



City of Tacoma  
Department of Public Works

# **SPECIFICATION NO. PW23-0019F**

**Edison, Whitman, Lincoln Safe  
Routes to Schools - REBID**

**Project No. PWK-01034**

**CITY OF TACOMA**  
**DEPARTMENT OF PUBLIC WORKS**

REQUEST FOR BIDS, SPECIAL PROVISIONS, BID PROPOSAL AND CONTRACT

FOR

**SPECIFICATION NO.**  
**PW23-0019F**

**Edison, Whitman, Lincoln Safe**  
**Routes to Schools - REBID**

**PROJECT NO. PWK-01034**



01/27/2023

Brian Wang, Project Engineer, P.E.  
Engineering Division  
Public Works Department

Room 544, Tacoma Municipal Building  
Tacoma, Washington 98421-2711

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Tacoma, Washington 98421-2711



**City of Tacoma  
Public Works Engineering**

**REQUEST FOR BIDS PW23-0019F  
Edison, Whitman, Lincoln Safe Routes to Schools - REBID**

**Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday March 7th, 2023**

Submittals must be received by the City's Procurement and Payables Division prior to 11:00 a.m. Pacific Time.

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email, [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org), as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals.

**Submittal Delivery:** Sealed submittals will be received as follows:

**By Email:**

[bids@cityoftacoma.org](mailto:bids@cityoftacoma.org)

Maximum file size: 35 MB. Multiple emails may be sent for each submittal

**Bid Opening:** Sealed submittals in response to a RFB will be opened Tuesday's at 11AM by a purchasing representative and read aloud during a public bid opening held at the Tacoma Public Utilities Administrative Building North, 3628 S. 35<sup>th</sup> Street, Tacoma, WA 98409, conference room M-1, located on the main floor. They will also be held virtually Tuesday's at 11AM. Attend [via this link](#) or call 1 (253) 215 8782. Submittals in response to an RFP, RFQ or RFI will be recorded as received. As soon as possible, after 1:00 PM, on the day of submittal deadline, preliminary results will be posted to [www.TacomaPurchasing.org](http://www.TacomaPurchasing.org).

**Solicitation Documents:** An electronic copy of the complete solicitation documents may be viewed and obtained at the City's plan distribution service provider, ARC, 632 Broadway, Tacoma, WA, or by going to <http://www.e-arc.com/location/tacoma>. Prospective bidders will be required to pay reproduction costs. A list of vendors registered for this solicitation is also available at their website.

**Pre-Proposal Meeting:** A pre-proposal meeting will not be held.

**Project Scope:** This Contract shall generally consist of installing improvements at Edison Elementary School, Whitman Elementary School, and Lincoln High School consisting of: ADA compliant curb ramps, missing link sidewalks, bulbouts with pedestrian actuated beacons, traffic calming, and signage/markings.

**Estimate: \$1,366,850**

**Paid Sick Leave:** The City of Tacoma requires all employers to provide paid sick leave as set forth in Title 18 of the Tacoma Municipal Code. For more information, visit [our Minimum Employment Standards Paid Sick Leave webpage](#).

**Americans with Disabilities Act (ADA Information):** The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing Gail Himes at [ghimes@cityoftacoma.org](mailto:ghimes@cityoftacoma.org), or by calling her collect at 253-591-5785.

**Title VI Information:** "The City of Tacoma" in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair

opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

**Additional Information:** Requests for information regarding the specifications may be obtained by contacting Tina Eide, Senior Buyer by email to [teide@cityoftacoma.org](mailto:teide@cityoftacoma.org)

**Protest Policy:** City of Tacoma protest policy, located at [www.tacomapurchasing.org](http://www.tacomapurchasing.org), specifies procedures for protests submitted prior to and after submittal deadline.



Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.



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## **SPECIAL REMINDER TO ALL BIDDERS**

**HEALTH & SAFETY:** Be sure to comply with all City of Tacoma health and safety requirements.

**PLEASE NOTE:** Be sure you have complied with all specifications and requirements and have signed all required documents.

**YOUR ATTENTION IS PARTICULARLY CALLED** to the following forms, which must be executed in full and submitted with your bid response:

1. **BID PROPOSAL:** The unit prices bid must be shown in the space provided. Check your computations for omissions and errors.
2. **SIGNATURE PAGE:** To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.
3. **BID BOND:** The Bid Bond must be executed by the person legally authorized to sign the bid, and must be properly signed by the representatives of the surety company unless the bid is accompanied by a certified check. If Bid Bond is furnished, the form furnished by the City must be followed; no variations from the language thereof will be accepted. The amount of the Bid Bond must be not less than 5% of the total amount bid.
4. **CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES:** Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2017).
5. **STATE RESPONSIBILITY AND RECIPROCAL BID PREFERENCE INFORMATION:** Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2010).
6. **LIST OF SUBCONTRACTOR CATEGORIES OF WORK:** Bidder shall list all subcontractor(s) proposed to perform the work of heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW and electrical as described in Chapter 19.28 RCW. Bidder shall also list all subcontractor(s) proposed to perform the work of structural steel installation and/or rebar installation.

**FAILURE TO LIST SUBCONTRACTORS WILL RESULT IN THE BID BEING NON-RESPONSIVE AND THEREFORE VOID.**

7. **EQUITY IN CONTRACTING (EIC) UTILIZATION FORM**  
Bidders shall complete the Equity in Contracting Utilization Form in accordance with the City of Tacoma Equity in Contracting Regulations Manual and Chapter 1.07 of the City of Tacoma Municipal Code (TMC). This form shall be fully and accurately completed and returned with submission of the Bid and will be used to determine if the Bidder is in compliance with the EIC regulations and the TMC.

As part of the City of Tacoma's ongoing work to address past disparities and to increase the City's contracting with and utilization of historically underutilized businesses, the Equity in Contracting (EIC) Program places requirements on City contracts for utilization of businesses certified by the Washington State Office of Minority and Women's Business Enterprise and approved by the Equity in Contracting Program ("Certified Businesses"). The EIC Program also provides guidance and technical assistance to Certified Businesses who are interested in providing supplies, services and public works to the City of Tacoma. The EIC Program requirements are contained in Tacoma Municipal Code Chapter 1.07.

See City of Tacoma – Equity In Contracting Program section for additional information.

**POST AWARD FORMS EXECUTED UPON AWARD:**

- A. CONTRACT: Must be executed by the successful bidder.
- B. PAYMENT BOND TO THE CITY OF TACOMA: Must be executed by the successful bidder and his/her surety company.
- C. PERFORMANCE BOND TO THE CITY OF TACOMA: Must be executed by the successful bidder and his/her surety company.
- D. CERTIFICATE OF INSURANCE: Shall be submitted with all required endorsements.
- E. LEAP UTILIZATION PLAN: Shall be submitted at the Pre-Construction Meeting.
- F. GENERAL RELEASE.

**CODE OF ETHICS:** The successful bidder agrees that its violation of the City's Code of Ethics contained in TMC Chapter 1.46 shall constitute a breach of the contract subjecting the contract to termination.

**LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP):**

The Local Employment and Apprenticeship Training Program (LEAP) has been adopted to counteract economic and social ills, which accompany high rates of unemployment within the City of Tacoma. The Tacoma City Council established the mandatory LEAP program for public works contracts pursuant to Ordinance No. 28520. The primary goal is to provide an opportunity for City of Tacoma residents and Tacoma Public Utilities ratepayers to enter apprenticeship programs, acquire skills, and perform work that will provide living wages.

LEAP Goals:

1. Local Employment Utilization Goal – Prime contractor is required to ensure that 15 percent of the labor hours worked on the project are performed by residents of the City of Tacoma or local economically distressed areas, whether or not such person is an Apprentice.

2. Apprentice Utilization Goal - Prime contractor is required to ensure that 15 percent of the labor hours worked on the project are performed by Apprentices who reside in the Tacoma Public Utilities service area.

NOTE: If both goals are assigned to this project, the two goals can be satisfied concurrently if the prime contractor utilizes individuals who simultaneously meet the requirements of both goals, such as an apprentice who resides in the City of Tacoma or in a local economically distressed area.

See City of Tacoma – Local Employment and Apprenticeship Training Program section for additional information.

**CITY OF TACOMA  
FINANCE/PURCHASING DIVISION  
SPECIAL NOTICE TO BIDDERS**

Public works and improvement projects for the City of Tacoma are subject to Washington state law and Tacoma Municipal Code, including, but not limited to the following:

**I. STATE OF WASHINGTON**

**A. RESPONSIBILITY CRITERIA – STATE OF WASHINGTON**

In order to be considered a responsible bidder the bidder must meet the following mandatory state responsibility criteria contained in RCW 39.04.350:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect **at the time of bid submittal**;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable:
  - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
  - b. Have a Washington Employment Security Department number, as required in Title 50 RCW;
  - c. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW and;
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
5. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter 39.12 RCW and must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection.

**B. RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS:**

Effective March 30, 2012, RCW 39.04.380 imposes a reciprocal preference for resident contractors. Any bid received from a non-resident contractor from a state that provides an in-state percentage bidding preference is subject application of a comparable percentage disadvantage.

A non-resident contractor from a state that provides an in-state percentage bidding preference means a contractor that:

1. Is from a state that provides a percentage bid preference to its resident contractors bidding on public works projects, and
2. Does not have a physical office located in Washington at the time of bidding on the City of Tacoma public works project.

The state of residence for a non-resident contractor is the state in which the contractor was incorporated, or if not a corporation, the state in which the contractor's business entity was formed.

The City of Tacoma will evaluate all non-resident contractors for an out of state bidder preference. If the state of the non-resident contractor provides an in state contractor preference, a comparable percentage disadvantage will be applied to the non-resident contractor's bid prior to contract award. The responsive and lowest and best responsible bidder after application of any non-resident disadvantage will be awarded the contract.

The reciprocal preference evaluation does not apply to public works procured pursuant to RCW 39.04.155, RCW 39.04.280, federally funded competitive solicitations where such agencies prohibit the application of bid preferences, or any other procurement exempt from competitive bidding.

Bidders must provide the City of Tacoma with their state of incorporation or the state in which the business entity was formed and include whether the bidder has a physical office located in Washington.

The bidder shall submit documentation demonstrating compliance with above criteria on the enclosed State Responsibility and Reciprocal Bidder Information form.

### **C. SUBCONTRACTOR RESPONSIBILITY**

1. The Contractor shall include the language of this subcontractor responsibility section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier.
2. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
  - a. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
  - b. Have a current Washington Unified Business Identifier (UBI) number;
  - c. If applicable, have:
    - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
    - b. A Washington Employment Security Department number, as required in Title 50 RCW;
    - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
    - d. An electrical contractor license, if required by Chapter 19.28 RCW;
    - e. An elevator contractor license, if required by Chapter 70.87 RCW and;
3. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).

## **II. CITY OF TACOMA**

### **A. SUPPLEMENTAL RESPONSIBILITY CRITERIA – CITY OF TACOMA:**

In order to be considered a responsible bidder, the prospective bidder shall have all of the following qualifications set forth in Tacoma Municipal Code 1.06.262:

1. Adequate financial resources or the ability to secure such resources;
2. The necessary experience, stability, organization and technical qualifications to perform the proposed contract;
3. The ability to comply with the required performance schedule, taking into consideration all existing business commitments;
4. A satisfactory record of performance, integrity, judgment and skills; and
5. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
  - a. Bidder Responsibility. Bidders shall not be in violation of 39.04.350 RCW Bidder Responsibility Criteria - Supplemental Criteria.

In addition to the mandatory bidder responsibility criteria listed immediately above, the City may, in addition to price, consider any or all of the following criteria contained in Tacoma Municipal Code Chapter 1.06.262 in determining bidder responsibility:

1. The ability, capacity, experience, stability, technical qualifications and skill of the respondent to perform the contract;
2. Whether the respondent can perform the contract within the time specified, without delay or interference;
3. Integrity, reputation, character, judgment, experience, and efficiency of the respondents, including past compliance with the City's Ethics Code;
4. Quality of performance of previous contracts;
5. Previous and existing compliance with laws and ordinances relating to contracts or services;
6. Sufficiency of the respondent's financial resources;
7. Quality, availability, and adaptability of the supplies, purchased services or public works to the particular use required;
8. Ability of the respondent to provide future maintenance and service on a timely basis;
9. Payment terms and prompt pay discounts;
10. The number and scope of conditions attached to the submittal;
11. Compliance with all applicable City requirements, including but not limited to the City's Ethics Code and its Equity in Contracting and Local Employment and Apprenticeship Training programs;
12. Other qualification criteria set forth in the specification or advertisement that the appropriate department or division head determines to be in the best interests of the City.

The City may require bidders to furnish information, sworn or certified to be true, to demonstrate compliance with the City responsibility criteria set forth above. If the city manager or director of utilities is not satisfied with the sufficiency of the information provided, or if the prospective respondent does not substantially meet all responsibility requirements, any submittal from such respondent must be disregarded.

## **B. ADDITIONAL SUPPLEMENTAL CRITERIA – NOT APPLICABLE**

## **C. MODIFICATIONS TO SUPPLEMENTAL CRITERIA**

Potential bidders may request modifications to the City's **supplemental criteria** by submitting a written request to the Purchasing Division via email to [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org) no later than 5:00 p.m. Pacific Time, three days prior to the submittal deadline. Please include the Specification No. and Title when submitting such requests. Requests must include justification for why certain criteria should be modified. Requests received after this date and time will not be considered.

The City will respond to a timely submitted request prior to the bid opening date. Changes to the supplemental criteria, if warranted, will be issued by addendum to the solicitation documents and posted to the City's website for the attention of all prospective bidders.

## **D. DETERMINATION OF BIDDER RESPONSIBILITY**

If the City determines the bidder does not meet the criteria above and is therefore not a responsible bidder, the City shall notify the bidder in writing with the reasons for its determination. If the bidder disagrees, the bidder may appeal the determination in a manner consistent with the City's Protest Policy. Appeals are coordinated by the Purchasing Division heard by the Procurement and Payables Division manager for contracts less than or equal to \$500,000 and by Contracts and Awards Board for contracts greater than \$500,000.



## **PART I**

### **BID PROPOSAL AND CONTRACT FORMS**

# **BID PROPOSAL**

SPECIFICATION NO. PW23-0019F

## **Edison, Whitman, Lincoln Safe Routes to Schools - REBID**

The undersigned hereby certifies that he/she has examined the location and construction details of work as outlined on the Plans and Specifications for Project No. PWK-01034 and has read and thoroughly understands the Plans and Specifications and contract governing the work embraced in this improvement and the method by which payment will be made for said work, and hereby proposes to undertake and complete the work embraced in this improvement in accordance with said Plans, Specifications and contract and at the following schedule of rates and prices.

### NOTE:

1. Unit prices of all items, all extensions and total amount of bid should be shown. Show unit prices in figures only.
2. The notations below the item numbers refer to the specification section where information may be found regarding each contract item. These notations are intended only as a guide and are not warranted to refer to all specification sections where information may be found.
3. The total base bid will be determined by adding the base bid of Schedule A and Schedule B.

