen per acre.

Fertilizer for Trees and Shrubs shall be granular, tablet, or spikes applied at a rate recommended by the manufacturer for the size of the plant or as directed by the Engineer. Fertilizer shall be a 20-10-5 plant mix with 7% water soluble organic nitrogen and 13% water insoluble organic nitrogen or as approved by the Engineer.

Mycorrhizal fungi amendment shall be applied to all trees at a rate recommended by the manufacturer for the size of the tree.

9-14.5(3) Bark or Wood Chip Mulch

(November 20, 2020 Lacey GSP)

Supplement this section with the following:

Bark mulch shall be a pathogen-free medium-grind Hemlock or Douglas Fir bark mulch. The Contractor shall submit a sample to the Engineer for approval prior to use.

9-14.6(8) Sod

(October 16, 2009 Lacey)

Supplement this section with the following:

Sod shall be high quality commercial turf produced on a commercial turf farm. The turf farm shall be registered with the American Sod Producers Association. Turf shall closely match texture and color of existing turf to be repaired.

9-15 IRRIGATION SYSTEM**9-15.1(2) Polyvinyl Chloride Pipe and Fittings**

(October 29, 2010 Lacey)

Supplement this section with the following:

Pressure Mains - All Sizes: Polyvinyl chloride (PVC) 1120, 1220, Schedule 40, solvent weld and shall conform to ASTM D1784.

Laterals - All Sizes: Polyvinyl chloride (PVC) 1120, 1220, SDR 21.0, Class 200, solvent weld and shall conform to ASTM D1784.

Sleeving: Polyvinyl chloride (PVC), Class 40, solvent weld and shall conform to ASTM D1784.

Threaded Pipe, Adapters and Nipples: PVC 1120 or 1220, Schedule 80, conforming to ASTM D1785.

Pipe shall be marked with manufacturer's name, class of pipe, NSF seal and date and shift of manufacturing run. Pipe shall bear no evidence of interior or exterior extrusion marks.

Pipe walls shall be uniform, smooth and glossy. Pipe may be pre-belled or with individual solvent-weld couplings.

Fittings shall be PVC Schedule 40, full size. Fittings shall be of brand(s) recommended by manufacturer of pipe.

9-15.2 Drip Tubing **(October 29, 2010 Lacey)**

Supplement this section with the following:

Dripline shall be Netafim Techline CV or Engineer approved equal. Dripline fittings shall also be manufactured by NETAFIM.

Distribution Line (non-pressure) with Inline Pressure Compensating Emitters – The dripline shall consist of nominal sized ½” linear low density polyethylene tubing, housing turbulent flow integral drip emitters. The tubing shall have an outside diameter (O.D.) of approximately 0.66” and an inside diameter (I.D.) of approximately 0.56”. The turbulent flow path emitters shall be molded from virgin polyethylene resin with no moving parts. The turbulent flow path emitters shall have nominal discharge rates of 0.06 gallons per hour (GPH). The distribution tubing to be available with multiple (18” preferred) on center spacing options between emitters.

9-15.3 Automatic Controllers **(October 29, 2010 Lacey)**

Modify this section with the following:

Automatic Irrigation Controller shall be Toro Sentinel Series or Engineer approved equal with ET-based run time capabilities, pedestal mounted, with surge protection, data retrieval card, and antenna, and ground rod per NEC. Frequency shall be preset at 462.9125. Provide one (1) hand-held remote radio unit.

Automatic Irrigation Controller enclosure shall be a stainless steel cabinet.

9-15.4 Irrigation Heads **(March 3, 2022 Lacey GSP)**

Modify this section with the following:

In non-drip irrigated areas, pop-up sprinkler heads shall be Rain Bird model No. 1800-SAM-PRS series 12” pop-up “Pressure Regulating Spray” with “Seal-A-Matic” check valves, or Engineer approved equal. In turf areas where gear-driven sprinkler heads are impractical such as planter strips, pop-up sprinkler heads shall be Rain Bird model No 1800-SAM-PRS series 6” pop-up “Pressure Regulating Spray” with “Seal-A-Matic” check valves, or Engineer approved equal. Use 4” pop-up heads for street trees within tree grates, unless otherwise noted on the plans. All nozzles shall be plastic. All spray heads shall be installed on a triple swing joint at base of head casing.

Gear driven sprinkler heads for large turf areas shall be Hunter I-40 gear driven rotors, 4” minimum pop-up, as manufactured by Hunter Industries, or Engineer approved equal. Gear driven sprinkler heads for medium turf areas shall be Hunter I-20 Series Rotors, 4” minimum pop-up, or Engineer approved equal.

All heads shall have check valves to prevent low head drainage. All rotor heads shall be installed on a triple swing joint.

9-15.7(2) Automatic Control Valves

(March 3, 2022 Lacey GSP)

Modify this section with the following:

Remote control valves, including the master valve, shall be Weathermatic Black Bullet Max series valve or approved equal. The remote control valve shall be a normally closed, 24 VAC 50/60 cycle solenoid actuated globe/angle pattern design. The valve pressure rating shall not be less than 150 psi. All control valves shall have pressure regulating modules where system pressure has been verified to exceed 80 psi. All valves shall be double unioned with a schedule 80 ball valve on the inlet side of the valve.

Only one control valve shall be installed per valve box.

The valve body and bonnet shall be constructed of high-impact, weather-resistant PVC with stainless steel screws.

The valve shall have manual open/close control (internal bleed) for manual opening and closing of valve without electrically energizing the solenoid. The valve's internal bleed shall prevent flooding of the valve box.

The valve shall have a flow control stem for accurate manual regulation and/or shut off of outlet flow. The valve must open or close in less than 1 minute at 150 psi, and less than 30 seconds at 20 psi.

9-15.7(3) Drip Irrigation Control Valves

(October 29, 2010 Lacey)

Drip zone valve assemblies shall be Weathermatic zone valve with a disc filter or Engineer approved equal. Control zone kits to include shut off valve, and electric control valve.

9-15.8 Quick Coupling Equipment

(October 29, 2010 Lacey)

Modify this section with the following:

Quick coupling shall be a 1" Rain Bird model No. 44LRC, or Engineer approved equal. The Contractor shall supply one (1) Rain Bird 2049 locking cover key, and one (1) Rain Bird SH-1 Series Hose Swivel to the Engineer.

9-15.17 Electrical Wire and Splices

(October 29, 2010 Lacey)

Modify this section with the following:

Valve wire shall be direct burial wire, Copper, insulated single strand, minimum size AWG No. 14, 600 V., UL approved as Type UF. Color code as follows:

White: Common ground wire.

Red: Control valve wire.

Yellow: Spare wire.

Splice: Spears DRI-Splice Wire Connector DS400 or approved equal.

9-15.20 Flow Sensor

(October 29, 2010 Lacey)

Add the following new section:

Flow sensor shall be Badger Meter Data Industrial model No. IR220P flow sensor mounted in a schedule 80 PVC Tee with socket ends and installed with flow sensor wire. Wire shall be direct burial type, 2-wire, shielded, 18 gauge or larger, single run with no splices.

9-15.21 Valve Boxes

(October 29, 2010 Lacey)

Add the following new section:

Valve Boxes shall be plastic boxes, as manufactured by Applied Engineering Products, or Engineer approved equal, as follows:

Ball Valve	Model 910 L (10" round)
Quick Coupler Valve	Model 910 L (10" round, no 6" pit boxes)
Flow Sensor	Model 1320 12" High (jumbo)
Remote Control Valve	Model 1320 12" High (jumbo)

Valve box models 1320 shall be green with bolt down lids where applicable. Size valve box to allow 3" of clearance between bottom of cover and top of equipment. Furnish and install extensions as required to achieve full depth.

9-15.22 Triple Swing Joint

(March 3, 2022 Lacey GSP)

Add the following new section:

Triple swing joint shall be 0.75 inches x 12" min. for rotors and 0.50 inches x 6" min. for spray heads..

9-15.25 Disc Filter

(October 29, 2010 Lacey)

Add the following new section:

Disc filter shall be NETAFIM disc filter.

9-15.26 Backflow Preventer

(October 29, 2010 Lacey)

Add the following new section:

Backflow preventer shall be AWWA approved Double Union Double Check Valve Assembly designed to prevent the backflow of pollutants that are objectionable but not toxic, from entering into the potable water supply.

9-21 RAISED PAVEMENT MARKING

9-21.1 Raised Pavement Markers Type 1

[\(March 3, 2022 Lacey GSP\)](#)

Modify this section with the following:

Markers Type 1 shall be thermoplastic markers. Only the models and manufacturers identified in the Qualified Products List (QPL) will be accepted.

9-21.2 Raised Pavement Markers Type 2

[\(March 3, 2022 Lacey GSP\)](#)

Supplement this section with the following:

Markers Type 2 shall have an abrasion resistant coating. Only the models and manufacturers identified in the Qualified Products List (QPL) will be accepted.

9-29 ILLUMINATION, SIGNALS, ELECTRICAL

9-29.2(1)A Standard Duty Junction Boxes

[\(October 16, 2016 Lacey GSP\)](#)

Modify this section with the following:

The standard duty concrete junction box steel frame with locking lid, lid support, and lid shall be hot dip galvanized in accordance with ASTM M111.

9-29.6 Light and Signal Standards

[\(July 5, 2018 Lacey GSP\)](#)

Supplement this section with the following:

Roadway Light Poles

The roadway poles shall be a round aluminum satin finish type 2 tapered elliptic single or double luminaire mast arm.

Both these light poles shall meet the following dimensions:

Single Mast Arm

Nominal Mounting Height (ft)	Wall Thickness (in)	Arm Length (ft)	Bottom Shaft (in)	Top Shaft (in)	Bolt Circle
40	0.219	6	8	4.5	11-12
30	0.188	6	8	4.5	11-12

Dual Mast Arm

Nominal Mounting Height (ft)	Wall Thickness (in)	Arm Length (ft)	Bottom Shaft (in)	Top Shaft (in)	Bolt Circle
40	0.250	6	10	6.0	14-15
30	0.250	6	8	4.5	11-12

9-29.10(6) LED Head Luminaires **(November 20, 2020 Lacey GSP)**

Add the following new section:

All luminaires shall be of the type specified. Any luminaires proposed to be considered equal shall meet or exceed the photometric curves, meet the design parameters of the project and shall meet the following requirements: The light emitting diode (LED) fixtures shall be made in the USA. Fixture shall have tool-less access for driver change out. All fixtures shall utilize flexible wattage selection. The fixture shall have Type III asymmetrical distribution, full cut off with 4,000K color band and guarantee to exceed 100,000 hours of operational life. Fixtures shall have built-in bubble level. The fixture shall pass the LM80 test with a resistance to elements of (-40 C/-40 F to 50 C/12 F). Head color shall match the type of pole specified.