All bid items are sorted in the following groups:

- **Schedule A: Lump Sum, Bid Items L1 – L12**
- **Schedule B: Roadway, Bid Items R1 – R42**

**Schedule A: Lump Sum, Bid Items L1 – L12**

<u>ITEM NO.</u>	<u>SPEC. NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>		<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
			<u>Unit</u>	<u>No.</u>		
L1	1-07	SPCC Plan	Lump Sum	1	Lump Sum	\$ _____
L2	1-09	Mobilization	Lump Sum	1	Lump Sum	\$ _____
L3	1-10	Pedestrian Traffic Control	Lump Sum	1	Lump Sum	\$ _____
L4	1-10	Project Temporary Traffic Control	Lump Sum	1	Lump Sum	\$ _____
L5	2-01	Clearing and Grubbing	Lump Sum	1	Lump Sum	\$ _____
L6	2-01	Certified Arborist	Lump Sum	1	Lump Sum	\$ _____
L7	2-02	Removal of Structures and Obstructions	Lump Sum	1	Lump Sum	\$ _____
L8	2-02	Existing Irrigation Systems	Force Account	1	\$5,000	\$ _____
L9	8-01	Erosion/Water Pollution Control	Lump Sum	1	Lump Sum	\$ _____
L10	8-01	Stormwater Pollution Prevention Plan (SWPPP)	Lump Sum	1	Lump Sum	\$ _____
L11	8-02	Site Restoration	Lump Sum	1	Lump Sum	\$ _____
L12	8-21	Permanent Signing	Lump Sum	1	Lump Sum	\$ _____
<b>Lump Sum Base Bid Total (Bid Items No. L1 – L12)</b>					<b>\$ _____ (1)</b>	

Contractor's Name: \_\_\_\_\_  
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**Schedule B: Roadway, Bid Items R1 – R41**

<u>ITEM NO.</u>	<u>SPEC. NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>		<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
			<u>Unit</u>	<u>No.</u>		
R1	2-03	Roadway Excavation, Incl. Haul	Cu. Yd.	651	\$ _____	\$ _____
R2	2-03	Gravel Borrow Incl. Haul	Ton	20	\$ _____	\$ _____
R3	2-09	Shoring or Extra Excavation Class B	Sq. Ft.	2365	\$ _____	\$ _____
R4	2-14	Remove Existing Pavement, Asphalt	Sq. Yd.	2440	\$ _____	\$ _____
R5	2-14	Remove Existing Pavement, Concrete	Sq. Yd.	717	\$ _____	\$ _____
R6	2-14	Remove Existing Pavement, Type I, Class CA	Sq. Yd.	120	\$ _____	\$ _____
R7	2-15	Remove Curb	Lin. Ft.	1461	\$ _____	\$ _____
R8	2-16	Remove Catch Basin	Each	5	\$ _____	\$ _____
R9	4-04	Crushed Surfacing Top Course	Ton	348	\$ _____	\$ _____
R10	4-04	Crushed Surfacing Base Course	Ton	537	\$ _____	\$ _____
R11	5-04	Planing Bituminous Pavement	Sq. Yd.	1235	\$ _____	\$ _____
R12	5-04	HMA CL 1/2" PG 58H-22 for Temporary Pavement Patch	Ton	51	\$ _____	\$ _____
R13	5-04	HMA for Approach CL 1/2" PG 58H-22	Sq. Yd.	4	\$ _____	\$ _____
R14	5-04	HMA CL 1/2" PG 58H-22	Ton	594	\$ _____	\$ _____
R15	5-05	Raised Crossing	Each	3	\$ _____	\$ _____

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<u>ITEM NO.</u>	<u>SPEC. NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>		<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
			<u>Unit</u>	<u>No.</u>		
R16	7-05	Catch Basin Type 2	Each	1	\$ _____	\$ _____
R17	7-05	Adjust Existing Catch Basin, Furnish new Frame and Grate	Each	6	\$ _____	\$ _____
R18	7-05	Adjust Existing Valve Chamber to Grade	Each	11	\$ _____	\$ _____
R19	7-05	Catch Basin Type 1	Each	8	\$ _____	\$ _____
R20	7-05	Connect New Sewer Pipe To Existing Structure	Lin. Ft.	7	\$ _____	\$ _____
R21	7-05	Reconnect Existing Sewer Pipe to New Structure	Each	2	\$ _____	\$ _____
R22	7-05	Adjust Existing Manhole Furnish New Frame and Lid	Each	12	\$ _____	\$ _____
R23	7-08	Structure Excavation Class B	Cu. Yd.	177	\$ _____	\$ _____
R24	7-08	CDF for Pipe Abandonment	Cu. Yd.	4	\$ _____	\$ _____
R25	7-08	Plugging Existing Pipe	Each	2	\$ _____	\$ _____
R26	7-17	Removal and Replacement of Unsuitable Material Incl. Haul	Cu. Yd.	99	\$ _____	\$ _____
R27	7-17	PVC Storm Sewer Pipe 12 In. Diam.	Lin. Ft.	192	\$ _____	\$ _____
R28	7-17	Ductile Iron Storm Sewer Pipe 12 In. Diam.	Lin. Ft.	70	\$ _____	\$ _____
R29	8-02	Plant Selection	Each	18	\$ _____	\$ _____
R30	8-04	Cement Conc. Traffic Curb and Gutter	Lin. Ft.	1610	\$ _____	\$ _____
R31	8-06	Cement Conc. Driveway Entrance	Sq. Yd.	71	\$ _____	\$ _____

Contractor's Name: \_\_\_\_\_  
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<u>ITEM NO.</u>	<u>SPEC. NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>		<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
			<u>Unit</u>	<u>No.</u>		
R32	8-13	Poured Monument	Each	7	\$ _____	\$ _____
R33	8-14	Cement Conc. Sidewalk	Sq. Yd.	433	\$ _____	\$ _____
R34	8-14	Cement Conc. Curb Ramp	Each	44	\$ _____	\$ _____
R35	8-20	Pedestrian-Activated Crosswalk Beacon System, S 60th & Oakes St., Complete	Each	1	\$ _____	\$ _____
R36	8-20	Pedestrian-Activated Crosswalk Beacon System, S 40th & M St., Complete	Each	1	\$ _____	\$ _____
R37	8-22	Plastic Crosswalk Line	Lin. Ft.	1830	\$ _____	\$ _____
R38	8-22	Plastic Sharrow Symbol	Each	1	\$ _____	\$ _____
R39	8-22	Plastic Line	Lin. Ft.	136	\$ _____	\$ _____
R40	8-22	Plastic Traffic Letter	Each	12	\$ _____	\$ _____
R41	8-22	Plastic Chevron Symbol	Each	6	\$ _____	\$ _____
R42	8-30	Traffic Circle	Each	1	\$ _____	\$ _____
<b>Roadway Base Bid Total (Bid Items No. R1 – R42)</b>					\$ _____ (2)	
<b>TOTAL BASE BID (1) + (2) (Not Including Sales Tax)</b>					\$ _____ (3)	

Contractor's Name: \_\_\_\_\_  
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## Proposal for Incorporating Recycled Materials into the Project

In compliance with a new law that went into effect January 1, 2016 (SHB1695), the Bidder shall propose below, the total percent of construction aggregate and concrete materials to be incorporated into the Project that are recycled materials. Calculated percentages must be within the amounts allowed in Section 9-03.21(1)E, Table on Maximum Allowable Percent (By Weight) of Recycled Material, of the Standard Specifications.

Proposed total percentage: \_\_\_\_\_ percent (%)

*Note: Use of recycled materials is highly encouraged within the limits shown above, but does not constitute a Bidder Preference, and will not affect the determination of award, unless two or more lowest responsive Bid totals are exactly equal, in which case proposed recycling percentages will be used as a tie-breaker, per the APWA GSP in Section 1-03.1 of the Special Provisions. Regardless, the Bidder's stated proposed percentages will become a goal the Contractor should do its best to accomplish. Bidders will be required to report on recycled materials actually incorporated into the Project, in accordance with the APWA GSP in Section 1-06.6 of the Special Provisions.*

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**Bidder:** \_\_\_\_\_

**Signature of Authorized Official:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## SIGNATURE PAGE

### **CITY OF TACOMA PUBLIC WORKS / ENGINEERING**

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of the bidding/proposing entity, and received and time stamped as directed in the **Request for Bids page near the beginning of the specification**. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

#### **REQUEST FOR BIDS SPECIFICATION NO. PW23-0019F Edison, Whitman, Lincoln Safe Routes to Schools - REBID**

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

#### **Non-Collusion Declaration**

*The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).*

\_\_\_\_\_  
Bidder/Proposer's Registered Name

\_\_\_\_\_  
Signature of Person Authorized to Enter      Date  
into Contracts for Bidder/Proposer

\_\_\_\_\_  
Address

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
(Area Code) Telephone Number / Fax Number

\_\_\_\_\_  
Authorized Signatory E-Mail Address

\_\_\_\_\_  
State Business License Number  
in WA, also known as UBI (Unified Business Identifier) Number

\_\_\_\_\_  
E.I.No. / Federal Social Security Number Used on Quarterly  
Federal Tax Return, U.S. Treasury Dept. Form 941

\_\_\_\_\_  
State Contractor's License Number  
(See Ch. 18.27, R.C.W.)

\_\_\_\_\_  
E-Mail Address for Communications

Addendum acknowledgement #1\_\_\_\_\_ #2\_\_\_\_\_ #3\_\_\_\_\_ #4\_\_\_\_\_ #5\_\_\_\_\_

***THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.***



Herewith find deposit in the form of a cashier's check in the amount of \$\_\_\_\_\_ which amount is not less than 5-percent of the total bid.

SIGN HERE\_\_\_\_\_

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## BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, \_\_\_\_\_, as Principal, and \_\_\_\_\_, as Surety, are held and firmly bound unto the City of Tacoma, as Obligee, in the penal sum of \_\_\_\_\_ dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for

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

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

PRINCIPAL:

SURETY:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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\_\_\_\_\_, 20\_\_\_\_\_

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

\_\_\_\_\_



City of Tacoma

## Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (**February 14, 2023**), that 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

\_\_\_\_\_  
Signature of Authorized Official\*

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
City

\_\_\_\_\_  
State

**Check One:**

Individual ☐

Partnership ☐

Joint Venture ☐

Corporation ☐

State of Incorporation, or if not a corporation, the 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.*

Specification No. \_\_\_\_\_

Name of Bidder: \_\_\_\_\_

## State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor  
(Must be in effect at the time of bid submittal):

Number: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Current Washington Unified Business Identifier  
(UBI) Number:

Number: \_\_\_\_\_

Do you have industrial insurance (workers' compensation)  
Coverage nor your employees working in Washington?

☐ Yes      ☐ No  
☐ Not Applicable

Washington Employment Security Department Number

Number: \_\_\_\_\_

☐ Not Applicable

Washington Department of Revenue state excise tax  
Registration number:

Number: \_\_\_\_\_

☐ Not Applicable

Have you been disqualified from bidding any public  
works contracts under RCW 39.06.010 or 39.12.065(3)?

☐ Yes      ☐ No  
If yes, provide an explanation of your  
disqualification on a separate page.

Do you have a physical office located in the state of  
Washington?

☐ Yes      ☐ No

If incorporated, in what state were you incorporated?

State: \_\_\_\_\_ ☐ Not Incorporated

If not incorporated, in what state was your business  
entity formed?

State: \_\_\_\_\_

Have you completed the training required by RCW  
39.04.350, or are you on the list of exempt businesses  
maintained by the Department of Labor and Industries?

☐ Yes      ☐ No

# List of Subcontractor Categories of Work

Project Name \_\_\_\_\_

Subcontractor(s) that are proposed to perform the work of heating, ventilation and air conditioning, and/or plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. **This information must be submitted with the bid proposal or within one hour of the published bid submittal time via email to [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org).**

Subcontractor(s) that are proposed to perform the work of structural steel installation and/or rebar installation must be listed below. **This information must be submitted with the bid proposal or within forty-eight hours of the published bid submittal time via email to [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org).**

Failure to list subcontractors or naming more than one subcontractor to perform the same work will result in your bid being non-responsive. Contractors self-performing must list themselves below. The work to be performed is to be listed below the subcontractor(s) name.

Subcontractor Name \_\_\_\_\_  
Work to be Performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be Performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be Performed \_\_\_\_\_  
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Subcontractor Name \_\_\_\_\_  
Work to be Performed \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be Performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_

# EIC REQUIREMENT FORM

## EQUITY IN CONTRACTING REQUIREMENTS & PROCEDURES:

All bidders must complete and submit with their bid the following solicitation form contained in the bid submittal package:

City of Tacoma – EIC Utilization Form

### IMPORTANT NOTE:

It is the bidder's responsibility to ensure that the subcontractor(s) listed on the EIC Utilization Form are currently certified by the State of Washington's Office of Minority and Women Business Enterprises (OMWBE) at the time of bid opening. This may be verified by contacting the EIC Office at 253-591-5075 between 8 AM and 5 PM, Monday through Friday or the [OMWBE](http://www.omwbe.com) Office at (866) 208-1064. Please refer to the City of Tacoma EIC code.

### EQUITY IN CONTRACTING REQUIREMENTS

Minority Business  
Enterprise Requirement

**11%**

Women Business  
Enterprise Requirement

**7%**

Small Business Enterprise  
Requirement

**8%**

A list of EIC-eligible companies is available on the following web site addresses:

[www.omwbe.diversitycompliance.com](http://www.omwbe.diversitycompliance.com)\*

**MATERIAL MISSTATEMENTS CONCERNING COMPLETED ACTIONS BY THE BIDDER IN ANY SWORN STATEMENT OR FAILURE TO MEET COMMITMENTS AS INDICATED ON THE EIC UTILIZATION FORM MAY RENDER THE BIDDER IN DEFAULT OF CITY ORDINANCE 1.07**

CCD/SBE: PWK-01034-01-01

Date of Record: 01/17/2023

Project Spec#: PW23-0019F

Project Title: SRTS - Edison, Whitman, & Lincoln

\*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office if you have any questions.



City of Tacoma  
Community & Economic Development  
Office of Equity in Contracting  
747 Market Street, Rm 900  
Tacoma WA 98402  
253-591-5826  
Email: EICOffice@cityoftacoma.org

## EQUITY IN CONTRACTING UTILIZATION FORM

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are **required** to solicit bids from Businesses that are "Certified" by the Office of Minority and Women's Business Enterprises (OMWBE) [www.omwbe.wa.gov](http://www.omwbe.wa.gov) as a MBE, WBE, and SBE to be known as "Certified Business".
- It is the Prime contractor's responsibility to verify the certification status of the business(s) intended to be utilized prior to the submittal deadline.

Bidder's Name: \_\_\_\_\_

Address: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_

Spec. No. \_\_\_\_\_ Base Bid \* \$ \_\_\_\_\_ Complete business names and phone numbers are required to verify your usage of Certified Businesses

a. Business Name and Certification Number(s)	b. MBE, WBE, or SBE (Write all that apply)	c. NAICS code(s)	d. Contractor Bid Amount (100%)	e. Material Supplier Bid Amount (20%)	f. Estimated MBE Usage Dollar Amount	g. Estimated WBE Usage Dollar Amount	h. Estimated SBE Usage Dollar Amount
i. MBE Utilization %	j. WBE Utilization %	k. SBE Utilization %					

By signing and submitting this form the bidder certifies that the OMWBE Certified Business(s) listed will be used on this project including all applicable change orders.

\_\_\_\_\_  
Type or Print Name of Responsible Officer / Title

\_\_\_\_\_  
Signature of Responsible Officer

\_\_\_\_\_  
Date

# INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

**The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.**

This form when submitted with your bid, provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. \* Base Bid is the prime contractor's bid, plus any alternates, additives and deductibles selected by the City of Tacoma. Also, please refer to Items #10-12 below.
2. Column "a" – List all **Certified Business(s)** that you will be awarding a contract to if you are the successful bidder.
3. Column "b" – Identify if the **Certified Business(s)** is being utilized as an MBE, WBE, or SBE. (Businesses may count towards multiple requirements).
4. Column "c" – List the appropriate NAICS code(s) for the scope of work, services, or materials/supplies for each **Certified Business**.
5. Column "d" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the **Certified Businesses** have negotiated prior to bid opening.
6. Column "e" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.
7. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
8. Column "g" – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
9. Column "h" – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
10. Block "i" – The percentage of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column "f") by your Base Bid (\*) then multiply by 100 to get a percentage: \$ amounts from column "f" divided by Base Bid (\*) x 100 = MBE usage as a percentage of the Base Bid.)
11. Block "j" – The percentage of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column "g") by your Base Bid (\*) then multiply by 100 to get a percentage: \$ amounts from column "g" divided by Base Bid (\*) x 100 = WBE usage as a percentage of the Base Bid.)

12. Block “k” – The percentage of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column “h”) by your Base Bid (\*) then multiply by 100 to get a percentage: \$ amounts from column “h” divided by Base Bid (\*) x 100 = SBE usage as a percentage of the Base Bid.)

It is the prime contractor’s responsibility to check the status of **Certified Businesses** prior to bid opening. Call the EIC Office at 253-591-5826 or email at [EICOffice@cityoftacoma.org](mailto:EICOffice@cityoftacoma.org) for additional information.



## CONTRACT

Resolution No.  
Contract No.

This Contract is made and entered into effective as of [Month], [Day], [Year] ("Effective Date") by and between the City of Tacoma, a Municipal Corporation of the State of Washington ("City"), and [supplier name as it appears in Ariba, including dbas or trade names] ("Contractor").

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

- I. Contractor shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as "Contract Documents":

---

  1. Specification No. [Spec Number] [ Spec Title] together with all authorized addenda.
  2. Contractor's submittal [or specifically described portions thereof] dated [Enter Submittal Date] submitted in response to Specification No. [Spec Number] [Spec Title].
  3. Describe with specific detail and list separately any other documents that will make up the contract (fee schedule, work schedule, authorized personnel, etc.) or any other additional items mutually intended to be binding upon the parties.

---
- II. If federal funds will be used to fund, pay or reimburse all or a portion of the services provided under the Contract, the terms and conditions set forth at this Appendix A are incorporated into and made part of this Contract and CONTRACTOR will comply with all applicable provisions of Appendix A and with all applicable federal laws, regulations, executive orders, policies, procedures, and directives in the performance of this Contract.  
  
If CONTRACTOR's receipt of federal funds under this Contract is as a sub-recipient, a fully completed Appendix B, "Sub-recipient Information and Requirements" is incorporated into and made part of this Contract.
- III. In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:
  1. Contract, inclusive of Appendices A and B.
  2. List remaining Contract Documents in applicable controlling order.
- IV. The Contract terminates on xxxxx, and may be renewed for xxxxxxxx
- V. The total price to be paid by City for Contractor's full and complete performance hereunder, including during any authorized renewal terms, may not exceed:  
\$[Dollar Amount], plus any applicable taxes.
- VI. Contractor agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Contractor shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.
- VII. The City's preferred method of payment is by ePayables (Payment Plus), followed by credit card (aka procurement card), then Electronic Funds Transfer (EFT) by Automated Clearing House (ACH), then check or other cash equivalent. CONTRACTOR may be required to have the capability of accepting the City's ePayables or credit card methods of payment. The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used. The City, in its sole discretion, will determine the method of payment for this Contract.