400W LED Equivalent shall be LED Phillips Lumec RoadFocus model number:
RFL-180W80LED4K-G2-R3M-UNIV-RCD-(Color varies to match pole).

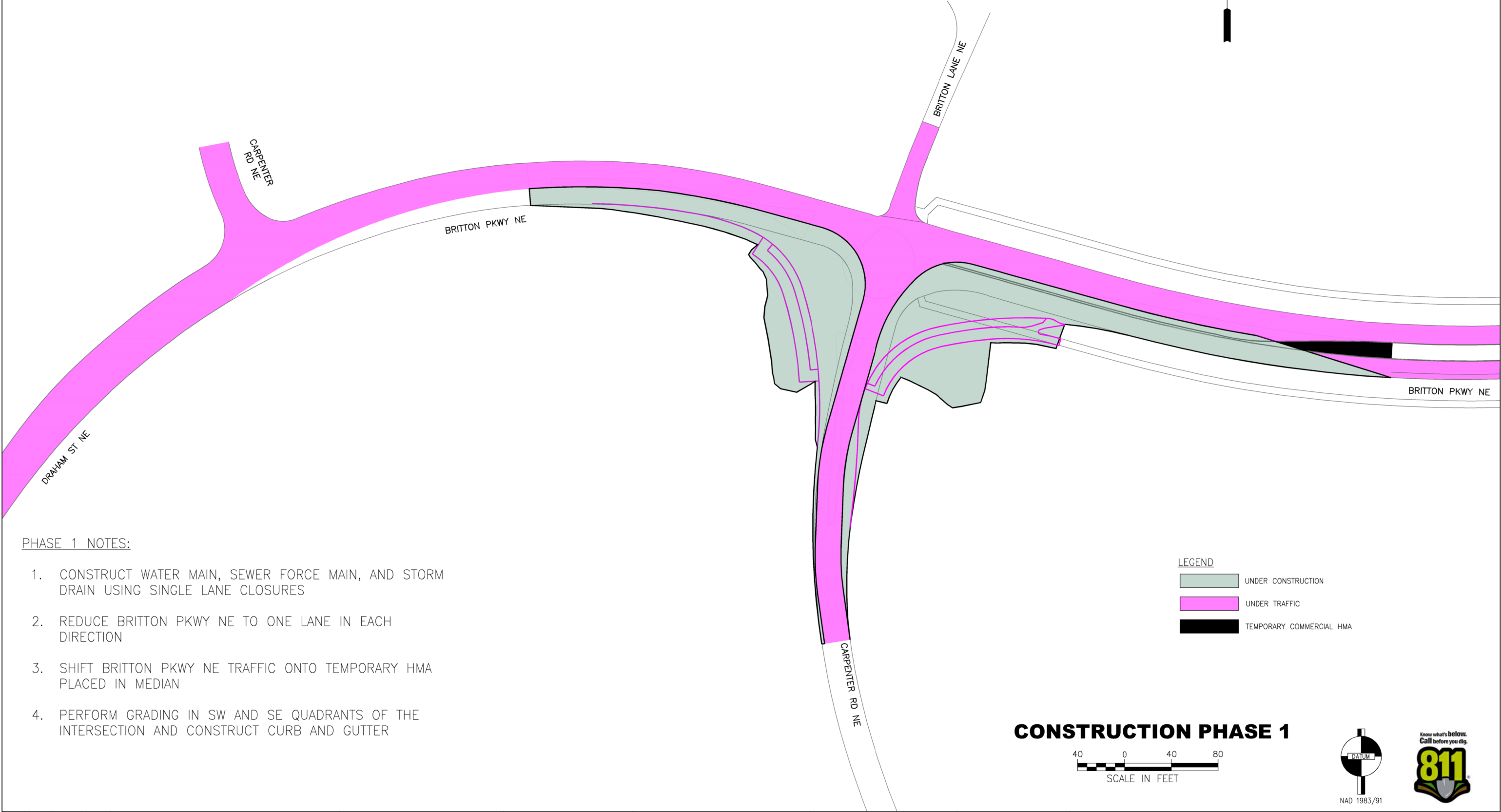
200W LED Equivalent shall be LED Phillips Lumec RoadFocus model number:
RFM-72W32LED4K-G2-R3M-UNIV-RCD-(Color varies to match pole).

Pedestrian scale lights shall be LED Phillips Lumec model number: [L80-023]-35WLED4K-T-PC-CS-LE3-240-FAWS-BLTX.

9-29.25 Amplifier, Transformer, and Terminal Cabinets **(November 20, 2020 Lacey GSP)**

Delete Item #1 and replace with the following:

All cabinets shall be rain tight and constructed of 0.125 inch minimum 5052 alloy aluminum H32 ASTM designator minimum and shall be of sufficient size to hold 36 terminals. Terminal cabinets shall be rigidly mounted on channel standoffs with nipple from terminal cabinet into pole as directed by the Engineer.



PHASE 1 NOTES:

- 1. CONSTRUCT WATER MAIN, SEWER FORCE MAIN, AND STORM DRAIN USING SINGLE LANE CLOSURES
- 2. REDUCE BRITTON PKWY NE TO ONE LANE IN EACH DIRECTION
- 3. SHIFT BRITTON PKWY NE TRAFFIC ONTO TEMPORARY HMA PLACED IN MEDIAN
- 4. PERFORM GRADING IN SW AND SE QUADRANTS OF THE INTERSECTION AND CONSTRUCT CURB AND GUTTER

LEGEND

- UNDER CONSTRUCTION
- UNDER TRAFFIC
- TEMPORARY COMMERCIAL HMA

CONSTRUCTION PHASE 1



NO.	DATE	BY	APPR.	REVISIONS

NJB
DESIGNED BY
JPP
DRAWN BY
YZ
CHECKED BY
ATB
APPROVED BY
DATE: 10/18/2023

FINAL SUBMITTAL

NOT FOR CONSTRUCTION

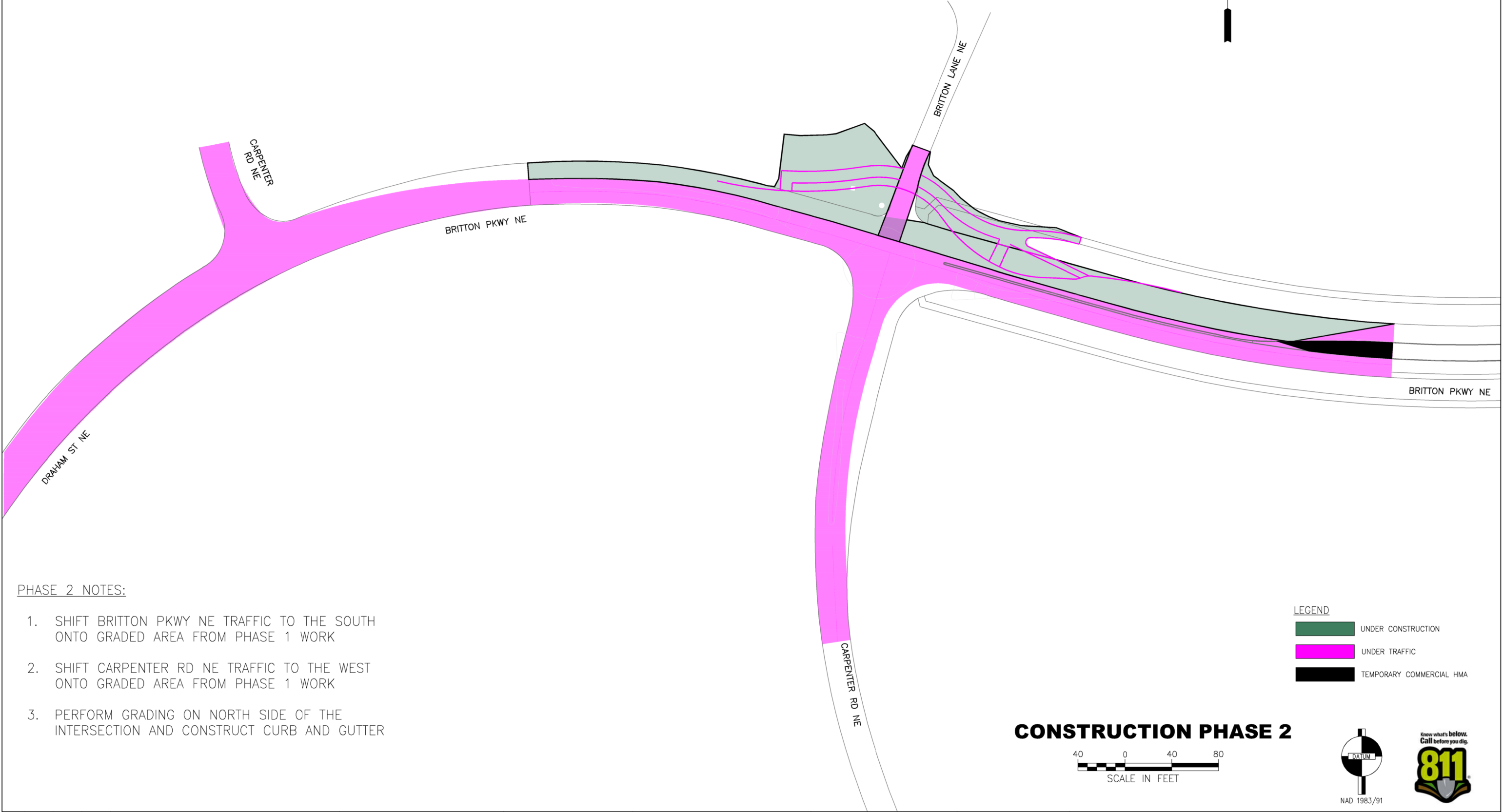
LOCHNER

CARPENTER ROAD/BRITTON PARKWAY ROUNDABOUT

CONSTRUCTION STAGING AND TRAFFIC CONTROL PLAN

DRAWING NUMBER

STC1



PHASE 2 NOTES:

- 1. SHIFT BRITTON PKWY NE TRAFFIC TO THE SOUTH ONTO GRADED AREA FROM PHASE 1 WORK
- 2. SHIFT CARPENTER RD NE TRAFFIC TO THE WEST ONTO GRADED AREA FROM PHASE 1 WORK
- 3. PERFORM GRADING ON NORTH SIDE OF THE INTERSECTION AND CONSTRUCT CURB AND GUTTER