VIII. Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with the insurance requirements contained in the Contract Documents shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

IX. Contractor and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.

It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed this Contract, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA:

Signature:

Name:

Title:

CONTRACTOR:

Signature:

Name:

Title:

(City of Tacoma use only - blank lines are intentional)

Director of Finance: \_\_\_\_\_

Deputy/City Attorney (approved as to form): \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Approved By: \_\_\_\_\_

**APPENDIX A  
FEDERAL FUNDING**

## 1. Termination for Breach

CITY may terminate this Contract in the event of any material breach of any of the terms and conditions of this Contract if CONTRACTOR's breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach.

## 2. Prevailing Wages

1. If federal, state, local, or any applicable law requires CONTRACTOR to pay prevailing wages in connection with this Contract, and CONTRACTOR is so notified by the CITY, then CONTRACTOR shall pay applicable prevailing wages and otherwise comply with the Washington State Prevailing Wage Act (RCW 39.12) in the performance of this Contract.
2. If applicable, a Schedule of Prevailing Wage Rates and/or the current prevailing wage determination made by the Secretary of Labor for the locality or localities where the Contract will be performed is made of part of the Contract by this reference. If prevailing wages apply to the Contract, CONTRACTOR and its subcontractors shall:
  - i. Be bound by and perform all transactions regarding the Contract relating to prevailing wages and the usual fringe benefits in compliance with the provisions of Chapter 39.12 RCW, as amended, the Washington State Prevailing Wage Act and/or the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable, including the federal requirement to pay wages not less than once a week.
  - ii. Ensure that no worker, laborer or mechanic employed in the performance of any part of the Contract shall be paid less than the prevailing rate of wage specified on that Schedule and/or specified in a wage determination made by the Secretary of Labor (unless specifically preempted by federal law, the higher of the Washington state prevailing wage or federal Davis-Bacon rate of wage must be paid.
  - iii. Immediately upon award of the Contract, contact the Department of Labor and Industries, Prevailing Wages section, Olympia, Washington and/or the federal Department of Labor, to obtain full information, forms and procedures relating to these matters. Per such procedures, a Statement of Intent to Pay Prevailing Wages and/or other or additional documentation required by applicable federal law, must be submitted by CONTRACTOR and its subcontractors to the CITY, in the manner requested by the CITY, prior to any payment by the CITY hereunder, and an Affidavit of Wages Paid and/or other or additional documentation required by federal law must be received or verified by the CITY prior to final Contract payment.

## 3. COPELAND ANTI-KICKBACK ACT

For Contracts subject to Davis Bacon Act the following clauses will be incorporated into the Contract:

- A. CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this Contract.
- B. CONTRACTOR or subcontractor shall insert in any subcontracts the clause above and such other clauses federal agencies may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.

The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these Contract clauses.

- C. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

#### **4. EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Contract, CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. If the CONTRACTOR does over \$10,000 in business a year that is funded, paid or reimbursed with federal funds, CONTRACTOR will take specific and affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

- A. Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- B. CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- C. CONTRACTOR will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.
- D. CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- E. CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- F. In the event of CONTRACTOR's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further federally funded contracts in accordance with procedures

authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- G. CONTRACTOR will include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. CONTRACTOR will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

## **5. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

- A. Overtime requirements. Neither CONTRACTOR or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (3)(A) of this section the CONTRACTOR and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such CONTRACTOR and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (3)(A) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (3)(A) of this section.
- C. Withholding for unpaid wages and liquidated damages. The CITY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the CONTRACTOR or subcontractor under any such contract or any other Federal

contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such CONTRACTOR or sub-contractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (3)(B) of this section.

- D. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (3)(A) through (D) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (3)(A) through (D) of this section.

## **6. CLEAN AIR ACT**

- A. CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- B. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal funds.

## **7. FEDERAL WATER POLLUTION CONTROL ACT**

- A. CONTRACTOR agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- B. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the appropriate federal agency.
- C. CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal funding.

## **8. DEBARMENT AND SUSPENSION**

- A. This Contract is a Covered Transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- B. CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier Covered Transaction it enters into.

- C. This certification is a material representation of fact relied upon by the CITY. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to CITY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- D. CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C throughout the period of this Contract and to include a provision requiring such compliance in its lower tier covered transactions.

## **9. BYRD ANTI-LOBBYING AMENDMENT**

- A. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification with CITY. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the CITY.
- B. If applicable, CONTRACTOR must sign and submit to the CITY the certification required by Appendix A to 44 CFR Part 18 contained at Appendix A-1 to this Contract.

## **10. PROCUREMENT OF RECOVERED MATERIALS**

- A. In the performance of this Contract, CONTRACTOR shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
  - i. Competitively within a timeframe providing for compliance with the contract performance schedule;
  - ii. Meeting contract performance requirements; or
  - iii. At a reasonable price.
- B. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
- C. CONTRACTOR also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

## APPENDIX A-1

### APPENDIX A to 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap.38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

\_\_\_\_\_  
Signature of Contractor's Authorized Official

\_\_\_\_\_  
Name and Title of Contractor's Authorized Official

\_\_\_\_\_  
Date



## APPENDIX B—Sub-recipient information and requirements

Pursuant to 2 CFR 200.332(a)(1) Federal Award Identification

<b>(i) Agency Name (must match the name associated with its unique entity identifier)</b>		<b>(ii) Unique Entity Identifier</b> <i>(i.e., DUNS)</i>	<b>City of Tacoma</b> <b>Number for This Agreement</b>
<b>(iii) Federal Award Identification Number (FAIN)</b>	<b>(iv) Federal Award Date</b>	<b>(v) Federal Period of Performance Start and End Date</b>	<b>(vi) Federal Budget Period Start and End Date</b>
<b>(vii) Amount of Federal Funds <i>Obligated</i> to the agency <i>by this action</i>:</b>  \$	<b>(viii) Total Amount of Federal Funds <i>Obligated</i> to the agency</b>		<b>(ix) Total Amount of the Federal Award <i>Committed</i> to the agency</b>  \$
<b>(x) Federal Award Project Description:</b>  CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS– City of Tacoma			
<b>(xi) Federal Awarding Agency:</b>  DEPARTMENT OF THE TREASURY	<b>Pass-Through Entity:</b>  City of Tacoma	<b>Awarding Official Name and Contact Information:</b>	
<b>(xii) Assistance Listing Number and Name (the pass-through entity must identify the dollar amount made available under each Federal award and the Assistance Listing number at time of disbursement)</b>			<b>(xiii) Identification of Whether the Award is R&amp;D</b>
<b>(xiv) Indirect Cost Rate for the Federal Award</b>	<b>Award Payment Method (lump sum payment or reimbursement)</b>  REIMBURSEMENT		



## PAYMENT BOND TO THE CITY OF TACOMA

Resolution No.  
Bond No.

That we, the undersigned,

as principal, and \_\_\_\_\_  
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,  
\$ \_\_\_\_\_, for the payment whereof Contractor and Surety bind themselves,  
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. \_\_\_\_\_

Specification Title: \_\_\_\_\_

Contract No. \_\_\_\_\_

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28, including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment 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 shall in any way affect its obligation on this bond, and waives notice of any changes, 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.

No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the City, and where required, the Contractor, in accordance with RCW 39.08.030.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

If any claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the City as a result of such suit. Venue for any action arising out of or in connection with this bond shall be in Pierce County, WA.

Surety companies executing bonds must be authorized to transact 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. Department of the Treasury.

Resolution No.  
Bond No.  
Specification No.  
Contract No.

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

Principal: Enter Vendor Legal Name

\_\_\_\_\_

By: \_\_\_\_\_

Surety:

\_\_\_\_\_

By: \_\_\_\_\_

Agent's Name: \_\_\_\_\_

Agent's Address: \_\_\_\_\_

SAMPLE



## PERFORMANCE BOND TO THE CITY OF TACOMA

Resolution No.  
Bond No.

That we, the undersigned,

as principal, and

as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of

\$ \_\_\_\_\_, for the payment whereof Contractor and Surety bind themselves,

their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. \_\_\_\_\_

Specification Title: \_\_\_\_\_

Contract No. \_\_\_\_\_

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory performance 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 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; and if such performance obligations have not been fulfilled, this bond shall remain in 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 increase.

If the City shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgement, shall pay all costs and attorney's fees incurred by the City in enforcement of its rights hereunder. Venue for any action arising out of in connection with this bond shall be in Pierce County, Washington.

Surety companies executing bonds must be authorized to transact 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. Department of the Treasury.

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

Principal: Enter Vendor Legal Name

\_\_\_\_\_

By: \_\_\_\_\_

Surety:

\_\_\_\_\_

By: \_\_\_\_\_

Agent's Name: \_\_\_\_\_

Agent's Address: \_\_\_\_\_

## GENERAL RELEASE TO THE CITY OF TACOMA

The undersigned, named as the contractor for \_\_\_\_\_  
between \_\_\_\_\_ and the City of Tacoma,  
dated \_\_\_\_\_, 20\_\_\_\_, hereby releases the City of  
Tacoma, its departmental officers and agents from any and all claim or claims  
whatsoever in any manner whatsoever at any time whatsoever arising out of and/or in  
connection with and/or relating to said contract, excepting only the equity of the  
undersigned in the amount now retained by the City of Tacoma under said contract,  
to-wit the sum of \$\_\_\_\_\_.

Signed at Tacoma, Washington this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Contractor

By \_\_\_\_\_

Title \_\_\_\_\_

## **PART II**

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## 1 INTRODUCTION

2 (April 1, 2022 Tacoma GSP)

3  
4 The following special provisions shall be used in conjunction with the "2022 Standard  
5 Specifications for Road, Bridge and Municipal Construction" and "Standard Plans for Road,  
6 Bridge, and Municipal Construction" as prepared by the Washington State Department of  
7 Transportation (WSDOT). State Standard Specifications are available through WSDOT, by  
8 calling (360) 705-7430, emailing engrpubs@wsdot.wa.gov, or may be downloaded, free of  
9 charge, from this location on the WSDOT home page:  
10 <http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm>

11  
12 These Special Provisions are made up of both General Special Provisions (GSPs) from various  
13 sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each  
14 Provision either supplements, modifies, or replaces the comparable Standard Specification, or is  
15 a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion  
16 of the Standard Specifications is meant to pertain only to that particular portion of the section,  
17 and in no way should it be interpreted that the balance of the section does not apply.

18  
19 The GSPs are labeled under the headers of each GSP, with the date of the GSP and its source,  
20 as follows:

21  
22 (May 18, 2007 APWA GSP)

23 (August 7, 2006 WSDOT GSP)

24 (April 2, 2007 Tacoma GSP)

25  
26 The project specific Special Provisions are labeled under the headers of each Special Provision  
27 as follows:

28 (\*\*\*\*\*)

29  
30 Also incorporated into the Contract Documents by reference are:

- 31 1. *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently  
32 adopted edition, with Washington State modifications, if any
- 33 2. *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT/APWA, current  
34 edition
- 35 3. City of Tacoma Standard Plans
- 36 4. City of Tacoma Traffic Control Handbook
- 37 5. City of Tacoma Right-of-Way Restoration Manual

38  
39 Contractor shall obtain copies of these publications, at Contractor's own expense.

40  
41 A pre-bid conference will not be held.

## 42 DESCRIPTION OF WORK

43 (\*\*\*\*\*)

44  
45  
46 This Contract shall generally consist of installing improvements at Edison Elementary School,  
47 Whitman Elementary School, and Lincoln High School consisting of: ADA compliant curb ramps,  
48 missing link sidewalks, bulbouts with pedestrian actuated beacons, traffic calming, and  
49 signage/markings.

50  
END OF SECTION

## 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, Amendments, or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

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

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

3  
4 All references to "final contract voucher certification" shall be interpreted to mean the  
5 Contracting Agency form(s) by which final payment is authorized, and final completion and  
6 acceptance granted.

7  
8 **Additive**

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

11  
12 **Alternate**

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

16  
17 **Business Day**

18 A business day is any day from Monday through Friday except holidays as listed in Section 1-  
19 08.5.

20  
21 **Contract Bond**

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

25  
26 **Contract Documents**

27 See definition for "Contract".

28  
29 **Contract Time**

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

32  
33 **Notice of Award**

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

36  
37 **Notice to Proceed**

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

41  
42 **Traffic**

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

45  
46 *This section is supplemented with the following:*

47 **(April 15, 2020 Tacoma GSP)**

48  
49 All references to the acronym UDBE" shall be revised to read "DBE/EIC".

50

1 All references in the Standard Specifications to the term "Proposal Bond" shall be revised to  
2 read "Bid Bond."

3  
4 **Base Bid**

5 The summation of Bid Item amounts (extensions) in the Bid Forms, excluding Additives,  
6 Alternates, Deductives, Force Accounts, and taxes collected separately pursuant to Section 1-  
7 07.2.

8  
9 **Calendar Day**

10 The time period of 24 hours measured from midnight to the next midnight, including weekends  
11 and holidays.

12  
13 **Change Order**

14 A written order to the Contractor, issued by the Contracting Agency after execution of the  
15 contract, authorizing an addition, deletion, or other revision in the Work, within the scope of the  
16 Contract Documents, and establishing the basis of payment and time adjustments, if any, for the  
17 Work affected by the change.

18  
19 **Day**

20 Unless otherwise specified, a calendar day.

21  
22 **Deductive**

23 A supplemental unit of work or group of Bid Items, identified separately in the Bid, which may, at  
24 the discretion of the Contract Agency, be deducted from the Base Bid should the Contract  
25 Agency choose not to Award the total Base Bid.

26  
27 **Grand Total Price**

28 The Grand Total Price of the Contract will include the Base Bid, Additives, Alternates,  
29 Deductives, Force Accounts, and taxes collected separately pursuant to Section 1-07.2.

30  
31 **Standard Specifications**

32 Divisions One through Nine of the specified edition of the WSDOT "Standard Specifications for  
33 Road, Bridge, and Municipal Construction."

34  
35  
36 **END OF SECTION**  
37  
38



1 **1-02 BID PROCEDURES AND CONDITIONS**

2  
3 **1-02.1 Prequalification of Bidders**

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

5  
6 **1-02.1 Qualifications of Bidder**  
7 **(January 24, 2011 APWA GSP)**

8  
9 Before award of a public works contract, a bidder must meet at least the minimum qualifications  
10 of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a  
11 public works project.

12  
13 **1-02.2 Plans and Specifications**  
14 **(June 27, 2011 APWA GSP)**

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

16  
17 Information as to where Bid Documents can be obtained or reviewed can be found in the Call  
18 for Bids (Advertisement for Bids) for the work.

19  
20 After award of the contract, plans and specifications will be issued to the Contractor at no cost  
21 as detailed below:

22

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	6	Furnished automatically upon award.
Contract Provisions	6	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	2	Furnished only upon request.

23  
24 Additional plans and Contract Provisions may be obtained by the Contractor from the source  
25 stated in the Call for Bids, at the Contractor's own expense.

26  
27 **1-02.4(1) General**  
28 **(December 30, 2022 APWA GSP Option B)**

29  
30 *The first sentence of the ninth paragraph, beginning with "Prospective Bidder desiring...", is*  
31 *revised to read:*

32  
33 Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall  
34 request the explanation or interpretation in writing by close of business 6 business days  
35 preceding the bid opening to allow a written reply to reach all prospective Bidders before the  
36 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  
(December 10, 2020 APWA GSP, Option B)**

*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 them with the following:*

If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use any Subcontractor to perform those items of work.

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

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

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

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

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

*The fourth paragraph is revised to read:*  
**(October 18, 2013 Tacoma GSP)**

The bidder shall submit the following completed forms:  
City of Tacoma – Equity in Contracting Utilization Form

*Add the following new section:*

**1-02.6(1) Recycled Materials Proposal  
(January 4, 2016 APWA GSP)**

The Bidder shall submit with the Bid, its proposal for incorporating recycled materials into the project, using the form provided in the Contract Provisions.

**1-02.7 Bid Deposit  
(March 1, 2021 Tacoma GSP)**

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

A deposit of at least 5 percent of the total Bid shall accompany each Bid. This deposit may be cash, certified check, cashier's check, or a proposal bond (Surety bond). Any proposal bond shall be on the Contracting Agency's form and shall be signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any way to modify the minimum 5 percent required. The Surety shall: (1) be registered with the Washington State Insurance Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of 5 percent shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

If submitting your bid electronically, a scanned version of the original bid bond or cashier's check shall accompany your electronic bid submittal. The original bid bond or cashier's check shall be sent to the Contracting Agency and received by the Contracting Agency within 7 calendar days of the bid opening or the bidder may be deemed non-responsive.

**Original bid bonds or cashier's check will be delivered to:**

City of Tacoma Procurement & Payables Division  
Tacoma Public Utilities  
P.O. Box 11007  
Tacoma, WA 98411-0007

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

**1-02.9 Delivery of Proposal  
(\*\*\*\*\*)**

*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.

Electronic Proposals shall be submitted to the City via email to [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org), with the Project Name as stated in the Call for Bids noted on the subject line of the email, or as otherwise required in the Bid Documents, to ensure proper handling and delivery. All electronic documents shall be in PDF format.

The Bidder shall submit to the Contracting Agency a signed "Certification of Compliance with Wage Payment Statutes" document where the Bidder under penalty of perjury verifies that the Bidder is in compliance with responsible bidder criteria in RCW 39.04.350 subsection (1) (g), as required per Section 1-02.14. The "Certification of Compliance with Wage Payment Statutes" document shall be received with the Bid Proposal.

#### **1-02.10 Withdrawing, Revising, or Supplementing Proposal (March 1, 2021 Tacoma GSP)**

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

After submitting a 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 emails it to [bids@cityoftacoma.org](mailto:bids@cityoftacoma.org), and
2. The Contracting Agency receives the request before the time set for receipt of 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.

The Bidder's written request to revise or supplement a Bid Proposal must be accompanied by 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 (March 1, 2021 Tacoma GSP)**

Proposals will be opened and publicly read via webcast at the time indicated in the call for Bids unless the Bid opening has been delayed or canceled.

This public bid opening will be held via webinar. Please use the link below or on the Request for Bids page to join the webinar:

<https://us02web.zoom.us/j/83250498294>

Preliminary and final bid results are posted at [www.TacomaPurchasing.org](http://www.TacomaPurchasing.org).

### 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 Confirmations (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 Provisions;
  - j. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
  - k. The 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 **1-02.14 Disqualification of Bidders**  
2 **(October 18, 2013 Tacoma GSP)**

3 *Delete this section and replace it with the following:*  
4

5 A Bidder will be deemed not responsible if:

- 6 1. the Bidder does not meet the mandatory bidder responsibility criteria in RCW  
7 39.04.350(1), as amended; or
- 8 2. evidence of collusion exists with any other Bidder or potential Bidder. Participants in  
9 collusion will be restricted from submitting further bids; or
- 10 3. the Bidder, in the opinion of the Contracting Agency, is not qualified for the work or to  
11 the full extent of the bid, or to the extent that the bid exceeds the authorized  
12 prequalification amount as may have been determined by a prequalification of the  
13 Bidder; or
- 14 4. an unsatisfactory performance record exists based on past or current Contracting  
15 Agency work or for work done for others, as judged from the standpoint of conduct of  
16 the work; workmanship; or progress; affirmative action; equal employment  
17 opportunity practices; termination for cause; or Disadvantaged Business Enterprise,  
18 Minority Business Enterprise, or Women's Business Enterprise utilization; or
- 19 5. there is uncompleted work (Contracting Agency or otherwise) which in the opinion of  
20 the Contracting Agency might hinder or prevent the prompt completion of the work  
21 bid upon; or
- 22 6. the Bidder failed to settle bills for labor or materials on past or current contracts,  
23 unless there are extenuating circumstances acceptable to the Contracting Agency; or
- 24 7. the Bidder has failed to complete a written public contract or has been convicted of a  
25 crime arising from a previous public contract, unless there are extenuating  
26 circumstances acceptable to the Contracting Agency; or
- 27 8. the Bidder is unable, financially or otherwise, to perform the work, in the opinion of  
28 the Contracting Agency; or
- 29 9. there are any other reasons deemed proper by the Contracting Agency; or
- 30 10. the Bidder fails to meet the Project-specific supplemental bidder responsibility criteria  
31 listed in the **Notice to All Bidders**; or
- 32 11. The bidder fails to meet the EIC requirements as described in Section 1-02.6.  
33

34 As evidence that the Bidder meets the bidder responsibility criteria above, the apparent two  
35 lowest Bidders must submit to the Contracting Agency within 24 hours of the bid submittal  
36 deadline, documentation (sufficient in the sole judgment of the Contracting Agency)  
37 demonstrating compliance with all applicable responsibility criteria, including all documentation  
38 specifically listed in the supplemental criteria. The Contracting Agency reserves the right to  
39 request such documentation from other Bidders as well, and to request further documentation  
40 as needed to assess bidder responsibility.  
41

42 The basis for evaluation of Bidder compliance with these supplemental criteria shall be any  
43 documents or facts obtained by Contracting Agency (whether from the Bidder or third parties)  
44 which any reasonable owner would rely on for determining such compliance, including but not  
45 limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained  
46 directly by the Contracting Agency from owners for whom the Bidder has worked, or other public  
47 agencies or private enterprises; and (iii) any additional information obtained by the Contracting  
48 Agency which is believed to be relevant to the matter.  
49

50 If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria  
51 above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder

1 in writing, with the reasons for its determination. If the Bidder disagrees with this determination,  
2 it may appeal the determination within 24 hours of receipt of the Contracting Agency's  
3 determination by presenting its appeal to the Contracting Agency. The Contracting Agency will  
4 consider the appeal before issuing its final determination. If the final determination affirms that  
5 the Bidder is not responsible, the Contracting Agency will not execute a contract with any other  
6 Bidder until at least two business days after the Bidder determined to be not responsible has  
7 received the final determination.

8  
9 **1-02.15 Pre Award Information**  
10 **(December 30, 2022 APWA GSP)**

11  
12 *Revise this section to read:*

13  
14 Before awarding any contract, the Contracting Agency may require one or more of these  
15 items or actions of the apparent lowest responsible bidder:

- 16 1. A complete statement of the origin, composition, and manufacture of any or all materials  
17 to be used,
- 18 2. Samples of these materials for quality and fitness tests,
- 19 3. A progress schedule (in a form the Contracting Agency requires) showing the order of  
20 and time required for the various phases of the work,
- 21 4. A breakdown of costs assigned to any bid item,
- 22 5. Attendance at a conference with the Engineer or representatives of the Engineer,
- 23 6. Obtain, and furnish a copy of, a business license to do business in the city or county  
24 where the work is located.
- 25 7. Any other information or action taken that is deemed necessary to ensure that the bidder  
26 is the lowest responsible bidder.

27  
28 **END OF SECTION**  
29  
30

## **1-03 AWARD AND EXECUTION OF CONTRACT**

### **1-03.1 Consideration of Bids (December 30, 2022 APWA GSP)**

*Revise the first paragraph to read:*

After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. If a minimum bid amount has been established for any item and the bidder's unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the Contracting Agency, will be used by the Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the amount of the contract bond.

#### **1-03.1(1) Identical Bid Totals (December 30, 2022 APWA GSP)**

*Revise this section to read:*

After opening Bids, if two or more lowest responsive Bid totals are exactly equal, then the tie-breaker will be the Bidder with an equal lowest bid, that proposed to use the highest percentage of recycled materials in the Project, per the form submitted with the Bid Proposal. If those percentages are also exactly equal, then the tie-breaker will be determined by drawing as follows: Two or more slips of paper will be marked as follows: one marked "Winner" and the other(s) marked "unsuccessful". The slips will be folded to make the marking unseen. The slips will be placed inside a box. One authorized representative of each Bidder shall draw a slip from the box. Bidders shall draw in alphabetic order by the name of the firm as registered with the Washington State Department of Licensing. The slips shall be unfolded and the firm with the slip marked "Winner" will be determined to be the successful Bidder and eligible for Award of the Contract. Only those Bidders who submitted a Bid total that is exactly equal to the lowest responsive Bid, and with a proposed recycled materials percentage that is exactly equal to the highest proposed recycled materials amount, are eligible to draw.

#### **1-03.2 Award of Contract (March 27, 2003 Tacoma GSP)**

All references to 45 calendar days shall be revised to read 60 calendar days.

#### **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, 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

- 1        5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the
- 2        bond; and
- 3        6. Be signed by an officer of the Contractor empowered to sign official statements (sole
- 4        proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by
- 5        the president or vice president, unless accompanied by written proof of the authority of
- 6        the individual signing the bond(s) to bind the corporation (i.e., corporate resolution,
- 7        power of attorney, or a letter to such effect signed by the president or vice president).

8  
9        *Add the following new section:*

10  
11  
12        **1-03.5 Failure to Execute Contract**  
13        **(April 15, 2020 Tacoma GSP)**

14        *The first sentence is revised to read:*

15  
16        Failure to return the insurance certification and bond with the signed contract as required in  
17        Section 1-03.3, or failure to provide Equity In Contracting (EIC) information if required in the  
18        contract, or failure or refusal to sign the Contract, or failure to register as a contractor in the  
19        state of Washington shall result in forfeiture of the bid bond or deposit of this Bidder

20  
21  
22        **END OF SECTION**  
23

1 **1-04 SCOPE OF THE WORK**

2  
3 **1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications,**  
4 **and Addenda**

5 **(December 30, 2022 APWA GSP)**

6 *Revise the second paragraph to read:*

7  
8 Any inconsistency in the parts of the contract shall be resolved by following this order of  
9 precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

- 10 1. Addenda,  
11 2. Proposal Form,  
12 3. Special Provisions,  
13 4. Contract Plans,  
14 5. Standard Specifications,  
15 6. Contracting Agency's Standard Plans or Details (if any), and  
16 7. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

17  
18 **END OF SECTION**  
19

## **1-05 CONTROL OF WORK**

### **1-05.3 Working Drawings (January 13, 2011 Tacoma GSP)**

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

#### **1-05.3 Submittals**

The Contractor shall not install materials or equipment, which require submittals, until reviewed by the Contracting Agency.

The Contractor shall submit four (4) copies to the Engineer of all submittals required by the Contract Documents, unless otherwise required in these Special Provisions. This includes, but is not limited to:

- Shop Drawings/Plans
- Product Data
- Samples
- Reports
- Material Submittals (Ref. 1-06)
- Progress Schedules (Ref. 1-08.3)
- Guarantees/Warranties (Ref. 1-05.10)

The Engineer will return one (1) copy to the Contractor.

#### **1-05.3(1) Submittal Schedule**

In conformance with section 1-08.3, the progress schedule shall be submitted and reviewed prior to commencing any work.

No claim will be allowed for damages or extension of time resulting from rejection of a submittal or the requirement of resubmittals as outlined by this section.

The Engineer's review will be completed as quickly as possible, but may require up to ten (10) working days from the date the submittals or resubmittals are received until they are sent to the Contractor. If more than ten (10) working days are required for the Engineer's review of any individual submittal or resubmittal, an extension of time will be considered in accordance with Section 1-08.8.

#### **1-05.3(2) Submittal Procedures**

Contractor submittals shall be in accordance with the following:

The Contractor shall thoroughly review each submittal for dimensions, quantities, and details of the material or item shown. The Contractor shall review each submittal and note any errors, omissions, or deviations with the Contract Documents. The Contractor shall accept full responsibility for the completeness of each submittal.

Each submittal shall have a unique number assigned to it, and the transmittals shall be sequentially numbered. The numbering of resubmittals shall meet the requirements of Section

1 1-05.3(4). On each page, indicate the page number, and total number of pages in each  
2 submittal.

3  
4 Each submittal shall indicate the intended use of the item in the work. When catalog pages are  
5 submitted, applicable items shall be clearly identified. The current revision, issue number, and  
6 data shall be indicated on all drawings and other descriptive data.

7  
8 Each submittal should be transmitted with the "Submittal Transmittal Form" found at the end of  
9 this section. Upon request, an electronic copy of the Submittal Transmittal Form will be made  
10 available to the Contractor.

11  
12 In lieu of utilizing the Submittal Transmittal Form, the Contractor may display the following  
13 information on each submittal, in a clear space on the front of the submittal:

- 14
- 15 • Project Name: Edison, Whitman, Lincoln Safe Routes to Schools - REBID
  - 16 • Project Specification Number: PW23-0019F
  - 17 • Project No. PWK-01034
  - 18 • Submittal Date
  - 19 • Description of Submittal
  - 20 • Sequential, unique submittal number.
  - 21 • Related Specification Section and/or plan sheet
  - 22 • The following statement: "This document has been detail-checked for accuracy of  
23 content and for compliance with the Contract documents. The information contained  
24 herein has been fully coordinated with all involved Subcontractors."
  - 25 • Printed or typed name and signature of Contractor.
- 26

27 When submitting product data, the Contractor shall modify drawings to delete any information  
28 not applicable to the project and add information that is applicable to the project. The  
29 Contractor shall mark copies of printed material to clearly identify the pertinent materials,  
30 products or models.

31  
32 Samples submitted shall be of sufficient size and quantity to clearly illustrate functional  
33 characteristics of product or material and full range of colors available. Field samples and  
34 mock-ups, where required, shall be erected at the project site where directed by the Engineer.

35  
36 The Contractor shall notify the Engineer, in writing at time of submission, of deviations in  
37 submittals from requirements of the Contract documents.

38  
39 The City shall not be responsible for delays in reviewing submittals not submitted in accordance  
40 with these specifications.

### 41 42 **1-05.3(3) Engineer's Review of Submittals**

43  
44 The Engineer's review of drawings and data submitted by the Contractor will cover only general  
45 conformity with the Contract drawings and specifications. The Engineer's review of submittals  
46 shall not relieve the Contractor from responsibility for errors, omissions, deviations, or  
47 responsibility for compliance with the Contract documents.

48 Review of a separate item does not constitute review of an assembly in which the item  
49 functions.

50

1 When the submittal or resubmittal is marked "REVIEWED", or "REVIEWED WITH  
2 COMMENTS", no additional copies need to be furnished. The Contractor shall comply with any  
3 comments on the return submittal.  
4

#### 5 **1-05.3(4) Resubmittals** 6

7 When a submittal is marked "AMEND AND RESUBMIT" or "REJECTED, SEE REMARKS," the  
8 Contractor shall make the corrections as noted and instructed by the Engineer and resubmit  
9 four (4) copies. The Contractor shall not install material or equipment that has received a  
10 review status of "AMEND AND RESUBMIT" or REJECTED, SEE REMARKS".  
11

12 When corrected copies are resubmitted, the Contractor shall in writing direct specific attention to  
13 all revisions and shall list separately any revision made other than those called for by the  
14 Engineer on previous submittals. Resubmittals shall bear the number of the original submittal  
15 followed by a letter (A, B, etc.) to indicate the sequence of the resubmittal.  
16

17 The Contractor shall revise returned submittals as required and resubmit until final review is  
18 obtained.  
19

20 The Contractor shall verify that all exceptions previously noted by the Engineer have been  
21 accounted for.  
22

#### 23 **1-05.3(5) Submittal Requirements by Section** 24

25 The following is a summary of submittal requirements. This summary is not inclusive of all  
26 submittal requirements. The Contractor shall review each individual section in the applicable  
27 provisions or specifications, as noted below, for specific requirements.  
28

Section	Description
1-05.3(6)	Project Red Line Drawings
1-06.1	Proposed Material Sources
1-06.1(2)	Request for Approval of Material
1-06.3	Manufacturer's Certificate of Compliance
1-07.15	Temporary Water Pollution/Erosion Control Plan
1-07.15(1)	Spill Prevention, Control and Countermeasures (SPCC) Plan
1-07.16(1)	Property Owner Notification
1-08.3(2)	Progress Schedule
1-09.6	Equipment Rental Rates and Equipment Watch Sheets
1-09.9	Schedule Of Values
1-10.2	Traffic Control Plan
2-07.3(1)	Hydrant Permit
2-09.3(4)	Engineered Shoring Design for Depths Over 20 Feet
4-04	Crushed Surfacing Top Course
4-04	Crushed Surfacing Base Course
5-04	Asphalt Mix Design Certification
5-05	Concrete Mix Design
7-05	Manholes
7-05	Castings
7-05	Kor-N-Seal Connector
7-08.3(1)A	Dewatering Plan
7-08.3(1)A	Special Approved Discharge (SAD) Permit for Sanitary
7-08.3(1)C	Pipe Bedding
7-08.3(3)	Trench Backfill
7-08.3(5)	Temporary Sewer Bypass Plan
7-08.3(6)	Pipe Abandonment Plan
7-08.3(6)	CDF Mix Design
7-17	Pipe materials
7-18	Inserta-Tees
8-01.3(1)A	Stormwater Pollution Prevention Plan (SWPPP)

### **1-05.3(6) Project Red Line Drawings**

The Contractor shall submit Project Red Line Drawings in accordance with the following.

Red line drawings refer to those documents maintained and annotated by the Contractor during construction and is defined as, a neatly and legibly marked set of Contract drawings showing any changes made to the original details of work.

The Contractor shall maintain drawings in good condition; protect from deterioration and keep in a clean, dry, and secure location. The Project Red Line Drawings shall not be used for construction purposes.

The Contractor shall provide to the City, access to Project Red Line Drawings at all times during normal working hours.

Red line drawings shall be updated on a continuous basis. The Contractor shall bring the up-to-date drawings to a monthly "red line review" meeting where the Engineer will verify the

1 maintenance of the Project Red Line Drawings as part of the condition precedent to approving  
2 the monthly progress payment disbursement process. Monthly progress payments to the  
3 Contractor may not be processed, if red line information for the involved work to date has not  
4 been accurately recorded on the Project Red Line Drawings.

5  
6 At the completion of the construction work, prior to pre-final payment, all Project Red Line  
7 Drawings shall be submitted to the Engineer.

8  
9 A. Project Red Line Drawings:

10  
11 Do not permanently conceal any work until required information has been recorded. Mark  
12 drawings to show the actual installation where the installation varies from the work as  
13 originally shown on the Contract drawings or indicated in the Contract Specifications. Give  
14 particular attention to information on concealed elements that would be difficult to measure  
15 and record at a later date.

- 16  
17 1. Changes and information shall be clearly drawn, described and shown  
18 technically correct.
- 19  
20 2. Mark drawings with red erasable pencil.
- 21  
22 3. Record data as soon as possible after obtaining it.
- 23  
24 4. Mark any new information.
- 25  
26 5. Keep accurate measurements of horizontal and vertical locations of  
27 underground services and utilities.
- 28  
29 6. Mark any changes made where installation varies from that shown originally,  
30 such as, in materials, equipments, locations, alignments, elevations, and any  
31 other dimensions of the work.
- 32  
33 7. For any work not demolished, abated, or salvaged, cross out and  
34 appropriately annotate "Not Complete".
- 35  
36 8. Indicate revisions to drawings with a "cloud" drawn around the revision and  
37 note date the revision(s) was made.
- 38  
39 9. Note Request For Change (RFC), Request For Information (RFI), and similar  
40 identification, where applicable.