LEGEND

UNDER CONSTRUCTION

UNDER TRAFFIC

TEMPORARY COMMERCIAL HMA

CONSTRUCTION PHASE 2



NO.	DATE	BY	APPR.	REVISIONS

NJB
DESIGNED BY
JPP
DRAWN BY
YZ
CHECKED BY
ATB
APPROVED BY
DATE: 10/18/2023

FINAL SUBMITTAL

NOT FOR CONSTRUCTION

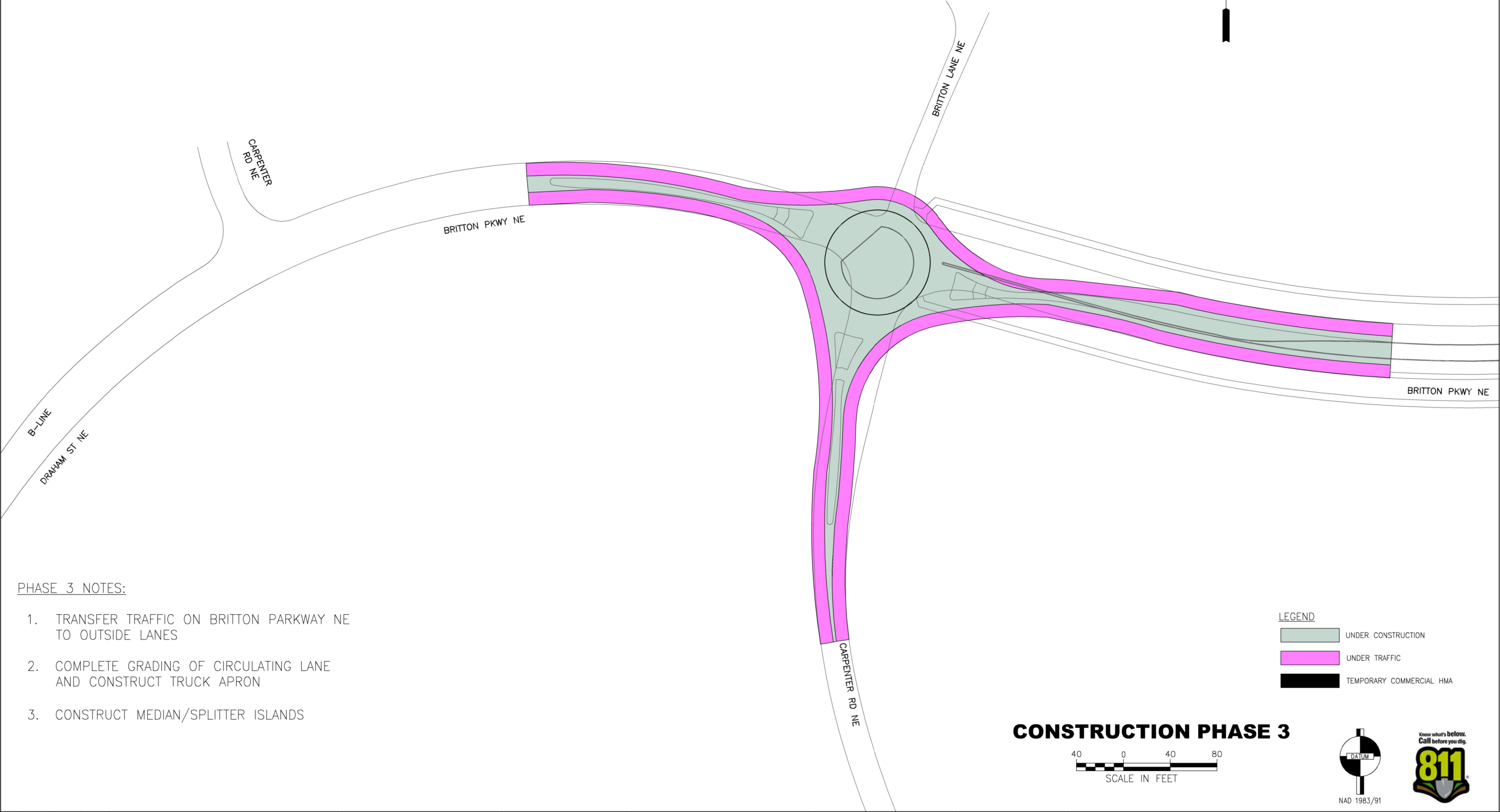
LOCHNER



CARPENTER ROAD/BRITTON PARKWAY ROUNDABOUT

CONSTRUCTION STAGING AND TRAFFIC CONTROL PLAN

DRAWING NUMBER
STC2



PHASE 3 NOTES:

- 1. TRANSFER TRAFFIC ON BRITTON PARKWAY NE TO OUTSIDE LANES
- 2. COMPLETE GRADING OF CIRCULATING LANE AND CONSTRUCT TRUCK APRON
- 3. CONSTRUCT MEDIAN/SPLITTER ISLANDS

LEGEND

UNDER CONSTRUCTION

UNDER TRAFFIC

TEMPORARY COMMERCIAL HMA

CONSTRUCTION PHASE 3



NO.	DATE	BY	APPR.	REVISIONS

NJB
DESIGNED BY
JPP
DRAWN BY
YZ
CHECKED BY
ATB
APPROVED BY
DATE: 10/18/2023

FINAL SUBMITTAL
NOT FOR
CONSTRUCTION



CARPENTER ROAD/BRITTON PARKWAY ROUNDBOUT
CONSTRUCTION STAGING AND TRAFFIC CONTROL PLAN

DRAWING NUMBER
STC3

MINIMUM LANE CLOSURE TAPER LENGTH = L (feet)

LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	-	-	-
11	115	165	225	295	495	550	605	660	-	-
12	125	180	245	320	540	600	660	720	780	840

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)

SHOULDER WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
8'	40	40	60	90	120	130	150	160	170	190
10'	40	60	90	90	150	170	190	200	220	240

USE A MINIMUM 3 DEVICES TAPER FOR SHOULDER LESS THEN 8'.

SIGN SPACING = X (1)

FREEWAYS & EXPRESSWAYS	55 / 70 MPH	1500' ±
RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS	25 / 30 MPH	200' ± (2)
RESIDENTIAL & BUSINESS DISTRICTS		
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

PCMS

1	2
2 LANES CLOSED AHEAD	WATCH FOR SLOW TRAFFIC
2.0 SEC	2.0 SEC

FIELD LOCATE 1 MILE ± IN ADVANCE OF LANE CLOSURE SIGNING.

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

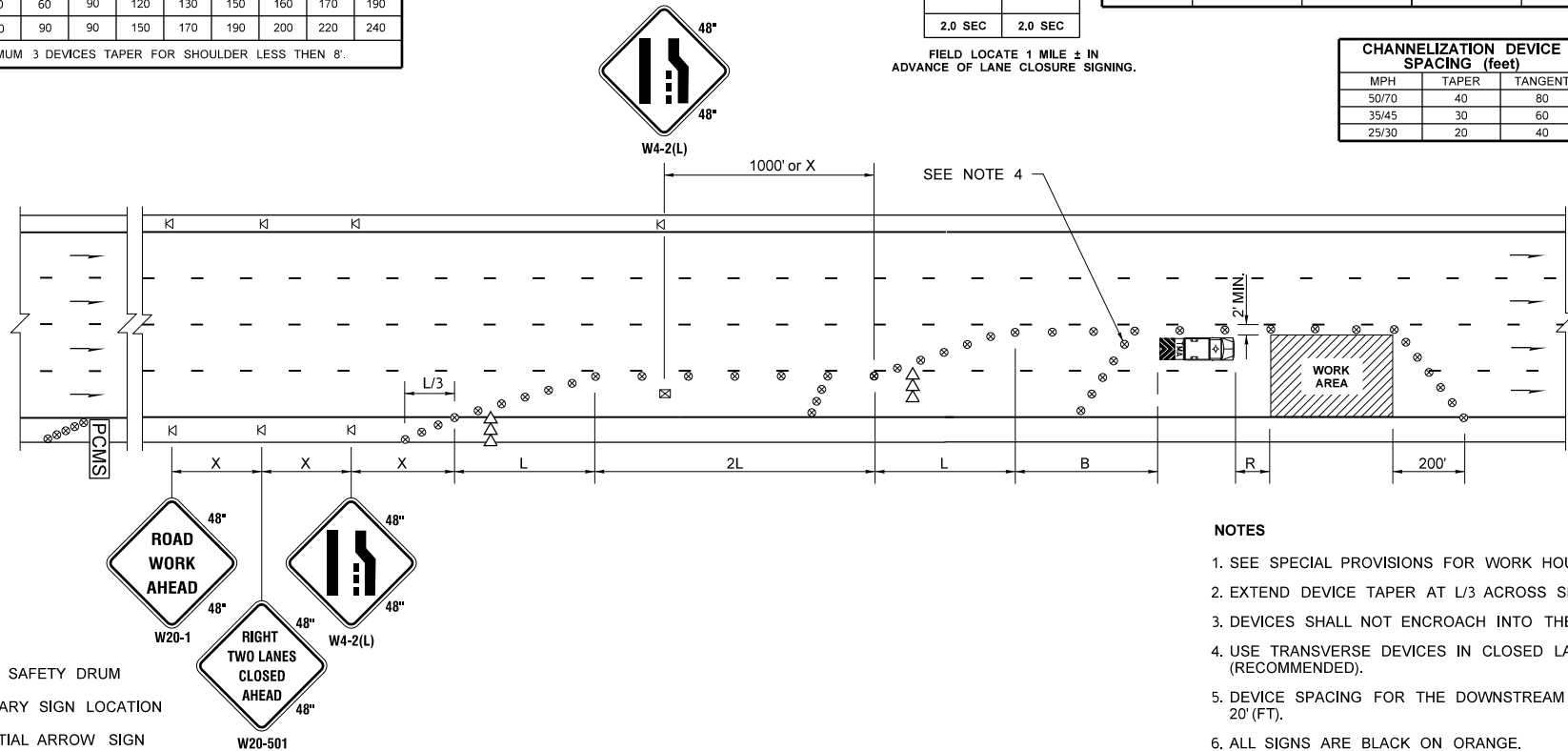
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R

HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

CHANNELIZATION DEVICE SPACING (feet)

MPH	TAPER	TANGENT
50/70	40	80
35/45	30	60
25/30	20	40



LEGEND

- ⊗ TRAFFIC SAFETY DRUM
- △ TEMPORARY SIGN LOCATION
- ⇒ SEQUENTIAL ARROW SIGN
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- ⊗ TEMPORARY SIGN LOCATION (5' (FT) MOUNTING HEIGHT)

DOUBLE-LANE CLOSURE FOR MULTI-LANE ROADWAYS

NOT TO SCALE

NOTES

- SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
- EXTEND DEVICE TAPER AT L/3 ACROSS SHOULDER.
- DEVICES SHALL NOT ENCROACH INTO THE ADJACENT LANES.
- USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000' (FT) (RECOMMENDED).
- DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
- ALL SIGNS ARE BLACK ON ORANGE.

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL\TC Work Zone Traffic Control\TC-4 Double-Lane Closure for Multi-Lane Roadways\TC-4.dgn
TIME	8:36:32 AM
DATE	1/3/2018
PLOTTED BY	liddelf
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	
REVISION	
DATE	
BY	
REGION NO.	
STATE	WASH
FED.AID PROJ.NO.	
JOB NUMBER	
CONTRACT NO.	
LOCATION NO.	
DATE	
P.E. STAMP BOX	

<p>Washington State Department of Transportation</p>	Plot 1
	PLAN REF NO TC4
	SHEET OF SHEETS
	TRAFFIC CONTROL PLAN

SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)										
SHOULDER WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
8'	40	40	60	90	-	-	-	-	-	-
10'	40	60	90	90	-	-	-	-	-	-

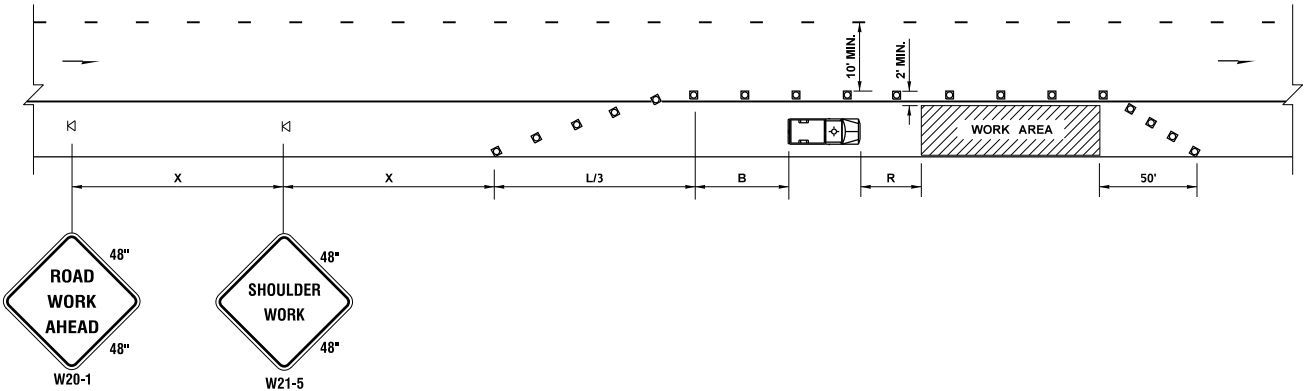
USE A 3 DEVICES TAPER FOR SHOULDERS LESS THEN 8'

BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R					
NO SPECIFIED DISTANCE REQUIRED					

CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35/40	30	60
25/30	20	40



LEGEND	
K	TEMPORARY SIGN LOCATION
□	CHANNELIZING DEVICES
	PROTECTIVE VEHICLE

SHOULDER CLOSURE - LOW SPEED (40 MPH OR LESS)

NOT TO SCALE

NOTES

1. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20'(FT).
2. ALL SIGNS ARE BLACK ON ORANGE.

FILE NAME		S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL\TC) Work Zone Traffic Control\TC-5) Shoulder Closure - Low Speed (40 MPH or Less)\TC-5.dgn								Plot 1
TIME		2:59:41 PM								PLAN REF NO
DATE		1/2/2018								TC5
PLOTTED BY		liddelf								SHEET
DESIGNED BY										OF
ENTERED BY										SHEETS
CHECKED BY										
PROJ. ENGR.										
REGIONAL ADM.		REVISION		DATE		BY				

REGION NO.	STATE
	WASH

JOB NUMBER

CONTRACT NO.

FED.AID PROJ.NO.
LOCATION NO.

P.E. STAMP BOX

P.E. STAMP BOX



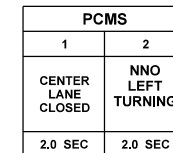
TRAFFIC CONTROL PLAN

SIGN SPACING = X (1)		
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS	25 / 30 MPH	200' ± (2)
RESIDENTIAL & BUSINESS DISTRICTS		
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANG
RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT
ROADWAY CONDITIONS.

MPH	TAPER	TANGENT
50	40	80
35/45	30	60
25/30	20	40



FIELD LOCATE IN ADVANCE
OF TEMPORARY SIGNS.

NOTES

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. ALL SIGNS ARE BLACK ON ORANGE.

NOT TO SCALE

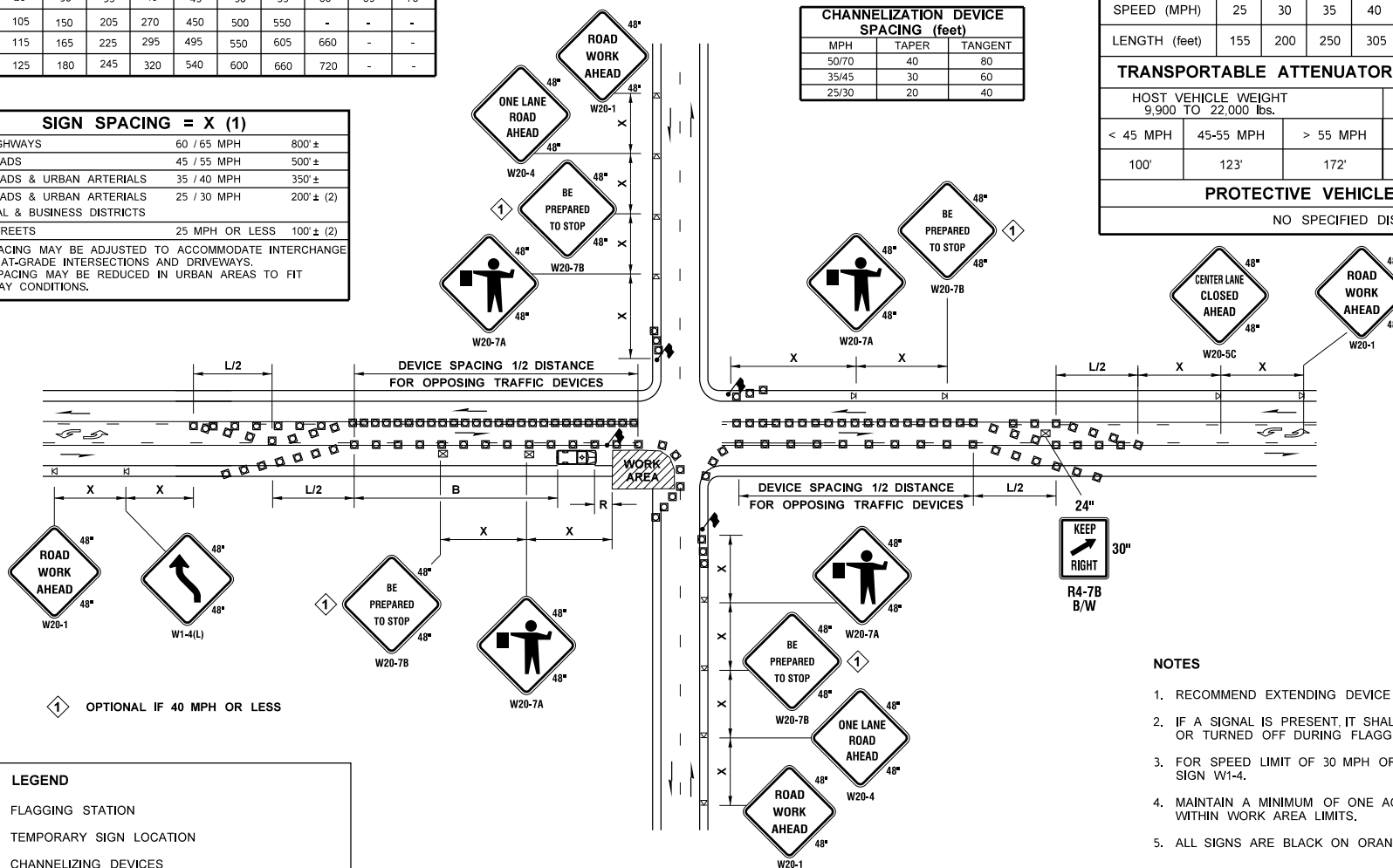
FILE NAME S:\Design R P\ S4-Standards\2-Plan Sheet Library\01-Published PSL\TC Work Zone Traffic Control\TC-11 Left Lane and Center Turn Lane Closure - Five Lane Roadway\TC-11.dgn										Plot 1									
TIME 3:20:13 PM										PLAN REF									
DATE 1/2/2018										TC11									
PLOTTED BY lldelf										SHEET									
DESIGNED BY										OF									
ENTERED BY										SHEETS									
CHECKED BY																			
PROJ. ENGR.																			
REGIONAL ADM.																			
REVISION										DATE									
BY																			
FED.AID PROJ.NO.										Washington State Department of Transportation									
WASH										TRAFFIC CONTROL PLAN									
JOB NUMBER																			
CONTRACT NO.										LOCATION NO.									
DATE										DATE									
P.E. STAMP BOX										P.E. STAMP BOX									

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.


BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730
TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R										
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.					HOST VEHICLE WEIGHT > 22,000 lbs.					
< 45 MPH	45-55 MPH		> 55 MPH		< 45 MPH	45-55 MPH		> 55 MPH		
100'	123'		172'		74'	100'		150'		
PROTECTIVE VEHICLE (WORK VEHICLE) = R										
NO SPECIFIED DISTANCE REQUIRED										

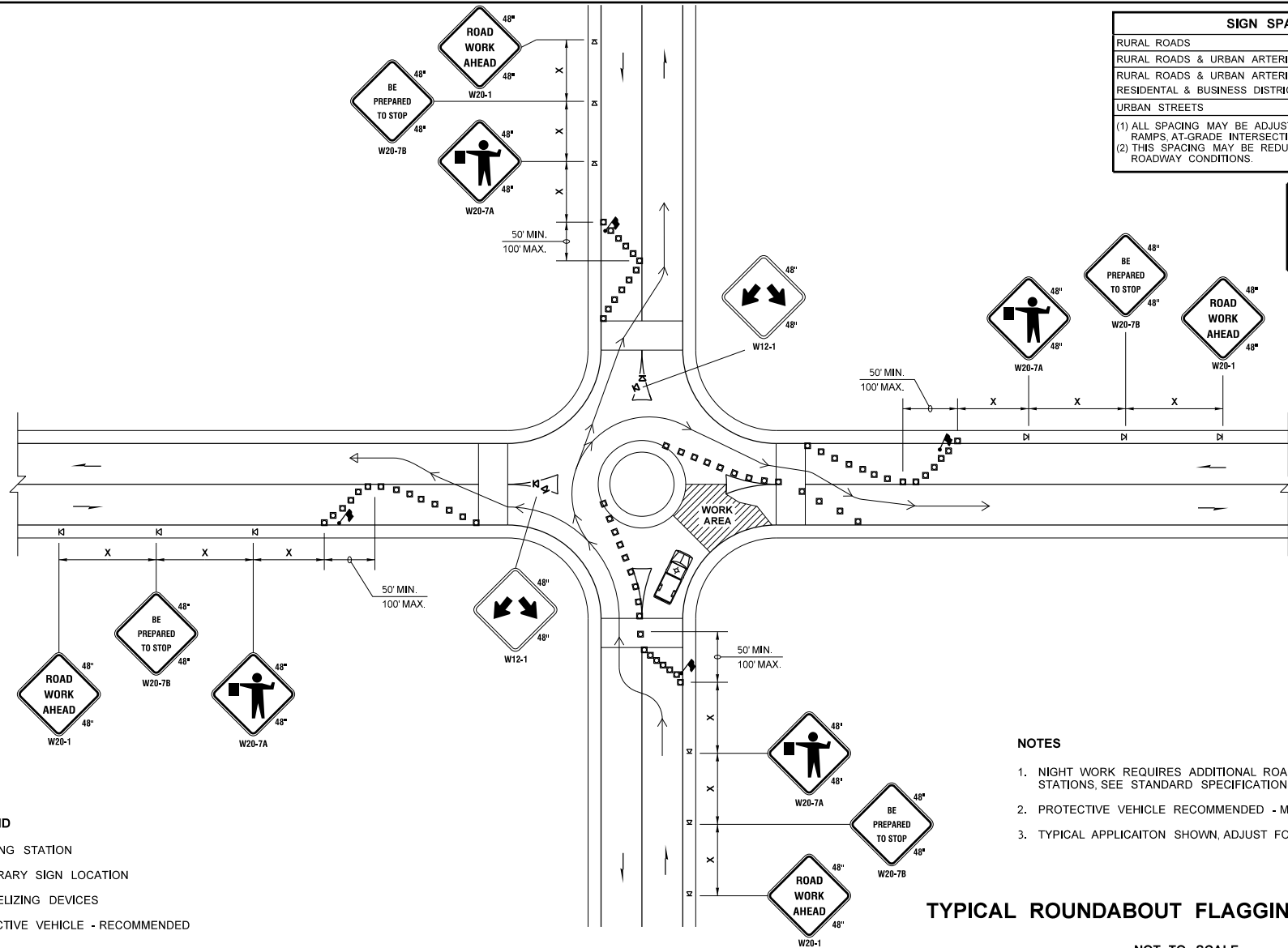


- ## NOTES
1. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
 2. IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS.
 3. FOR SPEED LIMIT OF 30 MPH OR LESS USE SIGN W1-3 IN LIEU OF SIGN W1-4.
 4. MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
 5. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.

INTERSECTION LANE CLOSURE - THREE LANE ROADWAY

NOT TO SCALE

FILE NAME S:\Design R P& S\4-Standards\2-Plan Sheet Library\01-Published PSL(TC) Work Zone Traffic Control(TC-14) Intersection Lane Closure - Three Lane Roadway\TC-14.dgn TIME 6:59:33 AM DATE 1/3/2018 PLOTTED BY lldelf DESIGNED BY ENTERED BY CHECKED BY REGIONAL ENGR. REGIONAL ADM.										REGION NO. STATE WASH JOB NUMBER CONTRACT NO.		FED.AID PROJ.NO. LOCATION NO.		DATE P.E. STAMP, REG.		DATE P.E. STAMP, REG.		 Washington State Department of Transportation		Plot 1 PLAN REF NO. TC14 SHEET OF SHEETS	
REVISION DATE BY														TRAFFIC CONTROL PLAN							



SIGN SPACING = X (1)		
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS	25 / 30 MPH	200' ± (2)
RESIDENTIAL & BUSINESS DISTRICTS		
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
 (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50/55	40	80
35/45	30	60
25/30	20	40

NOTES


1. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS, SEE STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
2. PROTECTIVE VEHICLE RECOMMENDED - MAY BE A WORK VEHICLE.
3. TYPICAL APPLICATION SHOWN, ADJUST FOR SITE CONDITIONS.

TYPICAL ROUNDABOUT FLAGGING OPERATION

NOT TO SCALE


FILE NAME: S:\Design_R_P&S\4-Standards\2-Plan Sheet Library\01-Published PSL(TC) Work Zone Traffic Control(TC-18) Typical Roundabout Flagging Operation\TC-18.dgn		REGION NO. STATE		FED.AID PROJ.NO.		Plot 1	
TIME: 11:11:16 AM		WASH				PLAN REF NO. TC18	
DATE: 1/9/2018		JOB NUMBER				SHEET	
PLOTTED BY: lldelf		CONTRACT NO.		LOCATION NO.		OF	
DESIGNED BY:						SHEETS	
ENTERED BY:							
CHECKED BY:							
PROJ. ENGR.							
REGIONAL ADM.		REVISION		DATE BY		TRAFFIC CONTROL PLAN	



PROJECT:		SUBMITTAL No.		
LACEY CONTRACT NO. PW____-20____		Date sent to City:		
Request for Approval of Material, Product or Shop Drawing				
Contractor:		Subcontractor:		
No. of Pages	Item: Material, Product or Shop Drawing		Specification Reference	
<input type="checkbox"/> This item is as specified		OR <input type="checkbox"/> This item is a substitution/or equal Material/Product Substitution Request shall be submitted		
<input type="checkbox"/> Supplier/Subcontractor certifies material/product conforms to contract.				
Review Priority: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 Requested Due Date:				
Notes to Engineer:				

City of Lacey Engineer:		Date Approved by City:	
<input type="checkbox"/> Rejected	New Submittal Required.		
<input type="checkbox"/> Revise and Resubmit	See Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	See items included in Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	No exceptions noted.		
Review of the materials, products or plans do not relieve the contractor from compliance with requirements of the contract documents and does not necessarily constitute acceptance for materials, products or plans to be incorporated in the work. This review is for general conformance of the project's conceptual design and general compliance with the project's plans and specifications.			
Date City Transmitted to Contractor:		Date Contractor Transmitted to Subcontractor/Supplier:	

Date Received by City of Lacey:	Reviewed by: (Name/Company)
<u>Engineer's Comments:</u> 1.	

PROJECT: <i>A</i>		SUBMITTAL No. <i>C</i>	 CITY OF LACEY
LACEY CONTRACT NO. PW___-20___ <i>B</i>			
Request for Approval of Material, Product or Shop Drawing			
Contractor: <i>D</i>		Subcontractor: <i>E</i>	
No. of Pages	Item: Material, Product or Shop Drawing	Specification Reference	
<i>F</i>	<i>G</i>	<i>H</i>	
<input type="checkbox"/> This item is as specified <i>I1</i> OR <input type="checkbox"/> This item is a substitution/or equal Material/Product Substitution Request shall be submitted <i>I2</i>			
<input type="checkbox"/> Supplier/Subcontractor certifies material/product conforms to contract.			
Review Priority: <input type="checkbox"/> 1 <i>K</i> <input type="checkbox"/> 2 <input type="checkbox"/> 3 Requested Due Date: <i>L</i>			
Notes to Engineer: <i>M</i>			

Section 1

City of Lacey Engineer: <i>R</i>		Date City Transmitted to Contractor: <i>S</i>	
<input type="checkbox"/> Rejected	New Submittal Required.		
<input type="checkbox"/> Revise and Resubmit	See Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	See items included in Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	No exceptions noted.		
Review of the materials, products or plans do not relieve the contractor from compliance with requirements of the contract documents and does not necessarily constitute acceptance for materials, products or plans to be incorporated in the work. This review is for general conformance of the project's conceptual design and general compliance with the project's plans and specifications.			
Date Received by Contractor: <i>T</i>		Date Returned to Subcontractor/Supplier: <i>U</i>	

Section 3

Date Received by City of Lacey:	<i>N</i>	Reviewed by: (Name/Company)	<i>@</i>
<u>Engineer's Comments:</u> 1. <i>P</i>			

Section 2

Section 1

The **Project Manager** shall fill in items **A** and **B**. The “Request for Approval of Material, Products or Shop Drawing” form shall be included in the specifications.

A Project Manager enters in the project title that matches the plans and specifications.

B Project Manager enters in PW project number that matches the plans and specifications.

The **Contractor** shall fill out the “Request for Approval of Material, Product or Shop Drawing” form for all materials or products that will be installed and Shop Drawing that will be used in the project. The form and the submittal shall be sent in the same e-mail. Submittals that exceed 10 MB shall either be provided on a CD, a flash drive or an internet link.

The products and materials that are specific to the project shall be circled or highlighted. If a submittal includes products or materials that are not project specific then these items shall be crossed out. Project Submittals that exceed 10 pages shall be submitted in Adobe Acrobat format and include a table of contents. Submittals that are not submitted in this format may be rejected outright and the contractor will be required to resubmit in the correct format.

The contractor shall enter in items **C, D, E, F, G, H, I, J, K, L**, and **M**.

C Contractor enters in the submittal number. The first “Request for Approval of Material, Product or Shop Drawing” submittal number shall be 1.0, the second shall be 2.0, the third shall be 3.0, etc.

When a “Request for Approval of Material, Product or Shop Drawing” requires resubmitting, the next submittal shall be the first part of the submittal number and then 0.1. Example: If submittal 9.0 requires resubmitting, then the resubmittal shall be 9.1. If a second resubmittal is required, then the next resubmittal shall be 9.2.

D Contractor shall fill in their name.

E Contractor shall fill in the subcontractor that is requesting approval. If only the General Contractor is requesting approval, then NA (not applicable) shall be entered.

F The number of pages for each specific material, product or shop drawing shall be entered.

G The specific material, product or shop drawing shall be entered. Material or product will be the trade name of the product or the name it is most easily recognized by. Materials or products that are similar (i.e. pipe fittings) can be bundled into one submittal.

H The specification that pertains to the specific material, product or shop drawing shall be entered. This information is critical in comparing the material, product or shop drawing to the specifications. You may also list Plan Sheet number or Special Provision page in this area.