41  
42 B. Format:

43  
44 Identify and date each print; include the designation "PROJECT RED LINE DRAWINGS" in  
45 a prominent location.

- 46  
47 1. Prints: Organize Red Line Drawings into manageable sets. Include  
48 identification on cover sheets.
- 49  
50  
51



2. Identify cover sheets as follows:

- Specification No.
- Project Name
- Date
- "PROJECT RED LINE DRAWINGS"
- Name of Engineer
- Name of Contractor

3. Electronic Copies: Scan full-size (dimension size: 22x34) Project Red Line Drawings and submit, on a CD-R, in pdf format.

The lump sum Contract price for "Project Red Line Drawings" shall be full pay for all costs associated with, including but not limited to, documenting, revising, updating, maintaining, and submitting red line drawings at the completion of construction work.

#### **1-05.4 Conformity With and Deviations from Plans and Stakes**

*Add the following two new sub-sections:*

##### **1-05.4(1) Roadway and Utility Surveys (July 23, 2015 APWA GSP)**

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) Bridge and Structure Surveys (July 23, 2015 APWA GSP)**

For all structural work such as bridges and retaining walls, the Contractor shall retain as a part of Contractor's organization an experienced team of surveyors.

The Contractor shall provide all surveys required to complete the structure, except the following primary survey control which will be provided by the Engineer:

1. Centerline or offsets to centerline of the structure.
2. Stations of abutments and pier centerlines.
3. A sufficient number of bench marks for levels to enable the Contractor to set grades at reasonably short distances.
4. Monuments and control points as shown in the Plans.

1 The Contractor shall establish all secondary survey controls, both horizontal and vertical, as  
2 necessary to assure proper placement of all project elements based on the primary control  
3 points provided by the Engineer. Survey work shall be within the following tolerances:

4 Stationing	+ .01 foot
5 Alignment	+ .01 foot (between successive points)
6 Superstructure Elevations	+ .01 foot (from plan elevations)
7 Substructure Elevations	+ .05 foot (from plan elevations)

8  
9 During the progress of the work, the Contractor shall make available to the Engineer all field  
10 books including survey information, footing elevations, cross sections and quantities.

11  
12 The Contractor shall be fully responsible for the close coordination of field locations and  
13 measurements with appropriate dimensions of structural members being fabricated.

14  
15 **1-05.7 Removal of Defective and Unauthorized Work**  
16 **(October 1, 2005 APWA GSP)**

17 *Supplement this section with the following:*

18  
19 If the Contractor fails to remedy defective or unauthorized work within the time specified in a  
20 written notice from the Engineer, or fails to perform any part of the work required by the Contract  
21 Documents, the Engineer may correct and remedy such work as may be identified in the written  
22 notice, with Contracting Agency forces or by such other means as the Contracting Agency may  
23 deem necessary.

24  
25 If the Contractor fails to comply with a written order to remedy what the Engineer determines to  
26 be an emergency situation, the Engineer may have the defective and unauthorized work  
27 corrected immediately, have the rejected work removed and replaced, or have work the  
28 Contractor refuses to perform completed by using Contracting Agency or other forces. An  
29 emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy  
30 could be potentially unsafe, or might cause serious risk of loss or damage to the public.

31  
32 Direct or indirect costs incurred by the Contracting Agency attributable to correcting and  
33 remedying defective or unauthorized work, or work the Contractor failed or refused to perform,  
34 shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or  
35 to become due, the Contractor. Such direct and indirect costs shall include in particular, but  
36 without limitation, compensation for additional professional services required, and costs for  
37 repair and replacement of work of others destroyed or damaged by correction, removal, or  
38 replacement of the Contractor's unauthorized work.

39  
40 No adjustment in Contract time or compensation will be allowed because of the delay in the  
41 performance of the work attributable to the exercise of the Contracting Agency's rights provided  
42 by this Section.

43  
44 The rights exercised under the provisions of this section shall not diminish the Contracting  
45 Agency's right to pursue any other avenue for additional remedy or damages with respect to the  
46 Contractor's failure to perform the work as required.

47  
48 **1-05.11 Final Inspection**

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

1 **1-05.11 Final Inspections and Operational Testing**  
2 **(October 1, 2005 APWA GSP)**  
3

4 **1-05.11(1) Substantial Completion Date**  
5

6 When the Contractor considers the work to be substantially complete, the Contractor shall so  
7 notify the Engineer and request the Engineer establish the Substantial Completion Date. The  
8 Contractor's request shall list the specific items of work that remain to be completed in order to  
9 reach physical completion. The Engineer will schedule an inspection of the work with the  
10 Contractor to determine the status of completion. The Engineer may also establish the  
11 Substantial Completion Date unilaterally.  
12

13 If, after this inspection, the Engineer concurs with the Contractor that the work is substantially  
14 complete and ready for its intended use, the Engineer, by written notice to the Contractor, will  
15 set the Substantial Completion Date. If, after this inspection the Engineer does not consider the  
16 work substantially complete and ready for its intended use, the Engineer will, by written notice,  
17 so notify the Contractor giving the reasons therefore.  
18

19 Upon receipt of written notice concurring in or denying substantial completion, whichever is  
20 applicable, the Contractor shall pursue vigorously, diligently and without unauthorized  
21 interruption, the work necessary to reach Substantial and Physical Completion. The Contractor  
22 shall provide the Engineer with a revised schedule indicating when the Contractor expects to  
23 reach substantial and physical completion of the work.  
24

25 The above process shall be repeated until the Engineer establishes the Substantial Completion  
26 Date and the Contractor considers the work physically complete and ready for final inspection.  
27

28 **1-05.11(2) Final Inspection and Physical Completion Date**  
29

30 When the Contractor considers the work physically complete and ready for final inspection, the  
31 Contractor by written notice, shall request the Engineer to schedule a final inspection. The  
32 Engineer will set a date for final inspection. The Engineer and the Contractor will then make a  
33 final inspection and the Engineer will notify the Contractor in writing of all particulars in which the  
34 final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately  
35 take such corrective measures as are necessary to remedy the listed deficiencies. Corrective  
36 work shall be pursued vigorously, diligently, and without interruption until physical completion of  
37 the listed deficiencies. This process will continue until the Engineer is satisfied the listed  
38 deficiencies have been corrected.  
39

40 If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written  
41 notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take  
42 whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.  
43 The Contractor will not be allowed an extension of Contract time because of a delay in the  
44 performance of the work attributable to the exercise of the Engineer's right hereunder.  
45

46 Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting  
47 Agency, in writing, of the date upon which the work was considered physically complete. That  
48 date shall constitute the Physical Completion Date of the Contract, but shall not imply  
49 acceptance of the work or that all the obligations of the Contractor under the contract have been  
50 fulfilled.  
51

1 **1-05.11(3) Operational Testing**  
2

3 It is the intent of the Contracting Agency to have at the Physical Completion Date a complete  
4 and operable system. Therefore when the work involves the installation of machinery or other  
5 mechanical equipment; street lighting, electrical distribution or signal systems; irrigation  
6 systems; buildings; or other similar work it may be desirable for the Engineer to have the  
7 Contractor operate and test the work for a period of time after final inspection but prior to the  
8 physical completion date. Whenever items of work are listed in the Contract Provisions for  
9 operational testing they shall be fully tested under operating conditions for the time period  
10 specified to ensure their acceptability prior to the Physical Completion Date. During and  
11 following the test period, the Contractor shall correct any items of workmanship, materials, or  
12 equipment which prove faulty, or that are not in first class operating condition. Equipment,  
13 electrical controls, meters, or other devices and equipment to be tested during this period shall  
14 be tested under the observation of the Engineer, so that the Engineer may determine their  
15 suitability for the purpose for which they were installed. The Physical Completion Date cannot  
16 be established until testing and corrections have been completed to the satisfaction of the  
17 Engineer.  
18

19 The costs for power, gas, labor, material, supplies, and everything else needed to successfully  
20 complete operational testing, shall be included in the unit Contract prices related to the system  
21 being tested, unless specifically set forth otherwise in the proposal.  
22

23 Operational and test periods, when required by the Engineer, shall not affect a manufacturer's  
24 guaranties or warranties furnished under the terms of the Contract.  
25

26 *Add the following new section:*  
27

28 **1-05.12(1) One-Year Guarantee Period**  
29 **(March 8, 2013 APWA GSP)**  
30

31 The Contractor shall return to the project and repair or replace all defects in workmanship and  
32 material discovered within one year after Final Acceptance of the Work. The Contractor shall  
33 start work to remedy any such defects within 7 calendar days of receiving Contracting Agency's  
34 written notice of a defect, and shall complete such work within the time stated in the Contracting  
35 Agency's notice. In case of an emergency, where damage may result from delay or where loss  
36 of services may result, such corrections may be made by the Contracting Agency's own forces  
37 or another Contractor, in which case the cost of corrections shall be paid by the Contractor. In  
38 the event the Contractor does not accomplish corrections within the time specified, the work will  
39 be otherwise accomplished and the cost of same shall be paid by the Contractor.  
40

41 When corrections of defects are made, the Contractor shall then be responsible for correcting all  
42 defects in workmanship and materials in the corrected work for one year after acceptance of the  
43 corrections by Contracting Agency.  
44

45 This guarantee is supplemental to and does not limit or affect the requirements that the  
46 Contractor's work comply with the requirements of the Contract or any other legal rights or  
47 remedies of the Contracting Agency.  
48  
49  
50

1 **1-05.13 Superintendents, Labor and Equipment of Contractor**  
2 **(August 14, 2013 APWA GSP)**

3  
4 *Delete the sixth and seventh paragraphs of this section.*

5  
6 **1-05.15 Method of Serving Notices**  
7 **(December 30, 2022 APWA GSP)**

8 *Revise the second paragraph to read:*

9 All correspondence from the Contractor shall be directed to the Project Engineer. All  
10 correspondence from the Contractor constituting any notification, notice of protest, notice of  
11 dispute, or other correspondence constituting notification required to be furnished under the  
12 Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project  
13 Engineer's office. Electronic copies such as e-mails or electronically delivered copies of  
14 correspondence will not constitute such notice and will not comply with the requirements of the  
15 Contract.

16  
17 *Add the following new section:*

18  
19 **1-05.16 Water and Power**  
20 **(October 1, 2005 APWA GSP)**

21  
22 The Contractor shall make necessary arrangements, and shall bear the costs for power and  
23 water necessary for the performance of the work, unless the Contract includes power and water  
24 as a pay item.  
25  
26  
27

## SUBMITTAL TRANSMITTAL FORM

Edison, Whitman, Lincoln Safe Routes to Schools - REBID  
Project Number PWK-01034  
Specification No. PW23-0019F

ATTN: Construction Division Date: \_\_\_\_\_

Submittal Number \_\_\_\_\_

Specification Number \_\_\_\_\_ Bid Item No. \_\_\_\_\_

Submittal Description \_\_\_\_\_

We are sending you:

Copies	Date	Page	Description

Transmitted: ☐ Submittals (Product Data) for information only.  
☐ Submittals for review and comment.

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Certify Either A or B:

- ☐ A. This document has been detail-checked for accuracy of content and for compliance with the Contract documents **(no exceptions)**. The information contained herein has been fully coordinated with all involved Subcontractors.
- ☐ B. This document has been detail-checked for accuracy of content and for compliance with the Contract documents **except for the attached deviations**. The information contained herein has been fully coordinated with all involved Subcontractors.

Certified By: \_\_\_\_\_  
Signature

**END OF SECTION**

1 **1-06 CONTROL OF MATERIAL**

2  
3 **1-06.1 Approval of Materials Prior To Use**  
4 **(September 15, 2010 Tacoma GSP)**

5 *The first sentence is revised to read:*

6  
7 All materials and equipment shall be submitted for review in accordance with section 1-05.3 of  
8 these special provisions.

9  
10 For aggregates, the Contractor shall notify the Engineer of all proposed aggregates.  
11 The Contractor shall use the Aggregate Source Approval (ASA) Database.

12  
13 All equipment, materials, and articles incorporated into the permanent Work:

- 14  
15 1. Shall be new, unless the Special Provisions or Standard Specifications permit otherwise;  
16  
17 2. Shall meet the requirements of the Contract and be approved by the Engineer;  
18  
19 3. May be inspected or tested at any time during their preparation and use; and  
20  
21 4. Shall not be used in the Work if they become unfit after being previously approved.  
22

23 **1-06.1(1) Qualified Products List (QPL)**

24 *This section is revised in its entirety to read:*

25  
26 QPL's are not accepted by the City.  
27

28 **1-06.1(2) Request for Approval of Material (RAM)**

29 *This section is deleted in its entirety.*

30  
31 **1-06.6 Recycled Materials**  
32 **(January 4, 2016 APWA GSP)**

33  
34 *Delete this section, including its subsections, and replace it with the following:*

35  
36 The Contractor shall make their best effort to utilize recycled materials in the construction of the  
37 project. Approval of such material use shall be as detailed elsewhere in the Standard  
38 Specifications.  
39

40 Prior to Physical Completion the Contractor shall report the quantity of recycled materials that  
41 were utilized in the construction of the project for each of the items listed in Section 9-03.21.  
42 The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel  
43 furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates  
44 from concrete returned to the supplier). The Contractor's report shall be provided on DOT form  
45 350-075 Recycled Materials Reporting.  
46

47 **END OF SECTION**  
48

1  
2 **1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC**

3  
4 **1-07.1 Laws to be Observed**  
5 **(October 1, 2005 APWA GSP)**

6 *Supplement this section with the following:*

7  
8 In cases of conflict between different safety regulations, the more stringent regulation shall  
9 apply.

10  
11 The Washington State Department of Labor and Industries shall be the sole and paramount  
12 administrative agency responsible for the administration of the provisions of the Washington  
13 Industrial Safety and Health Act of 1973 (WISHA).

14  
15 The Contractor shall maintain at the project site office, or other well known place at the project  
16 site, all articles necessary for providing first aid to the injured. The Contractor shall establish,  
17 publish, and make known to all employees, procedures for ensuring immediate removal to a  
18 hospital, or doctor's care, persons, including employees, who may have been injured on the  
19 project site. Employees should not be permitted to work on the project site before the  
20 Contractor has established and made known procedures for removal of injured persons to a  
21 hospital or a doctor's care.

22  
23 The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the  
24 Contractor's plant, appliances, and methods, and for any damage or injury resulting from their  
25 failure, or improper maintenance, use, or operation. The Contractor shall be solely and  
26 completely responsible for the conditions of the project site, including safety for all persons and  
27 property in the performance of the work. This requirement shall apply continuously, and not be  
28 limited to normal working hours. The required or implied duty of the Engineer to conduct  
29 construction review of the Contractor's performance does not, and shall not, be intended to  
30 include review and adequacy of the Contractor's safety measures in, on, or near the project site.

31  
32 **1-07.2 State Taxes**  
33 **(January 6, 2015 TACOMA GSP)**

34 *Supplement this section with the following:*

35  
36 Washington State Department of Revenue Rules 170 and 171 shall apply as shown in the  
37 Proposal and per Section 1-07.2 of the WSDOT and APWA Standard Specifications for Road,  
38 Bridge, and Municipal Construction.

39  
40 **1-07.2 State Tax**  
41 **(June 27, 2011 APWA GSP)**

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

48  
49 The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract  
50 amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2)  
51 describes this exception.



1  
2 The Contracting Agency will pay the retained percentage (or release the Contract Bond if a  
3 FHWA-funded Project) only if the Contractor has obtained from the Washington State  
4 Department of Revenue a certificate showing that all contract-related taxes have been paid  
5 (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor  
6 any amount the Contractor may owe the Washington State Department of Revenue, whether  
7 the amount owed relates to this contract or not. Any amount so deducted will be paid into the  
8 proper State fund.  
9

#### 10 **1-07.2(1) State Sales Tax — Rule 171**

11  
12 WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads,  
13 etc., which are owned by a municipal corporation, or political subdivision of the state, or by the  
14 United States, and which are used primarily for foot or vehicular traffic. This includes storm or  
15 combined sewer systems within and included as a part of the street or road drainage system  
16 and power lines when such are part of the roadway lighting system. For work performed in such  
17 cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid  
18 item prices, or other contract amounts, including those that the Contractor pays on the purchase  
19 of the materials, equipment, or supplies used or consumed in doing the work.  
20

#### 21 **1-07.2(2) State Sales Tax — Rule 170**

22  
23 WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or  
24 existing buildings, or other structures, upon real property. This includes, but is not limited to, the  
25 construction of streets, roads, highways, etc., owned by the state of Washington; water mains  
26 and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers  
27 and disposal systems are within, and a part of, a street or road drainage system; telephone,  
28 telegraph, electrical power distribution lines, or other conduits or lines in or above streets or  
29 roads, unless such power lines become a part of a street or road lighting system; and installing  
30 or attaching of any article of tangible personal property in or to real property, whether or not  
31 such personal property becomes a part of the realty by virtue of installation.  
32

33 For work performed in such cases, the Contractor shall collect from the Contracting Agency,  
34 retail sales tax on the full contract price. The Contracting Agency will automatically add this  
35 sales tax to each payment to the Contractor. For this reason, the Contractor shall not include  
36 the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule  
37 170, with the following exception.  
38

39 Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a  
40 subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable  
41 supplies not integrated into the project. Such sales taxes shall be included in the unit bid item  
42 prices or in any other contract amount.  
43

#### 44 **1-07.2(3) Services**

45  
46 The Contractor shall not collect retail sales tax from the Contracting Agency on any contract  
47 wholly for professional or other services (as defined in Washington State Department of  
48 Revenue Rules 138 and 244).  
49  
50

1 **1-07.9 Wages**

2  
3 **1-07.9(5) Required Documents**  
4 **(March 1, 2004 Tacoma GSP)**

5 *The first sentence of the third paragraph is revised to read:*

6  
7 Weekly certified payrolls shall be submitted for the Contractor and all lower tier subcontractors  
8 or agents.

9  
10 *This section is supplemented with the following:*

11  
12 Where fringe benefits are paid in cash, certified payrolls shall include the fringe benefit dollar  
13 amount paid to each employee for each employee classification.

14  
15 Where fringe benefits are paid into approved plans, funds, or programs, the amount of the fringe  
16 benefits shall be identified in the "Benefit Distribution" section of the Certified Payroll Affirmation  
17 form.

18  
19 **1-07.11 Requirements for Nondiscrimination**  
20 **(July 18, 2016 APWA GSP, Option C)**

21 *Supplement this section with the following:*

22  
23 **Voluntary Minority, Small, Veteran and Women's Business Enterprise (MSVWBE)**  
24 **Participation**

25  
26 **General Statement**

27 Voluntary goals for minority, small, veteran and women business enterprises are included in this  
28 Contract. The Contractor is encouraged to utilize MSVWBEs in accordance with these  
29 Specifications, RCW 39.19 and Executive Order 13-01 (issued by the Governor of Washington  
30 on May 10, 2013).

31  
32 No preference will be included in the evaluation of the Contractor's Proposal or Bid; no minimum  
33 level of MSVWBE participation is required as a condition of award or completion of the Contract;  
34 and a Proposal or Bid will not be rejected or considered non-responsive on that basis.

35  
36 The goals are voluntary and outreach efforts to provide MSVWBEs maximum practicable  
37 opportunities are encouraged.

38  
39 **Non-Discrimination**

40 Contractors shall not create barriers to open and fair opportunities for all businesses, including  
41 MSVWBEs, to participate in the Work on this Contract. This includes the opportunity to  
42 compete for subcontracts as sources of supplies, equipment, construction or services.

43  
44 The Contractor shall make Voluntary MSVWBE Participation a part of all subcontracts and  
45 agreements entered into as a result of this Contract.

46  
47 **Voluntary MSVWBE Participation Goals**

48 Goals for voluntary MSVWBE participation have been established as a percentage of  
49 Contractor's total Bid amount.

50  
51

The Contracting Agency has established the following voluntary goals:

Minority	10%
Small	5%
Veteran	5%
Women	6%

Amounts paid to an MSVWBE will be credited to every voluntary goal in which they are eligible. In other words participation may be credited for participation in more than one category. If the Contractor is a MSVWBE their Work will be credited to the voluntary goals in which they are eligible.

### **Definitions**

**Minority Business Enterprise (MBE)** – A minority owned business meeting the requirements of RCW 39.19 and WAC 326-20 and certified by the Washington State Office of Minority & Women’s Business Enterprises.

**Small Business** – A business meeting the Washington State requirements for a “Small business”, “Minibusiness” or “Microbusiness as defined in RCW 39.26.010 and included on the WSDOT Office of Equal Opportunity list of Small Businesses at <http://www.wsdot.wa.gov/equalopportunity/bddirectory.htm>

**Veteran Business** – A veteran owned business meeting the requirements of RCW 43.60A.010 and included on the WSDOT Office of Equal Opportunity list of Veteran Businesses at <http://www.wsdot.wa.gov/equalopportunity/bddirectory.htm>

**Women Business Enterprise (WBE)** – A women owned business meeting the requirements of RCW 39.19 and WAC 326-20 and certified by the Washington State Office of Minority & Women’s Business Enterprises.

### **MSVWBE Inclusion Plan**

A MSVWBE Inclusion Plan shall be submitted to the Engineer prior to the start of Work on the project. The plan is submitted for the Contracting Agency’s information. Approval of the plan is not required; an incomplete plan will be returned for correction and resubmittal. The plan shall include the information identified in the guidelines at <http://www.wsdot.wa.gov/EqualOpportunity/MSVWBE.htm>.

### **MSVWBE Reporting**

An end of project Report of Amounts Paid to MSVWBEs shall be submitted to the Engineer after Physical Completion of the Contract. The end of project report is due 20 calendar days after the physical completion of the project has been issued.

The end of project report shall include payments to all eligible businesses regardless of their listing on the MSVWBE Inclusion Plan. If the Contractor is a MSVWBE the amounts paid by the Contracting Agency for Work performed by the Contractor shall also be reported.

### **MSVWBE Payment**

All costs for implementation of the requirements for Voluntary MSVWBE Participation shall be included in the associated items of Contract Work.

1 **1-07.15 Temporary Water Pollution/Erosion Control**  
2 **(March 23, 2010 Tacoma GSP)**

3 *This section is supplemented with the following:*  
4

5 Stormwater or dewatering water that has come in contact with concrete rubble, concrete pours,  
6 or cement treated soils shall be maintained to pH 8.5 or less before it is allowed to enter waters  
7 of the State or the City stormwater system. If pH exceeds 8.5, the Contractor shall immediately  
8 discontinue work and initiate treatment according to the plan to lower the pH. Work may  
9 resume, with treatment, once the pH of the stormwater is 8.5 or less or it can be demonstrated  
10 that the runoff will not reach surface waters or the City stormwater system.

11  
12 High pH process water shall not be discharged to waters of the State or the City stormwater  
13 system. Unless specific measures are identified in the Special Provisions, high pH water may  
14 be infiltrated, dispersed in vegetation or compost, or discharged to a sanitary sewer system.  
15 Disposal shall be in accordance with the City of Tacoma Surface Water Management Manual or  
16 to City wastewater system with proper approval. Water being infiltrated or dispersed shall have  
17 no chance of discharging directly to waters of the State or the City stormwater system, including  
18 wetlands or conveyances that indirectly lead to waters of the State. High pH process water  
19 shall be treated to within a range of 6.5 to 8.5 pH units prior to infiltration to ensure the  
20 discharge does not cause a violation of groundwater quality standards. If water is discharged to  
21 the sanitary sewer, the Contractor shall provide a copy of permits and requirements for placing  
22 the material into a sanitary sewer system prior to beginning the work. Process water may be  
23 collected and disposed of by the Contractor off the project site. The Contractor shall provide a  
24 copy of the permit for an approved waste site for the disposal of the process water prior to the  
25 start of work that generates the process water. A Special Approved Discharge permit shall be  
26 required for all discharges to the sanitary sewer system.

27  
28 **1-07.15(1) Spill Prevention, Control and Countermeasures Plan**  
29 **(February 9, 2011 Tacoma GSP)**

30 *This section is revised to read:*  
31

32 The Contractor shall prepare a project-specific spill prevention, control, and countermeasures  
33 plan (SPCC Plan) that will be used for the duration of the project. The Contractor shall submit  
34 the plan to the Project Engineer no later than the date of the preconstruction conference. No on-  
35 site construction activities may commence until the Contracting Agency accepts an SPCC Plan  
36 for the project.

37  
38 The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and other  
39 materials as defined in Chapter 447 of the WSDOT Environmental Procedures Manual (M 31-  
40 11). Occupational safety and health requirements that may pertain to SPCC Plan  
41 implementation are contained in, but not limited to, WAC 296-824 and WAC 296-843.

42  
43 **Implementation Requirements**

44 The SPCC Plan shall be updated by the Contractor throughout project construction so that the  
45 written plan reflects actual site conditions and practices. The Contractor shall update the SPCC  
46 Plan at least annually and maintain a copy of the updated SPCC Plan on the project site. All  
47 project employees shall be trained in spill prevention and containment, and they shall know  
48 where the SPCC Plan and spill response kits are located and have immediate access to them.

49  
50 If hazardous materials are encountered or spilled during construction, the Contractor shall do  
51 everything possible to control and contain the material until appropriate measures can be taken.

1 The Contractor shall supply and maintain spill response kits of appropriate size within close  
2 proximity to hazardous materials and equipment.

3  
4 The Contractor shall implement the spill prevention measures identified in the SPCC Plan  
5 before performing any of the following:

- 6  
7 1. Placing materials or equipment in staging or storage areas.
- 8  
9 2. Refueling, washing, or maintaining equipment.
- 10  
11 3. Stockpiling contaminated materials.

### 12 **SPCC Plan Element Requirements**

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

- 14  
15 1. Responsible Personnel  
16 Identify the name(s), title(s), and contact information, including a 24/7 emergency  
17 contact number, for the personnel responsible for implementing and updating the plan,  
18 including all spill responders.  
19  
20
- 21 2. Spill Reporting  
22 List the names and telephone numbers of the Federal, State, and local agencies the  
23 Contractor shall notify in the event of a spill. The City of Tacoma contact will be the  
24 Wastewater Treatment Plant Operations number at 253.591.5595 and the City Source  
25 Control Spill Response number at 253.502.2222.  
26
- 27 3. Project and Site Information  
28 Describe the following items:  
29 A. The project Work.  
30 B. The site location and boundaries.  
31 C. The drainage pathways from the site, including both stormwater and sanitary  
32 conveyance pathways.  
33 D. Nearby waterways and sensitive areas and their distances from the site.  
34
- 35 4. Potential Spill Sources  
36 Describe each of the following for all potentially hazardous materials brought or  
37 generated on-site (including materials used for equipment operation, refueling,  
38 maintenance, or cleaning):  
39 A. Name of material and its intended use.  
40 B. Estimated maximum amount on-site at any one time.  
41 C. Location(s) (including any equipment used below the ordinary high water line) where  
42 the material will be staged, used, and stored and the distance(s) from nearby  
43 waterways and sensitive areas.  
44 D. Decontamination location and procedure for equipment that comes into contact with  
45 the material.  
46 E. Disposal procedures.  
47 F. Include a Material Safety Data Sheet (MSDS) for each potentially hazardous  
48 material.  
49
5. Pre-Existing Contamination

Describe any pre-existing contamination and contaminant sources (such as buried pipes or tanks) in the project area that are described in the Contract documents. Identify equipment and work practices that will be used to prevent the release of contamination.

6. Spill Prevention and Response Training

Describe how and when all personnel (including refueling Contractors and Subcontractors) will be trained in spill prevention, containment, and response in accordance with the Plan. Describe how and when all spill responders will be trained in accordance with WAC 296-824.

7. Spill Prevention

Describe the following items:

- A. Spill response kit contents and location(s).
- B. Security measures for potential spill sources.
- C. Secondary containment practices and structures for all containers to handle the maximum volume of potential spill of hazardous materials.
- D. Methods used to prevent stormwater from contacting hazardous materials.
- E. Site inspection procedures and frequency.
- F. Equipment and structure maintenance practices.
- G. Daily inspection and cleanup procedures that ensure all equipment used below the ordinary high water line is free of all external petroleum-based products.
- H. Refueling procedures for equipment that cannot be moved from below the ordinary high water line.

8. Spill Response

Outline the response procedures the Contractor will follow for each scenario listed below. 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, and clean up and dispose of spilled and contaminated material.

Response procedures shall be outlined in the Spill Response section and shall include notification to the City of Tacoma Wastewater Treatment Plant Operations number at 253.591.5595 and the City Source Control Spill Response number at 253.502.2222.

- A. A spill of each type of hazardous material at each location identified in 4, above.
- B. Stormwater that has come into contact with hazardous materials.
- C. Drainage pathways from the site, including both stormwater and sanitary conveyance pathways.
- D. A release or spill of any unknown pre-existing contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.
- E. A spill occurring during Work with equipment used below the ordinary high water line.

If the Contractor will use a Subcontractor for spill response, provide contact information for the Subcontractor under item 1 (above), identify when the Subcontractor will be used, and describe actions the Contractor shall take while waiting for the Subcontractor to respond.

1       9.       Project Site Map

2       Provide a map showing the following items:

- 3
- 4       A.   Site location and boundaries.
- 5       B.   Site access roads.
- 6       C.   Drainage pathways from the site.
- 7       D.   Nearby waterways and sensitive areas.
- 8       E.   Hazardous materials, equipment, and decontamination areas identified in 4, above.
- 9       F.   Pre-existing contamination or contaminant sources described in 5, above.
- 10      G.   Spill prevention and response equipment described in 7 and 8, above.

11

12      10.     Spill Report Forms

13      Provide a copy of the spill report form(s) that the Contractor will use in the event of a

14      release or spill.

15

16      **Payment**

17      Payment will be made in accordance with Section 1-04.1 for the following Bid item when it is

18      included in the Proposal:

19

20      “SPCC Plan,” lump sum.

21

22      When the written SPCC Plan is accepted by the Contracting Agency, the Contractor shall

23      receive 50-percent of the lump sum Contract price for the plan.

24

25      The remaining 50-percent of the lump sum price will be paid after the materials and equipment

26      called for in the plan are mobilized to the project.

27

28      The lump sum payment for “SPCC Plan” shall be full pay for:

- 29
- 30      1.   All costs associated with creating the accepted SPCC Plan.
- 31
- 32      2.   All costs associated with providing and maintaining the on-site spill prevention
- 33      equipment described in the accepted SPCC Plan.
- 34
- 35      3.   All costs associated with providing and maintaining the on-site standby spill response
- 36      equipment and materials described in the accepted SPCC Plan.
- 37
- 38      4.   All costs associated with implementing the spill prevention measures identified in the
- 39      accepted SPCC Plan.
- 40
- 41      5.   All costs associated with updating the SPCC Plan as required by this Specification.

42

43      As to other costs associated with releases or spills, the Contractor may request payment as

44      provided for in the Contract. No payment shall be made if the release or spill was caused by or

45      resulted from the Contractor’s operations, negligence, or omissions.

46

47      **1-07.16 Protection and Restoration of Property**

48

49

50

1 **1-07.16(1) Private/Public Property**  
2 **(January 13, 2011 Tacoma GSP)**

3 *This section is supplemented with the following:*  
4

5 Stockpiling in City of Tacoma right-of-way or on existing or new improvements shall not occur  
6 unless approved by the Engineer. All stockpile sites shall be restored to as good or better  
7 condition.  
8

9 The Contractor shall contact all property owners and tenants in the vicinity of this project, via  
10 newsletter/mailling, a minimum of one (1) week prior to start of construction. The Contractor  
11 shall submit a draft of the property owner notification prior to posting/mailling.  
12

13 The newsletter/mailling shall advise the owners and tenants of the construction schedule and  
14 indicate the Contractor's name, contact person, and telephone numbers.  
15

16 **1-07.17 Utilities and Similar Facilities**

17 **(\*\*\*\*\*)**

18 *The first paragraph is supplemented with the following:*  
19

20 Public and private utilities or their Contractors will furnish all work necessary to adjust, relocate,  
21 replace, or construct their facilities unless otherwise provided for in the Plans or these Special  
22 Provisions. Such adjustment, relocations, replacement, or construction will be done within the  
23 time for performance of this project. The Contractor shall coordinate their work with such  
24 adjustment, relocation, or replacement of utility work. This may require the Contractor to phase  
25 their work in a manner that will allow for the utility work.  
26

27 The Contractor shall coordinate their work with all utilities and other organizations which have to  
28 adjust or revise their facilities within the project area. These may include, but are not limited to:  
29

- 30 • City of Tacoma Light Division, Contact: Kevin Kelley, phone: (253) 502-8229
- 31 • City of Tacoma Water Division, Contact: Kimberly Baard, phone: (253) 396-3317
- 32 • City of Tacoma Traffic Division, Signal/Streetlight Shop, phone: (253) 591-5287
- 33 • Rainier Connect, Contact: Brian Munson, phone: (253) 312-2819;  
34 [Brian.Munson@Rainierconnect.net](mailto:Brian.Munson@Rainierconnect.net)
- 35 • Puget Sound Energy, Contact: Mike Klapperich, Electric, phone: (253) 313-3790 OR  
36 Amber Uhls, Gas, phone: (253) 476-6137
- 37 • Lumen, Contact: Al (Aliyah) Skaro, [relocations@lumen.com](mailto:relocations@lumen.com)
- 38 • Comcast, Contact: Todd Gallant, phone: (253) 878-4955,  
39 [todd\\_gallant@cable.comcast.com](mailto:todd_gallant@cable.comcast.com)
- 40 • AT&T/Siena Engineering Group, Contact: Louie Van Hollebeke, phone: (425) 896-9850;  
41 [louie.vanhollebeke@sienaengineeringgroup.com](mailto:louie.vanhollebeke@sienaengineeringgroup.com) OR Steve Duppenthaler, phone: (425)  
42 286-3822; [sd1891@att.com](mailto:sd1891@att.com) OR Roberta Anderson, phone: (425) 896-9839;  
43 [roberta.anderson@sienaengineeringgroup.com](mailto:roberta.anderson@sienaengineeringgroup.com)
- 44 • Level 3 Communications, [Level3NetworkRelocations@Level3.com](mailto:Level3NetworkRelocations@Level3.com)
- 45 • One-Number Locator Service "One Call System" telephone **1-800-424-5555**
- 46 • Verizon, Contact: David Lacombe, phone: (206) 305-5366
- 47 • MCI Metro Utility, Contact: Brad Landis, phone: (425) 229-3123
- 48 T-Mobile, Contact: Steven Schauer, Phone: (360) 402-7725; [steven.schauer@t-](mailto:steven.schauer@t-mobile.com)  
49 [mobile.com](mailto:steven.schauer@t-mobile.com)  
50



1 If the Contractor plans to excavate or trench within ten (10) feet of any utility pole or other  
2 electric or water utility structure owned by the City of Tacoma, the Contractor shall contact the  
3 City of Tacoma, Department of Public Utilities, Field Coordinator, telephone number 502-8044,  
4 and arrange for an inspection before proceeding. The Contractor shall perform, at the  
5 Contractor's expense, such additional work as is required to protect the pole or structure from  
6 subsidence. The Contractor may be directed to suspend work at the site of any such  
7 excavation until such utility structures are adequately protected.