I The Contractor shall check if the items submitted are either specified (I1) or that the submitted item is a substitution or equal (I2). If the product is a substitute or equal, then a Material/Product Substitution Request shall be submitted.

J The Contractor shall check that supplier and/or subcontractor certifies the bid item.

K The Contractor shall check if the submittal for approval is a high (1), average (2) or low (3) priority. The City of Lacey will review priority submittals as quickly as possible. Note: The majority of the submittals shall be checked as priority 2 or 3. Priority 1 submittals shall be critical or long lead items.

L A due date can be entered by the contractor. The City of Lacey will endeavor to review and return the request for approval by the requested due date.

M Any additional notes that the Contractor finds would assist the City of Lacey in reviewing the submittal can be entered in here.

Section 2

The **City of Lacey Engineer** shall fill in items **N**, **O** and **P**.

N Enter the date that the City of Lacey received the “Request for Approval of Material, Product or Shop Drawing” from the Contractor.

O Enter the name and company of the person that reviewed the submittal.

P Any comments regarding changes needed, resubmittals requirements, conditional approval, etc. shall be entered.

Section 3

The **City of Lacey Engineer** shall fill in items **Q**, **R**, and **S**.

Q Either “Rejected: New Submittal Required.”, “Review and Resubmit: See Engineer’s comments.”, “Conditionally Approved: See items included in Engineer’s comments.”, or “Conditionally Approved: No exceptions noted” shall be checked”.

R Enter the name of the Engineer sending the submittal back to the Contractor. The Engineering sending the form back may not necessarily be the Engineer completing the review.

S Enter the date that the City of Lacey transmits the “Request for Approval of Material, Product or Shop Drawing” to the Contractor.

The **Contractor** shall enter in items **T** and **U** for their own records. If there is a discrepancy between the **S** “Date City Transmitted to Contractor” and **T**, the Contractor shall notify the City of Lacey within 3 working days.

T Contractor enters the date that they received the completed “Request for Approval of Material or Shop Drawing”.

U Contractor enters the date that that they return the completed “Request for Approval of Material or Shop Drawing” to the Subcontractor/Supplier.

E
PREVAILING
MINIMUM
HOURLY
RATES

Benefit Code Key – Effective 8/31/2023 thru 3/1/2024

Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
 - B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
 - G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.
 - J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.
 - K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
 - M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.
- P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.
- R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.
- W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
- Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
- Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
- F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
- M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.
- R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.
3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
- H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.
- J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

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

- A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage
- C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:

On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

- E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.
- S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).
- All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus \$2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).
- U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. V. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established or outside the normal shift (5 am to 6pm), and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

- X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

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

- B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

- C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

Overtime Codes Continued

11. D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
- E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
- F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.
- H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.

Overtime Codes Continued

11. J. All hours worked on holidays shall be paid at double the hourly rate of wage.
- K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.
- L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar (\$2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
- M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.
- Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars (\$2.00) per hour.
- N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.
- Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.
- O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Benefit Code Key – Effective 8/31/2023 thru 3/1/2024

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).
- C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
- H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).
- I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).
- L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).
- N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.
- Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).
- S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
- H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

Holiday Codes Continued

6. T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.
7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.
- X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.
- Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
- M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: \$1.00, Levels C & D: \$0.50.
- N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.

Note Codes Continued

8. S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: \$2.00, Class B Suit: \$1.50, And Class C Suit: \$1.00. Workers performing underground work receive an additional \$0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional \$0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional \$0.50 per hour.
- V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.
- Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.
- Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.
- W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.
- X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, and Class D Suit: \$0.50. Special Shift Premium: Basic hourly rate plus \$2.00 per hour.
- When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)
- Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.
- Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Note Codes Continued

8. Z. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

9. A. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid \$0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130' to 199' – \$0.50 per hour over their classification rate.

(B) – 200' to 299' – \$0.80 per hour over their classification rate.

(C) – 300' and over – \$1.00 per hour over their classification rate.

- B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

- C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

- D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

Note Codes Continued

- 9. E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.
- H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

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: 12/21/2023

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>	<u>*Risk Class</u>
Thurston	Asbestos Abatement Workers	Journey Level	\$59.07	<u>5D</u>	<u>1H</u>		View
Thurston	Boilermakers	Journey Level	\$74.29	<u>5N</u>	<u>1C</u>		View
Thurston	Brick Mason	Journey Level	\$69.07	<u>7E</u>	<u>1N</u>		View
Thurston	Brick Mason	Pointer-Caulker-Cleaner	\$69.07	<u>7E</u>	<u>1N</u>		View
Thurston	Building Service Employees	Janitor	\$15.74		<u>1</u>		View
Thurston	Building Service Employees	Shampooer	\$15.74		<u>1</u>		View
Thurston	Building Service Employees	Waxer	\$15.74		<u>1</u>		View
Thurston	Building Service Employees	Window Cleaner	\$15.74		<u>1</u>		View
Thurston	Cabinet Makers (In Shop)	Journey Level	\$15.74		<u>1</u>		View
Thurston	Carpenters	Acoustical Worker	\$74.96	<u>15J</u>	<u>4C</u>		View
Thurston	Carpenters	Bridge, Dock And Wharf Carpenters	\$74.96	<u>15J</u>	<u>4C</u>		View
Thurston	Carpenters	Floor Layer & Floor Finisher	\$74.96	<u>15J</u>	<u>4C</u>		View
Thurston	Carpenters	Journey Level	\$74.96	<u>15J</u>	<u>4C</u>		View
Thurston	Carpenters	Scaffold Erector	\$74.96	<u>15J</u>	<u>4C</u>		View
Thurston	Cement Masons	Application of all Composition Mastic	\$72.87	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Application of all Epoxy Material	\$72.37	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Application of all Plastic Material	\$72.87	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Application of Sealing Compound	\$72.37	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Application of Underlayment	\$72.87	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Building General	\$72.37	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Composition or Kalman Floors	\$72.87	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Concrete Paving	\$72.37	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Curb & Gutter Machine	\$72.87	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Curb & Gutter, Sidewalks	\$72.37	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Curing Concrete	\$72.37	<u>15J</u>	<u>4U</u>		View
Thurston	Cement Masons	Finish Colored Concrete	\$72.87	<u>15J</u>	<u>4U</u>		View

Thurston	Cement Masons	Floor Grinding	\$72.87	15J	4U		View
Thurston	Cement Masons	Floor Grinding/Polisher	\$72.37	15J	4U		View
Thurston	Cement Masons	Green Concrete Saw, self-powered	\$72.87	15J	4U		View
Thurston	Cement Masons	Grouting of all Plates	\$72.37	15J	4U		View
Thurston	Cement Masons	Grouting of all Tilt-up Panels	\$72.37	15J	4U		View
Thurston	Cement Masons	Guniting Nozzleman	\$72.87	15J	4U		View
Thurston	Cement Masons	Hand Powered Grinder	\$72.87	15J	4U		View
Thurston	Cement Masons	Journey Level	\$72.37	15J	4U		View
Thurston	Cement Masons	Patching Concrete	\$72.37	15J	4U		View
Thurston	Cement Masons	Pneumatic Power Tools	\$72.87	15J	4U		View
Thurston	Cement Masons	Power Chipping & Brushing	\$72.87	15J	4U		View
Thurston	Cement Masons	Sand Blasting Architectural Finish	\$72.87	15J	4U		View
Thurston	Cement Masons	Screed & Rodding Machine	\$72.87	15J	4U		View
Thurston	Cement Masons	Spackling or Skim Coat Concrete	\$72.37	15J	4U		View
Thurston	Cement Masons	Troweling Machine Operator	\$72.87	15J	4U		View
Thurston	Cement Masons	Troweling Machine Operator on Colored Slabs	\$72.87	15J	4U		View
Thurston	Cement Masons	Tunnel Workers	\$72.87	15J	4U		View
Thurston	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	\$129.71	15J	4C		View
Thurston	Divers & Tenders	Dive Supervisor/Master	\$93.94	15J	4C		View
Thurston	Divers & Tenders	Diver	\$129.71	15J	4C	8V	View
Thurston	Divers & Tenders	Diver On Standby	\$88.94	15J	4C		View
Thurston	Divers & Tenders	Diver Tender	\$80.82	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$93.26	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	\$98.26	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$102.26	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$107.26	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$109.76	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$114.76	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$116.76	15J	4C		View
Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$118.76	15J	4C		View

Thurston	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$120.76	15J	4C		View
Thurston	Divers & Tenders	Manifold Operator	\$80.82	15J	4C		View
Thurston	Divers & Tenders	Manifold Operator Mixed Gas	\$85.82	15J	4C		View
Thurston	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$80.82	15J	4C		View
Thurston	Divers & Tenders	Remote Operated Vehicle Tender	\$75.41	15J	4C		View
Thurston	Dredge Workers	Assistant Engineer	\$79.62	5D	3F		View
Thurston	Dredge Workers	Assistant Mate (Deckhand)	\$79.01	5D	3F		View
Thurston	Dredge Workers	Boatmen	\$79.62	5D	3F		View
Thurston	Dredge Workers	Engineer Welder	\$81.15	5D	3F		View
Thurston	Dredge Workers	Leverman, Hydraulic	\$82.77	5D	3F		View
Thurston	Dredge Workers	Mates	\$79.62	5D	3F		View
Thurston	Dredge Workers	Oiler	\$79.01	5D	3F		View
Thurston	Drywall Applicator	Journey Level	\$74.96	15J	4C		View
Thurston	Drywall Tapers	Journey Level	\$74.50	5P	1E		View
Thurston	Electrical Fixture Maintenance Workers	Journey Level	\$29.54		1		View
Thurston	Electricians - Inside	Cable Splicer	\$88.45	5C	1G		View
Thurston	Electricians - Inside	Journey Level	\$82.57	5C	1G		View
Thurston	Electricians - Inside	Lead Covered Cable Splicer	\$94.34	5C	1G		View
Thurston	Electricians - Inside	Welder	\$88.45	5C	1G		View
Thurston	Electricians - Motor Shop	Craftsman	\$15.74		1		View
Thurston	Electricians - Motor Shop	Journey Level	\$15.74		1		View
Thurston	Electricians - Powerline Construction	Cable Splicer	\$93.00	5A	4D		View
Thurston	Electricians - Powerline Construction	Certified Line Welder	\$85.42	5A	4D		View
Thurston	Electricians - Powerline Construction	Groundperson	\$55.27	5A	4D		View
Thurston	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$85.42	5A	4D		View
Thurston	Electricians - Powerline Construction	Journey Level Lineperson	\$85.42	5A	4D		View
Thurston	Electricians - Powerline Construction	Line Equipment Operator	\$73.35	5A	4D		View
Thurston	Electricians - Powerline Construction	Meter Installer	\$55.27	5A	4D	8W	View
Thurston	Electricians - Powerline Construction	Pole Sprayer	\$85.42	5A	4D		View
Thurston	Electricians - Powerline Construction	Powderperson	\$63.50	5A	4D		View
Thurston	Electronic Technicians	Journey Level	\$53.46	6Z	1B		View
Thurston	Elevator Constructors	Mechanic	\$107.49	7D	4A		View
Thurston	Elevator Constructors	Mechanic In Charge	\$116.13	7D	4A		View
Thurston	Fabricated Precast Concrete Products	Journey Level	\$15.74		1		View