8  
9 Garbage, recycling, and yard waste pick up within the project limits is on **check City of Tacoma**  
10 **website.**

#### 11 12 **1-07.18 Public Liability and Property Damage Insurance**

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

#### 14 15 **1-07.18 Insurance**

16 **(December 17, 2019 Tacoma GSP)**

17  
18 During the course and performance of the services herein specified, the Contractor will maintain  
19 the insurance coverage in the amounts and in the manner specified in the City of Tacoma  
20 Insurance Requirements as is applicable to the services and deliverables provided under this  
21 Contract. The City of Tacoma Insurance Requirements document is fully incorporated herein by  
22 reference.

23  
24 Failure by the Contracting Agency to identify a deficiency in the insurance documentation  
25 provided by the Contractor or failure of the Contracting Agency to demand verification of  
26 coverage or compliance by the Contractor with these insurance requirements shall not be  
27 construed as a waiver of the Contractor's obligation to maintain such insurance.

#### 28 29 **1-07.23 Public Convenience and Safety**

#### 30 31 **1-07.23(1) Construction Under Traffic**

32 **(May 2, 2017 APWA GSP)**

33  
34 *Revise the third sentence of the second paragraph to read:*

35  
36 Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved  
37 by the Contracting Agency activating pedestrian recall timing or other accommodation may be  
38 allowed during construction.

#### 39 40 **1-07.23(1) Construction under Traffic**

41 **(March 1, 2004 Tacoma GSP)**

42 *This section is supplemented with the following:*

43  
44 The following special traffic requirements shall be adhered to during all phases of construction:

45  
46 South Alder Street, South Pine Street, South Oakes Street\*, South 37th Street, South 39th  
47 Street, South 40th Street, South 60th Street, South M Street\*, South L Street, South Park  
48 Street, and Tacoma Avenue shall remain fully open to vehicular and pedestrian traffic at all  
49 times.

1 EXCEPTION:  
2

- 3 • Alleys may be closed during construction/restoration but should allow for access from  
4 one end or the other if practicable. If the alley provides exclusive access to properties  
5 with no other access means, then any proposed closure of the alley (or situation in  
6 which property access is restricted and/or at least 10 feet of the alleyway cannot be  
7 maintained as passable) must be coordinated with the affected property owners (and  
8 City services who might use the alley) at least 10 calendar days in advance to  
9 determine an acceptable date/time/duration for the work. Closures for a given alley  
10 shall not extend across intersecting roadways nor include sequential segments of alley  
11 at the same time. Contractor shall reopen alleys at the conclusion of each work shift,  
12 or if the work requires continuous closure provisions, then affected properties shall be  
13 contacted at least 10 calendar days in advance and access arrangements made to the  
14 extent possible with respect to completing the scope of work. Prior to work in  
15 alleyways, the Contractor shall contact Solid Waste Department at 253-591-5544 at  
16 least 5 working days in advance regarding potential impacts to solid waste pickup. It  
17 is recommended that the Contractor schedule work in alleys around refuse pickup  
18 days or provide measures to accommodate pickup around the construction activities.
- 19 • Non-arterial roadways (those not marked with an “\*” in the list at the beginning of this  
20 section) can be closed to through traffic, although paralleling non-arterial closures are  
21 not permitted concurrently. Local traffic and property access shall be maintained at all  
22 times, and when in proximity to (in-session) schools and/or working on  
23 arrival/departure routes for (in-session) schools, the working times shall be limited to  
24 9:30 AM and 2:30 PM on weekdays (school days) or on weekends from 9 AM to 9 PM  
25 or from 9 PM to 5 AM (with noise variance approval). Contractor shall reopen the street  
26 and all parking areas at the conclusion of each work shift.
- 27 • Work being performed on non-arterial streets that create an encroachment into an  
28 intersecting arterial roadway may only do so with proper temporary traffic control  
29 provisions, which include maintaining two-way traffic in separate lanes, and only from  
30 9 AM to 3 PM (unless overall working hours is further constrained per other applicable  
31 conditions).
- 32 • Two-way (as applicable) traffic in separate lanes along all arterial streets (those  
33 identified with an “\*” in the list at the beginning of this section) must be maintained as  
34 a default traffic control objective (exceptions are identified below). Any work/work zone  
35 within an arterial roadway that requires a shift of travel lanes (in order to maintain two-  
36 way traffic) is restricted to doing so only from 9 AM to 3 PM (or from 9 PM to 5 AM with  
37 approved noise variance) and must have written confirmation from the contractor that  
38 proper roadway vertical and horizontal clearances are available (or can be made  
39 available through contractor's means) within the proposed roadway space to be used  
40 for moving traffic. Any work/work zone within an arterial roadway that only impacts  
41 parking is permitted to be in effect from 7 AM to 5 PM (or 9 PM to 5 AM with approved  
42 noise variance) with proper 72-hour (minimum) advance notice of parking restrictions.

43 Exceptions:

- 44 ○ Two-way, one-lane flagger control on an arterial (and potential complementary  
45 detour relying on the arterial roadway network) will only be considered (with  
46 provided supporting reasons) during off-peak hours (including nighttime with  
47 approved noise variance) when no other means to conduct the work is  
48 possible, with specific working times (e.g., limited daytime working hours or  
49 possibly night-only times with approved noise variance) to be determined on a  
50 case-by-case basis. Additional traffic control provisions, such as advance

PCMS deployment, may be required depending on the situation/particular arterial roadway. Contractor shall reopen the roadway and all parking areas at the conclusion of each work shift.

- Any proposed closure of an intersection and/or roadway, including an arterial roadway if one direction of traffic flow is able to be maintained, can be considered in extenuating circumstances (and with provided supporting reasons that show why a less impactful work method cannot be utilized) with at least 10 working days' notice and proposed traffic control/detour plan. Depending on the location, temporary traffic control provisions may include, but is not limited to, advance notification (minimum 7 days) to City departments, other agencies, and affected businesses; advance notice (by a minimum of 7 days), and continued during for the work duration, to the traveling public via PCMS; and a signed detour utilizing pre-approved roadways (an arterial route must be available if proposing to directionally close an arterial roadway or intersection). Contractor shall fully reopen the roadway/intersection at the conclusion of each workday (or shift) and cover/remove any associated traffic control/detour signing. Concurrent closures, whether a part of this project or overlapping from potential other projects/construction, of this nature within the same general area will not be permitted.
- Even if adjacent roadway vehicle traffic is closed/restricted, there shall be at least one parallel pedestrian route (equivalent accessibility to the pre-existing conditions) that is available to traverse along the closed roadway. Regardless of the roadway control provisions, if any pedestrian route cannot be maintained (with adequate supporting reasoning), then a signed pedestrian detour route (or pedestrian bypass meeting or exceeding City's requirements) must be established and approved by the City.
- Any work/traffic control provision that affects pedestrian accessibility at a given corner of an intersection must be limited to that given corner, with the remaining three corners at the intersection (at a minimum) being used to facilitate a pedestrian detour, until full accessibility or an accessible connection with at least one other corner can be re-established. Regardless of location/situation, any temporary pedestrian access path/route that may be employed shall provide equivalent to, or better, accessibility than the unavailable path/route in accordance with the Americans with Disabilities Act and the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG). Combination of work areas affecting overall pedestrian mobility shall be scheduled so as not to require pedestrians, especially students, to cross roadways multiple times in order to avoid construction zones/follow the prescribed pedestrian detour route.
- Any one-way roadways impacted by work/work zone/temporary traffic control provisions may require additional provisions or specific working times based on preserving property access at all times.
- Any of the above scenarios that affect the normal operation of traffic signal controls shall require the use of Uniformed Police Officers (UPOs), with Tacoma Police Department having first right of refusal to provide those services. Flagging within a signalized intersection and/or its functional area is not permitted unless it is coordinated with the use of UPOs.

Contractor must provide proper advance notice per the City of Tacoma Traffic Control Handbook prior to any traffic revisions.

1 To minimize the disruption to access to adjacent properties, and to Pierce Transit operations,  
2 the lane closure area shall be limited to that area of active work and necessary for appropriate  
3 lane closure tapers. The Contractor shall stage work to maintain access to and egress from all  
4 properties at all times.

5  
6 A safe pedestrian access shall be provided at all times through the project area. All lane  
7 closures shall be coordinated with the adjacent businesses, other contractors working within the  
8 project vicinity, local transit agencies and the City.

9  
10 Where, in the opinion of the Engineer, parking is a hazard to through traffic or to the  
11 construction work, parking may be restricted either entirely or during the time when it creates a  
12 hazard. Signs for restricting parking shall be approved by the City and placed by the  
13 Contractor. The Contractor shall be responsible for and shall maintain all such signs. The  
14 replacement of signs restricting parking shall be as approved by the Engineer.

15  
16 The Contractor shall notify all property owners and tenants of detours, street and alley closures,  
17 or other restrictions that may interfere with their access. Notification shall be at least twenty-four  
18 (24) hours in advance for residential property, and at least forty-eight (48) hours in advance for  
19 commercial property.

20  
21 Emergency traffic, such as police, fire, and disaster units, shall be provided access at all times.  
22 In addition, the Contractor shall coordinate Contractor activities with all disposal firms and transit  
23 bus service that may be operating in the project area.

24  
25 If street closures or lane restrictions, not provided for in the Specifications, are allowed  
26 subsequent to award of the contract, an equitable adjustment of the Contract amount shall be  
27 negotiated.

28  
29 It is the intent of the Contract to effectively prevent the deposition of debris on streets in areas of  
30 public traffic or where such debris may be transported into a drainage system. When  
31 construction operations are such that debris from the work is deposited on the streets, the  
32 Contractor shall, at a minimum, remove on a daily basis any deposits or debris which may  
33 accumulate on the roadway surface. Should daily removal be insufficient to keep the streets  
34 clean, the Contractor shall perform removal operations on a more frequent basis. If the  
35 Engineer determines that a more frequent cleaning is impractical or if the Contractor fails to  
36 keep the streets free from deposits and debris resulting from the work, the Contractor shall,  
37 upon order of the Engineer, provide facilities for and remove all deposits from the tires or  
38 between wheels before trucks or other equipment will be allowed to travel over paved streets.  
39 Should the Contractor fail or refuse to clean the streets in question, or the trucks or equipment  
40 in question, the Engineer may order the work suspended at the Contractor's risk until  
41 compliance with Contractor's obligations is assured, or the Engineer may order the streets in  
42 question cleaned by others and such costs incurred by the City in achieving compliance with  
43 these contract requirements, including cleaning of the streets, shall be deducted from moneys  
44 due or to become due the Contractor on monthly estimate. The Contractor shall have no claim  
45 for delay or additional costs should the Engineer choose to suspend the Contractor's work until  
46 compliance is achieved.

47  
48 *The sixth paragraph of this section is supplemented with the following:*  
49

Trenches backfilled with CDF shall be protected from traffic with steel plates. The plates shall remain in place for 24-hours after placement of the CDF or until CDF is compacted or hardened to prevent rutting by construction equipment or traffic.

**1-07.23(2) Construction and Maintenance of Detours  
(April 1, 2018 Tacoma GSP)**

*This section is supplemented with the following:*

Detour signing during any allowed road closures shall be in accordance with Detour Plans, when included in the Contract Documents. When plans are not included in the Contract Documents, the Contractor shall submit plans for detours in accordance with the "Manual on Uniform Traffic Control Devices (MUTCD)". In addition, where the Contractor believes an alternate plan will safely and adequately maintain vehicular and pedestrian traffic, the Contractor may submit alternate plans to those for traffic control and detours required by MUTCD or contract documents. Such alternate plans must comply with the MUTCD and shall be in writing and submitted to the Engineer at least fifteen (15) days in advance of their intended use. In general, detouring of arterial traffic must be accomplished on streets designated as City Arterials. Detouring of arterial traffic on non-arterial streets will not be allowed. The acceptance of any alternate plan shall be entirely at the discretion of the Engineer and the Contractor shall have no claim by reason of a plan being rejected or modified, nor shall there be any additional payment by reason of using a substitute plan.

The Contractor shall notify the Engineer three (3) working days in advance of implementation of any street closures/detours allowed under the Contract. Advance notice signing shall be placed a minimum of three (3) working days prior to implementation of any street closure/detour.

A minimum of three (3) working days prior to any street closure, the Contractor shall notify all entities below:

Tacoma Fire Dept.	(253-591-5775)
Tacoma Police Dept.	(253-591-5932)
LESA Communications Center	(253-798-4721 - Opt.#2)
Tacoma Public Schools Transportation Office	(253-571-1853)
Pierce Transit	(253-581-8001)
Tacoma Environmental Services Solid Waste	(253-591-5544)
Tacoma Public Works Engineering Division	(253-591-5500)
Tacoma Public Works Streets and Grounds	(253-591-5495)

**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.

1  
2 Whenever any of the work is accomplished on or through property other than public Right of  
3 Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement  
4 agreement obtained by the Contracting Agency from the owner of the private property. Copies  
5 of the easement agreements may be included in the Contract Provisions or made available to  
6 the Contractor as soon as practical after they have been obtained by the Engineer.  
7

8 Whenever easements or rights of entry have not been acquired prior to advertising, these areas  
9 are so noted in the Plans. The Contractor shall not proceed with any portion of the work in  
10 areas where right of way, easements or rights of entry have not been acquired until the  
11 Engineer certifies to the Contractor that the right of way or easement is available or that the right  
12 of entry has been received. If the Contractor is delayed due to acts of omission on the part of  
13 the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor  
14 will be entitled to an extension of time. The Contractor agrees that such delay shall not be a  
15 breach of contract.  
16

17 Each property owner shall be given 48 hours notice prior to entry by the Contractor. This  
18 includes entry onto easements and private property where private improvements must be  
19 adjusted.  
20

21 The Contractor shall be responsible for providing, without expense or liability to the Contracting  
22 Agency, any additional land and access thereto that the Contractor may desire for temporary  
23 construction facilities, storage of materials, or other Contractor needs. However, before using  
24 any private property, whether adjoining the work or not, the Contractor shall file with the  
25 Engineer a written permission of the private property owner, and, upon vacating the premises, a  
26 written release from the property owner of each property disturbed or otherwise interfered with  
27 by reasons of construction pursued under this contract. The statement shall be signed by the  
28 private property owner, or proper authority acting for the owner of the private property affected,  
29 stating that permission has been granted to use the property and all necessary permits have  
30 been obtained or, in the case of a release, that the restoration of the property has been  
31 satisfactorily accomplished. The statement shall include the parcel number, address, and date  
32 of signature. Written releases must be filed with the Engineer before the Completion Date will  
33 be established.  
34  
35

36 **END OF SECTION**  
37  
38

1 **1-08 PROSECUTION AND PROGRESS**

2  
3 *Add the following new section:*

4 **1-08.0 Preliminary Matters**  
5 **(May 25, 2006 APWA GSP)**

6  
7 **1-08.0(1) Preconstruction Conference**  
8 **(October 10, 2008 APWA GSP)**  
9

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

- 13 1. To review the initial progress schedule;
- 14 2. To establish a working understanding among the various parties associated or affected  
15 by the work;
- 16 3. To establish and review procedures for progress payment, notifications, approvals,  
17 submittals, etc.;
- 18 4. To establish normal working hours for the work;
- 19 5. To review safety standards and traffic control; and
- 20 6. To discuss such other related items as may be pertinent to the work.

21  
22 The Contractor shall prepare and submit at the preconstruction conference the following:

- 23 1. A breakdown of all lump sum items;
- 24 2. A preliminary schedule of working drawing submittals; and
- 25 3. A list of material sources for approval if applicable.