Thurston	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$15.74		1		View
Thurston	Fence Erectors	Fence Erector	\$50.07	15J	11P	8Y	View
Thurston	Fence Erectors	Fence Laborer	\$50.07	15J	11P	8Y	View
Thurston	Flaggers	Journey Level	\$50.07	15J	11P	8Y	View
Thurston	Glaziers	Journey Level	\$79.16	7L	1Y		View
Thurston	Heat & Frost Insulators And Asbestos Workers	Journey Level	\$87.15	15H	11C		View
Thurston	Heating Equipment Mechanics	Journey Level	\$96.42	7F	1E		View
Thurston	Hod Carriers & Mason Tenders	Journey Level	\$62.49	15J	11P	8Y	View
Thurston	Industrial Power Vacuum Cleaner	Journey Level	\$15.74		1		View
Thurston	Inland Boatmen	Boat Operator	\$61.41	5B	1K		View
Thurston	Inland Boatmen	Cook	\$56.48	5B	1K		View
Thurston	Inland Boatmen	Deckhand	\$57.48	5B	1K		View
Thurston	Inland Boatmen	Deckhand Engineer	\$58.81	5B	1K		View
Thurston	Inland Boatmen	Launch Operator	\$58.89	5B	1K		View
Thurston	Inland Boatmen	Mate	\$57.31	5B	1K		View
Thurston	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$15.74		1		View
Thurston	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$15.74		1		View
Thurston	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$15.74		1		View
Thurston	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$25.00		1		View
Thurston	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$15.74		1		View
Thurston	Insulation Applicators	Journey Level	\$74.96	15J	4C		View
Thurston	Ironworkers	Journeyman	\$85.80	15K	11N		View
Thurston	Laborers	Air, Gas Or Electric Vibrating Screed	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Airtrac Drill Operator	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Ballast Regular Machine	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Batch Weighman	\$50.07	15J	11P	8Y	View
Thurston	Laborers	Brick Pavers	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Brush Cutter	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Brush Hog Feeder	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Burner	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Caisson Worker	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Carpenter Tender	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Cement Dumper-paving	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Cement Finisher Tender	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Change House Or Dry Shack	\$59.07	15J	11P	8Y	View

Thurston	Laborers	Chipping Gun (30 Lbs. And Over)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Chipping Gun (Under 30 Lbs.)	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Choker Setter	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Chuck Tender	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Clary Power Spreader	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Clean-up Laborer	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Concrete Dumper/Chute Operator	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Concrete Form Stripper	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Concrete Placement Crew	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Concrete Saw Operator/Core Driller	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Crusher Feeder	\$50.07	15J	11P	8Y	View
Thurston	Laborers	Curing Laborer	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Ditch Digger	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Diver	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Drill Operator (Hydraulic, Diamond)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Dry Stack Walls	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Dump Person	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Epoxy Technician	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Erosion Control Worker	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Faller & Bucker Chain Saw	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Fine Graders	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Firewatch	\$50.07	15J	11P	8Y	View
Thurston	Laborers	Form Setter	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Gabian Basket Builders	\$59.07	15J	11P	8Y	View
Thurston	Laborers	General Laborer	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Grade Checker & Transit Person	\$62.49	15J	11P	8Y	View
Thurston	Laborers	Grinders	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Grout Machine Tender	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Groutmen (Pressure) Including Post Tension Beams	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Guardrail Erector	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Hazardous Waste Worker (Level A)	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Hazardous Waste Worker (Level B)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Hazardous Waste Worker (Level C)	\$59.07	15J	11P	8Y	View
Thurston	Laborers	High Scaler	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Jackhammer	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Laserbeam Operator	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Maintenance Person	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Manhole Builder-Mudman	\$60.15	15J	11P	8Y	View

Thurston	Laborers	Material Yard Person	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Mold Abatement Worker	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Motorman-Dinky Locomotive	\$62.59	15J	11P	8Y	View
Thurston	Laborers	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	\$62.49	15J	11P	8Y	View
Thurston	Laborers	Pavement Breaker	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Pilot Car	\$50.07	15J	11P	8Y	View
Thurston	Laborers	Pipe Layer (Lead)	\$62.49	15J	11P	8Y	View
Thurston	Laborers	Pipe Layer/Tailor	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Pipe Pot Tender	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Pipe Reliner	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Pipe Wrapper	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Pot Tender	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Powderman	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Powderman's Helper	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Power Jacks	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Railroad Spike Puller - Power	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Raker - Asphalt	\$62.49	15J	11P	8Y	View
Thurston	Laborers	Re-timberman	\$60.90	15J	11P	8Y	View
Thurston	Laborers	Remote Equipment Operator	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Rigger/Signal Person	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Rip Rap Person	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Rivet Buster	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Rodder	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Scaffold Erector	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Scale Person	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Sloper (Over 20")	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Sloper Sprayer	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Spreader (Concrete)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Stake Hopper	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Stock Piler	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Swinging Stage/Boatswain Chair	\$50.07	15J	11P	8Y	View
Thurston	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Tamper (Multiple & Self-propelled)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Toolroom Person (at Jobsite)	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Topper	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Track Laborer	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Track Liner (Power)	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Traffic Control Laborer	\$53.54	15J	11P	9C	View

Thurston	Laborers	Traffic Control Supervisor	\$56.73	15J	11P	9C	View
Thurston	Laborers	Truck Spotter	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Tugger Operator	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$175.79	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$180.82	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$184.50	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$190.20	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$192.32	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$197.42	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$199.32	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$201.32	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$203.32	15J	11P	9B	View
Thurston	Laborers	Tunnel Work-Guage and Lock Tender	\$62.59	15J	11P	8Y	View
Thurston	Laborers	Tunnel Work-Miner	\$62.59	15J	11P	8Y	View
Thurston	Laborers	Vibrator	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Vinyl Seamer	\$59.07	15J	11P	8Y	View
Thurston	Laborers	Watchman	\$45.51	15J	11P	8Y	View
Thurston	Laborers	Welder	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Well Point Laborer	\$60.15	15J	11P	8Y	View
Thurston	Laborers	Window Washer/Cleaner	\$45.51	15J	11P	8Y	View
Thurston	Laborers - Underground Sewer & Water	General Laborer & Topman	\$59.07	15J	11P	8Y	View
Thurston	Laborers - Underground Sewer & Water	Pipe Layer	\$60.15	15J	11P	8Y	View
Thurston	Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	\$45.51	15J	11P	8Y	View
Thurston	Landscape Construction	Landscape Operator	\$77.82	15J	3K	8X	View
Thurston	Landscape Maintenance	Groundskeeper	\$15.74		1		View
Thurston	Lathers	Journey Level	\$74.96	15J	4C		View
Thurston	Marble Setters	Journey Level	\$69.07	7E	1N		View
Thurston	Metal Fabrication (In Shop)	Fitter	\$27.10	6T	2U		View
Thurston	Metal Fabrication (In Shop)	Laborer	\$16.91	6T	2U		View
Thurston	Metal Fabrication (In Shop)	Layerout	\$30.63	6T	2U		View
Thurston	Metal Fabrication (In Shop)	Machine Operator	\$20.86	6T	2U		View
Thurston	Metal Fabrication (In Shop)	Welder	\$24.74	6T	2U		View
Thurston	Millwright	Journey Level	\$76.51	15J	4C		View
Thurston	Modular Buildings	Cabinet Assembly	\$15.74		1		View
Thurston	Modular Buildings	Electrician	\$15.74		1		View
Thurston	Modular Buildings	Equipment Maintenance	\$15.74		1		View

Thurston	Modular Buildings	Plumber	\$15.74		<u>1</u>		View
Thurston	Modular Buildings	Production Worker	\$15.74		<u>1</u>		View
Thurston	Modular Buildings	Tool Maintenance	\$15.74		<u>1</u>		View
Thurston	Modular Buildings	Utility Person	\$15.74		<u>1</u>		View
Thurston	Modular Buildings	Welder	\$15.74		<u>1</u>		View
Thurston	Painters	Journey Level	\$51.71	<u>6Z</u>	<u>11J</u>		View
Thurston	Pile Driver	Crew Tender	\$80.82	<u>15J</u>	<u>4C</u>		View
Thurston	Pile Driver	Journey Level	\$75.41	<u>15J</u>	<u>4C</u>		View
Thurston	Plasterers	Journey Level	\$70.91	<u>7Q</u>	<u>1R</u>		View
Thurston	Plasterers	Nozzleman	\$74.91	<u>7Q</u>	<u>1R</u>		View
Thurston	Playground & Park Equipment Installers	Journey Level	\$15.74		<u>1</u>		View
Thurston	Plumbers & Pipefitters	Journey Level	\$85.72	<u>5A</u>	<u>1G</u>		View
Thurston	Power Equipment Operators	Asphalt Plant Operator	\$79.12	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Assistant Engineer	\$75.29	<u>7A</u>	<u>11H</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Barrier Machine (zipper)	\$78.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Batch Plant Operator: Concrete	\$78.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Bobcat	\$74.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$74.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Brooms	\$74.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Bump Cutter	\$78.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Cableways	\$79.12	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Chipper	\$78.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Compressor	\$74.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42m	\$79.12	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Concrete Finish Machine -laser Screed	\$74.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$77.82	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$78.43	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Conveyors	\$77.82	<u>15J</u>	<u>3K</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Cranes Friction: 200 tons and over	\$82.49	<u>7A</u>	<u>11H</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Cranes, A-frame: 10 tons and under	\$75.29	<u>7A</u>	<u>11H</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$80.86	<u>7A</u>	<u>11H</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	\$79.35	<u>7A</u>	<u>11H</u>	<u>8X</u>	View
Thurston	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$81.69	<u>7A</u>	<u>11H</u>	<u>8X</u>	View

Thurston	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$82.49	7A	11H	8X	View
Thurston	Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$81.69	7A	11H	8X	View
Thurston	Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Crusher	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Deck Engineer/deck Winches (power)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Derricks: on building work	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators	Dozers D-9 & Under	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Drilling Machine	\$79.92	15J	3K	8X	View
Thurston	Power Equipment Operators	Elevator and man-lift: permanent and shaft type	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Forklift: 3000 lbs and over with attachments	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators	Grade Engineer: Using Blueprints, Cut Sheets,etc.	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Gradechecker/stakeman	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Guardrail punch/Auger	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Horizontal/directional Drill Locator	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Horizontal/directional Drill Operator	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators	Hydralifts/boom trucks: over 10 tons	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$79.92	15J	3K	8X	View
Thurston	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$78.43	15J	3K	8X	View

Thurston	Power Equipment Operators	Loaders, Plant Feed	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Loaders: Elevating Type Belt	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Locomotives, All	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Material Transfer Device	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Mechanics: all (Leadmen - \$0.50 per hour over mechanic)	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators	Motor patrol graders	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	\$79.35	7A	11H	8X	View
Thurston	Power Equipment Operators	Overhead, bridge type: 100 tons and over	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators	Pavement Breaker	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Posthole Digger, Mechanical	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Power Plant	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Pumps - Water	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Quad 9, HD 41, D10 And Over	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Quick Tower: no cab, under 100 feet in height based to boom	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Rigger and Bellman	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Rollagon	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Roller, Other Than Plant Mix	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Roto-mill, Roto-grinder	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Saws - Concrete	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Scrapers - Concrete & Carry All	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Service Engineers: equipment	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Shotcrete/gunite Equipment	\$74.43	15J	3K	8X	View

Thurston	Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$79.92	15J	3K	8X	View
Thurston	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$80.74	15J	3K	8X	View
Thurston	Power Equipment Operators	Slipform Pavers	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Spreader, Topsider & Screedman	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Subgrader Trimmer	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Tower Bucket Elevators	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$81.69	7A	11H	8X	View
Thurston	Power Equipment Operators	Tower crane: up to 175' in height base to boom	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom.	\$82.49	7A	11H	8X	View
Thurston	Power Equipment Operators	Transporters, All Track Or Truck Type	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators	Trenching Machines	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	\$79.35	7A	11H	8X	View
Thurston	Power Equipment Operators	Truck crane oiler/driver: under 100 tons	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators	Truck Mount Portable Conveyor	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Welder	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators	Wheel Tractors, Farmall Type	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators	Yo Yo Pay Dozer	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operator	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator: Concrete	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Bobcat	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Brooms	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	\$78.43	15J	3K	8X	View

Thurston	Power Equipment Operators-Underground Sewer & Water	Cableways	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Chipper	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Compressor	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42m	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Conveyors	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	\$82.49	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes, A-frame: 10 tons and under	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	\$79.35	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$81.69	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$82.49	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$81.69	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Crusher	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Derricks: on building work	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$77.82	15J	3K	8X	View

Thurston	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	\$79.92	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blueprints, Cut Sheets, etc.	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Guardrail punch/Auger	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$79.92	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Mechanics: all (Leadmen - \$0.50 per hour over mechanic)	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Motor patrol graders	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding	\$74.43	15J	3K	8X	View

		Operator					
Thurston	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators and manlifts), Air Tuggers, Strato	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	\$79.35	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 100 tons and over	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Power Plant	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Quad 9, HD 41, D10 And Over	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height based to boom	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	\$75.29	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman(Certified)	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Rollagon	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Service Engineers: equipment	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	\$74.43	15J	3K	8X	View

Thurston	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$79.92	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	\$81.69	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Tower crane: up to 175' in height base to boom	\$80.86	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom.	\$82.49	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	\$79.12	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	\$77.82	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	\$79.35	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	\$78.74	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$78.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Welder	\$80.05	7A	11H	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	\$74.43	15J	3K	8X	View
Thurston	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	\$78.43	15J	3K	8X	View
Thurston	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$57.22	5A	4A		View
Thurston	Power Line Clearance Tree Trimmers	Spray Person	\$54.32	5A	4A		View
Thurston	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$57.22	5A	4A		View
Thurston	Power Line Clearance Tree Trimmers	Tree Trimmer	\$51.18	5A	4A		View
Thurston	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$38.99	5A	4A		View

Thurston	Refrigeration & Air Conditioning Mechanics	Journey Level	\$87.46	5A	1G	View
Thurston	Residential Brick Mason	Journey Level	\$35.53		1	View
Thurston	Residential Carpenters	Journey Level	\$49.93	15J	4C	View
Thurston	Residential Cement Masons	Journey Level	\$18.09		1	View
Thurston	Residential Drywall Applicators	Journey Level	\$49.92	15J	4C	View
Thurston	Residential Drywall Tapers	Journey Level	\$23.25		1	View
Thurston	Residential Electricians	Journey Level	\$43.03	6Z	1B	View
Thurston	Residential Glaziers	Journey Level	\$51.80	7L	1H	View
Thurston	Residential Insulation Applicators	Journey Level	\$24.16		1	View
Thurston	Residential Laborers	Journey Level	\$22.90		1	View
Thurston	Residential Marble Setters	Journey Level	\$35.53		1	View
Thurston	Residential Painters	Journey Level	\$20.77		1	View
Thurston	Residential Plumbers & Pipefitters	Journey Level	\$71.41		1	View
Thurston	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$34.42		1	View
Thurston	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$57.31	7F	1R	View
Thurston	Residential Soft Floor Layers	Journey Level	\$20.67		1	View
Thurston	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$58.26	5C	2R	View
Thurston	Residential Stone Masons	Journey Level	\$35.53		1	View
Thurston	Residential Terrazzo Workers	Journey Level	\$15.74		1	View
Thurston	Residential Terrazzo/Tile Finishers	Journey Level	\$21.96		1	View
Thurston	Residential Tile Setters	Journey Level	\$15.74		1	View
Thurston	Roofers	Journey Level	\$60.90	5A	3H	View
Thurston	Roofers	Using Irritable Bituminous Materials	\$63.90	5A	3H	View
Thurston	Sheet Metal Workers	Journey Level (Field or Shop)	\$96.42	7F	1E	View
Thurston	Shipbuilding & Ship Repair	New Construction Boilermaker	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Carpenter	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Crane Operator	\$41.83	7V	1	View
Thurston	Shipbuilding & Ship Repair	New Construction Electrician	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	\$87.15	15H	11C	View
Thurston	Shipbuilding & Ship Repair	New Construction Laborer	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Machinist	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Operating Engineer	\$41.83	7V	1	View
Thurston	Shipbuilding & Ship Repair	New Construction Painter	\$51.95	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Pipefitter	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Rigger	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Sheet Metal	\$51.85	7X	4J	View
Thurston	Shipbuilding & Ship Repair	New Construction Shipwright	\$51.85	7X	4J	View

Thurston	Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	\$41.83	7V	1		View
Thurston	Shipbuilding & Ship Repair	New Construction Welder / Burner	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Boilermaker	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Carpenter	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Crane Operator	\$45.06	7Y	4K		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Electrician	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	\$87.15	15H	11C		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Laborer	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Machinist	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Operating Engineer	\$45.06	7Y	4K		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Painter	\$51.95	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Pipefitter	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Rigger	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Sheet Metal	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Shipwright	\$51.85	7X	4J		View
Thurston	Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	\$45.06	7Y	4K		View
Thurston	Sign Makers & Installers (Electrical)	Journey Level	\$18.04		1		View
Thurston	Sign Makers & Installers (Non-Electrical)	Journey Level	\$15.74		1		View
Thurston	Soft Floor Layers	Journey Level	\$66.32	15J	4C		View
Thurston	Solar Controls For Windows	Journey Level	\$15.74		1		View
Thurston	Sprinkler Fitters (Fire Protection)	Journey Level	\$93.99	5C	1X		View
Thurston	Stage Rigging Mechanics (Non Structural)	Journey Level	\$15.74		1		View
Thurston	Stone Masons	Journey Level	\$69.07	7E	1N		View
Thurston	Street And Parking Lot Sweeper Workers	Journey Level	\$16.00		1		View
Thurston	Surveyors	Assistant Construction Site Surveyor	\$78.74	7A	11H	8X	View
Thurston	Surveyors	Chainman	\$75.29	7A	11H	8X	View
Thurston	Surveyors	Construction Site Surveyor	\$80.05	7A	11H	8X	View
Thurston	Surveyors	Drone Operator (when used in conjunction with surveying work only)	\$75.29	7A	11H	8X	View
Thurston	Surveyors	Ground Penetrating Radar	\$75.29	7A	11H	8X	View
Thurston	Telecommunication Technicians	Journey Level	\$53.46	6Z	1B		View
Thurston	Telephone Line Construction - Outside	Cable Splicer	\$40.11	5A	2B		View
Thurston	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$26.67	5A	2B		View
Thurston	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$33.49	5A	2B		View
Thurston	Telephone Line Construction - Outside	Telephone Lineperson	\$37.90	5A	2B		View

Thurston	Terrazzo Workers	Journey Level	\$62.36	<u>7E</u>	<u>1N</u>		View
Thurston	Tile Setters	Journey Level	\$62.36	<u>7E</u>	<u>1N</u>		View
Thurston	Tile, Marble & Terrazzo Finishers	Finisher	\$53.19	<u>7E</u>	<u>1N</u>		View
Thurston	Traffic Control Stripers	Journey Level	\$89.54	<u>15L</u>	<u>1K</u>		View
Thurston	Truck Drivers	Asphalt Mix Over 16 Yards	\$74.20	<u>15J</u>	<u>11M</u>	<u>8L</u>	View
Thurston	Truck Drivers	Asphalt Mix To 16 Yards	\$73.36	<u>15J</u>	<u>11M</u>	<u>8L</u>	View
Thurston	Truck Drivers	Dump Truck	\$73.36	<u>15J</u>	<u>11M</u>	<u>8L</u>	View
Thurston	Truck Drivers	Dump Truck & Trailer	\$74.20	<u>15J</u>	<u>11M</u>	<u>8L</u>	View
Thurston	Truck Drivers	Other Trucks	\$74.20	<u>15J</u>	<u>11M</u>	<u>8L</u>	View
Thurston	Truck Drivers - Ready Mix	Transit Mix	\$74.20	<u>15J</u>	<u>11M</u>	<u>8L</u>	View
Thurston	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.53		<u>1</u>		View
Thurston	Well Drillers & Irrigation Pump Installers	Oiler	\$15.74		<u>1</u>		View
Thurston	Well Drillers & Irrigation Pump Installers	Well Driller	\$18.00		<u>1</u>		View