26  
27 *Add the following new section:*

28 **1-08.0(2) Hours of Work**  
29 **(March 3, 2008 Tacoma GSP)**  
30

31 Except in the case of emergency or unless otherwise approved by the Contracting Agency, the  
32 normal straight time working hours for the contract shall be any consecutive 8-hour period  
33 between 7:00 a.m. and 6:00 p.m. of a working day with a maximum 1-hour lunch break and a 5-  
34 day work week. The normal straight time 8-hour working period for the contract shall be  
35 established at the preconstruction conference or prior to the Contractor commencing the work.  
36

37 If a Contractor desires to perform work on holidays, Saturdays, Sundays, or before 7:00 a.m. or  
38 after 6:00 p.m. on any day, the Contractor shall apply in writing to the Engineer for permission to  
39 work such times. Permission to work longer than an 8-hour period between 7:00 a.m. and 6:00  
40 p.m. is not required. Such requests shall be submitted to the Engineer no later than noon on  
41 the working day prior to the day for which the Contractor is requesting permission to work.  
42

43 Permission to work between the hours of 9:00 p.m. and 7:00 a.m. during weekdays and  
44 between the hours of 9:00 p.m. and 9:00 a.m. on weekends or holidays may also be subject to  
45 noise control requirements. Approval to continue work during these hours may be revoked at  
46 any time the Contractor exceeds the Contracting Agency's noise control regulations or  
47 complaints are received from the public or adjoining property owners regarding the noise from  
48 the Contractor's operations. The Contractor shall have no claim for damages or delays should  
49 such permission be revoked for these reasons.  
50

1 Permission to work Saturdays, Sundays, holidays or other than the agreed upon normal straight  
2 time working hours Monday through Friday may be given subject to certain other conditions set  
3 forth by the Contracting Agency or Engineer. These conditions may include but are not limited  
4 to: requiring the Engineer or such assistants as the Engineer may deem necessary to be  
5 present during the work; requiring the Contractor to reimburse the Contracting Agency for the  
6 costs in excess of straight-time costs for Contracting Agency employees who worked during  
7 such times, on non Federal aid projects; considering the work performed on Saturdays and  
8 holidays as working days with regards to the contract time; and considering multiple work shifts  
9 as multiple working days with respect to contract time even though the multiple shifts occur in a  
10 single 24-hour period. Assistants may include, but are not limited to, survey crews; personnel  
11 from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency  
12 employees when in the opinion of the Engineer, such work necessitates their presence.

13  
14 *Add the following new section:*

15 **1-08.0(3) Reimbursement for Overtime Work of Contracting Agency Employees**  
16 **(September 29, 2009 Tacoma GSP)**  
17

18 Where the Contractor elects to work on a Saturday, Sunday, or holiday, or longer than an 8-  
19 hour work shift on a regular working day, as defined in the Standard Specifications, such work  
20 shall be considered as overtime work. On all such overtime work, city staff may be required at  
21 the discretion of the Engineer. In such case, the Contracting Agency may deduct from amounts  
22 due or to become due to the Contractor for the costs in excess of the straight-time costs for  
23 employees of the Contracting Agency required to work overtime hours.

24  
25 The Contractor by these specifications does hereby authorize the Engineer to deduct such costs  
26 from the amount due or to become due to the Contractor.  
27

28 **1-08.1 Subcontracting**  
29 **(\*\*\*\*\*)**  
30

31 *Delete the eighth paragraph, beginning with "The Contractor shall not use businesses..."*  
32

33 *Delete the ninth paragraph, beginning with "On all projects, the Contractor shall certify..."*  
34

35 *Add the following new section:*  
36

37 **1-08.1 (2) Subcontracting – Equity In Contracting**  
38 **(\*\*\*\*\*)**  
39

40 Contractor shall follow all Equity in Contracting Program Regulations included in Part III and  
41 these Regulations shall be considered part of the Contract.  
42

43 **1-08.3(2)A Type A Progress Schedule**  
44 **(December 30, 2022 APWA GSP)**  
45

46 *Revise this section to read:*

47 The Contractor shall submit 7 copies of a Type A Progress Schedule no later than at the  
48 preconstruction conference, or some other mutually agreed upon submittal time. The schedule  
49 may be a critical path method (CPM) schedule, bar chart, or other standard schedule format.  
50 Regardless of which format used, the schedule shall identify the critical path. The Engineer will



1 evaluate the Type A Progress Schedule and approve or return the schedule for corrections  
2 within 15 calendar days of receiving the submittal.

#### 3 4 **1-08.4 Prosecution of Work**

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

#### 6 7 **1-08.4 Notice to Proceed and Prosecution of Work** 8 **(July 23, 2015 APWA GSP)** 9

10 Notice to Proceed will be given after the contract has been executed and the contract bond and  
11 evidence of insurance have been approved and filed by the Contracting Agency. The  
12 Contractor shall not commence with the work until the Notice to Proceed has been given by the  
13 Engineer. The Contractor shall commence construction activities on the project site within ten  
14 days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall  
15 diligently pursue the work to the physical completion date within the time specified in the  
16 contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the  
17 Contractor of the responsibility to complete the work within the time(s) specified in the contract.  
18

19 When shown in the Plans, the first order of work shall be the installation of high visibility fencing  
20 to delineate all areas for protection or restoration, as described in the Contract. Installation of  
21 high visibility fencing adjacent to the roadway shall occur after the placement of all necessary  
22 signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing,  
23 the Contractor shall request the Engineer to inspect the fence. No other work shall be performed  
24 on the site until the Contracting Agency has accepted the installation of high visibility fencing, as  
25 described in the Contract.  
26

#### 27 **1-08.5 Time for Completion** 28 **(March 16, 2016 Tacoma GSP)**

29 *Revise the third and fourth paragraphs to read:*

30  
31 Contract time shall begin on the first working day following the Notice to Proceed Date.

32  
33 Each working day shall be charged to the contract as it occurs, until the contract work is  
34 physically complete. If substantial completion has been granted and all the authorized working  
35 days have been used, charging of working days will cease. Each week the Engineer will  
36 provide the Contractor a statement that shows the number of working days: (1) charged to the  
37 contract the week before; (2) specified for the physical completion of the contract; and (3)  
38 remaining for the physical completion of the contract. The statement will also show the  
39 nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10  
40 calendar days after the date of each statement, the Contractor shall file a written protest of any  
41 alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient  
42 detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing  
43 such detailed protest in that period, the Contractor shall be deemed as having accepted the  
44 statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week  
45 (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily  
46 be charged as a working day then the fifth day of that week will be charged as a working day  
47 whether or not the Contractor works on that day.  
48  
49  
50  
51

1 *Revise the sixth paragraph to read:*

2  
3 The Engineer will give the Contractor written notice of the completion date of the contract after  
4 all the Contractor's obligations under the contract have been performed by the Contractor. The  
5 following events must occur before the Completion Date can be established:

- 6 1. The physical work on the project must be complete; and
- 7 2. The Contractor must furnish all documentation required by the contract and required by  
8 law, to allow the Contracting Agency to process final acceptance of the contract. The  
9 following documents must be received by the Project Engineer prior to establishing a  
10 completion date:
  - 11 a. Certified Payrolls (per Section 1-07.9(5)).
  - 12 b. Material Acceptance Certification Documents
  - 13 c. Reports of Amounts Credited as EIC Participation, as required by the Contract
  - 14 Provisions.
  - 15 d. Final Contract Voucher Certification
  - 16 e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all
  - 17 Subcontractors
  - 18 f. Property owner releases per Section 1-07.24

19  
20 *This section is supplemented with the following:*  
21 **(March 1, 2004 Tacoma GSP)**

22  
23 This project shall be physically completed within **90** working days.

24  
25 **1-08.9 Liquidated Damages**  
26 **(March 3, 2021 APWA GSP, Option B)**

27 Revise the second and third paragraphs to read:

28  
29 Accordingly, the Contractor agrees:

- 30  
31 1. To pay (according to the following formula) liquidated damages for each working  
32 day beyond the number of working days established for Physical Completion,  
33 and  
34
- 35 2. To authorize the Engineer to deduct these liquidated damages from any money  
36 due or coming due to the Contractor.

37  
38 **Liquidated Damages Formula**

39  
40  $LD=0.15C/T$

41  
42 Where:

43  
44 LD = liquidated damages per working day (rounded to the nearest dollar)

45 C = original Contract amount

46 T = original time for Physical Completion

47  
48 When the Contract Work has progressed to Substantial Completion as defined in the  
49 Contract, the Engineer may determine the Contract Work is Substantially Complete. The  
50 Engineer will notify the Contractor in writing of the Substantial Completion Date. For

1 overruns in Contract time occurring after the date so established, the formula for liquidated  
2 damages shown above will not apply. For overruns in Contract time occurring after the  
3 Substantial Completion Date, liquidated damages shall be assessed on the basis of direct  
4 engineering and related costs assignable to the project until the actual Physical Completion  
5 Date of all the Contract Work. The Contractor shall complete the remaining Work as  
6 promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a  
7 written schedule for completing the physical Work on the Contract.

8  
9 **END OF SECTION**  
10

1 **1-09 MEASUREMENT AND PAYMENT**

2  
3 **1-09.2(1) General Requirements for Weighing Equipment**  
4 **(December 30, 2022 APWA GSP, Option 2)**

5  
6 *Revise item 4 of the fifth paragraph to read:*

- 7  
8 4. Test results and scale weight records for each day's hauling operations are provided to  
9 the Engineer daily. Reporting shall utilize WSDOT form 422-027, Scaleman's Daily  
10 Report, unless the printed ticket contains the same information that is on the Scaleman's  
11 Daily Report Form. The scale operator must provide AM and/or PM tare weights for  
12 each truck on the printed ticket.

13  
14 **1-09.6 Force Account**  
15 **(December 30, 2022 APWA GSP)**

16 *Supplement this Section with the following:*

17  
18 The Contracting Agency has estimated and included in the Proposal, dollar amounts for all  
19 items to be paid per force account, only to provide a common proposal for Bidders. All such  
20 dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency  
21 does not warrant expressly or by implication, that the actual amount of work will correspond with  
22 those estimates. Payment will be made on the basis of the amount of work actually authorized  
23 by Engineer.

24  
25 **(January 13, 2011 Tacoma GSP)**

26 *Item #3 of this Section is supplemented with the following:*

27  
28 The Contractor shall submit a comprehensive summary list of all equipment anticipated to be  
29 used on the project and their associated AGC/WSDOT Equipment Rental Rates. The list shall  
30 include the contractor's equipment number, make, model, year, operation rate, standby rate,  
31 applicable attachments and any other applicable information necessary to determine the  
32 applicable rates in accordance with this section. In addition, the contractor shall submit an  
33 Equipment Watch rate sheet ([www.equipmentwatch.com](http://www.equipmentwatch.com)) for each piece of equipment in the  
34 summary list. Access to the Equipment Watch web site is available at the City's Construction  
35 Management Office.

36  
37 **1-09.9 Payments**  
38 **(March 13, 2012 APWA GSP)**

39  
40 *Delete the first four paragraphs and replace them with the following:*

41  
42 The basis of payment will be the actual quantities of Work performed according to the Contract  
43 and as specified for payment.

44  
45 The Contractor shall submit a breakdown of the cost of lump sum bid items at the  
46 Preconstruction Conference, to enable the Project Engineer to determine the Work performed  
47 on a monthly basis. A breakdown is not required for lump sum items that include a basis for  
48 incremental payments as part of the respective Specification. Absent a lump sum breakdown,  
49 the Project Engineer will make a determination based on information available. The Project  
50 Engineer's determination of the cost of work shall be final.

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

4  
5 The initial progress estimate will be made not later than 30 days after the Contractor  
6 commences the work, and successive progress estimates will be made every month thereafter  
7 until the Completion Date. Progress estimates made during progress of the work are tentative,  
8 and made only for the purpose of determining progress payments. The progress estimates are  
9 subject to change at any time prior to the calculation of the final payment.

10  
11 The value of the progress estimate will be the sum of the following:

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

21  
22 Progress payments will be made in accordance with the progress estimate less:

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

27  
28 Progress payments for work performed shall not be evidence of acceptable performance or an  
29 admission by the Contracting Agency that any work has been satisfactorily completed. The  
30 determination of payments under the contract will be final in accordance with Section 1-05.1.

31  
32 *This section is supplemented with the following:*  
33 **(January 6, 2015 Tacoma GSP)**

34  
35 Breakdowns of all lump sum items shall be provided for all lump sum items and shall include all  
36 costs for labor, equipment, materials, and taxes (as applicable) associated with the lump sum  
37 item. Washington State Department of Revenue Rules 170 and 171 apply to lump sum items  
38 per Section 1-07.2 of the WSDOT State Amendments to the Standard Specifications.

39  
40 Stockpiled Material - The point of acceptance of stockpiled material for payment and quality  
41 shall be at the time of incorporation into the contract.

42  
43 **1-09.9(1) Retainage**  
44 **(May 10, 2006 Tacoma GSP)**

45 *The fourth paragraph is supplemented with the following:*

- 46
- 47 6. A "General Release to the City of Tacoma" is on file with the Contracting Agency.
- 48 7. A release has been obtained from the City of Tacoma's City Clerk's Office.
- 49

1 **1-09.13(3)A Administration of Arbitration**  
2 **(January 19, 2022 APWA GSP)**

3 *Revise the third paragraph to read:*  
4

5 The Contracting Agency and the Contractor mutually agree to be bound by the decision of the  
6 arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the  
7 Superior Court of the county in which the Contracting Agency's headquarters is located,  
8 provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050  
9 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the  
10 specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis  
11 for decisions.  
12

13 **END OF SECTION**  
14

1 **1-10 TEMPORARY TRAFFIC CONTROL**

2  
3 **1-10.1(2) Description**

4 **(July 22, 2019 Tacoma GSP)**

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

6  
7 The Contractor shall keep lanes, on-ramps, and off-ramps open to traffic at all times except  
8 when Work requires closure(s) that have been requested and approved in accordance with  
9 section 1-10.2(2).

10  
11 *The third sentence of the fourth paragraph is revised to read:*

12  
13 Approved lane and ramp closures shall be for the minimum time required to complete the Work.

14  
15 *This section is supplemented with the following:*

16  
17 Only uniformed off-duty police officers shall be used to control traffic when it is necessary to  
18 override or provide traffic control at signalized intersections. Off-duty City of Tacoma Police  
19 Department officers are preferred within the jurisdiction of the Tacoma PD, and the Contractor  
20 shall grant the Tacoma PD the "first right of refusal" by contacting the Tacoma PD first as stated  
21 below.

22  
23 The City will make all necessary temporary adjustments to existing traffic signals and traffic  
24 signal activators.

25  
26 Existing signs shall not be removed until the Contractor has provided for temporary measures  
27 sufficient to safeguard and direct traffic after existing signs have been removed. Preservation of  
28 temporary traffic control and street name signs shall be the sole responsibility of the Contractor.

29  
30 As the work progresses and permits, temporarily relocated and/or removed traffic signs shall be  
31 reset in their permanent location. Permanent signs and other traffic control devices damaged or  
32 lost by the Contractor shall be replaced or repaired at the Contractor's expense.

33  
34 **Traffic Control Management**

35 **1-10.2(1) General**

36 **(October 3, 2022)**

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

38  
39 The Traffic Control Supervisor shall be certified by one of the following:

40  
41 The Northwest Laborers-Employers Training Trust  
42 27055 Ohio Ave.  
43 Kingston, WA 98346  
44 (360) 297-3035  
45 <https://www.nwlett.edu>

46  
47 Evergreen Safety Council  
48 12545 135<sup>th</sup> Ave. NE  
49 Kirkland, WA 98034-8709  
50 1-800-521-0778  
51 <https://www.esc.org>

1  
2 The American Traffic Safety Services Association  
3 15 Riverside Parkway, Suite 100  
4 Fredericksburg, Virginia 22406-1022  
5 Training Dept. Toll Free (877) 642-4637  
6 Phone: (540) 368-1701  
7 <https://altssa.com/training>  
8

9 Integrity Safety  
10 13912 NE 20th Ave.  
11 Vancouver, WA 98686  
12 (360) 574-6071  
13 <https://www.integritysafety.com>  
14

15 US Safety Alliance  
16 (904) 705-5660  
17 <https://www.ussafetyalliance.com>  
18

19 K&D Services Inc.  
20 2719 Rockefeller Ave.  
21 Everett, WA 98201  
22 (800) 343-4049  
23 <https://www.kndservices.net>  
24

25 *Section 1-10.3 is supplemented with the following:*  
26

27 **1-10.3(2)F Signalized Intersections**  
28 **(August 15, 2019 Tacoma GSP)**  
29

30 When construction operations are such that an existing traffic signal is required to be overridden  
31 to allow for traffic control measures, only a uniformed off-duty police officer shall override the  
32 signal.  
33

34 All off-duty officers shall be commissioned within the State of Washington.  
35

36 Tacoma Police Department officers shall be the first choice for traffic control that overrides any  
37 traffic signal within the jurisdiction of the City of Tacoma PD. The Contractor shall first contact  
38 Tacoma Police Department, Special Events Sergeant, to schedule police officers for the  
39 specified traffic control duty.  
40

41 Tacoma Police Department  
42 Special Events Sergeant  
43 (253) 591-5932  
44 [TacomaPoliceEvents@ci.tacoma.wa.us](mailto:TacomaPoliceEvents@ci.tacoma.wa.us)  
45

46 The Contractor shall request officers at least 48 hours in advance for scheduling, unless an  
47 exception is approved by the Engineer.  
48

49 The Contractor shall immediately notify the Engineer in writing if Tacoma PD cannot supply  
50 officers for the requested date(s). The Contractor shall include the written response from  
51 Tacoma PD and state the preference to either postpone the affected Work or request officers



1 from other State of Washington jurisdictions. Using officers from other jurisdictions must be  
2 approved by the Engineer.

3  
4 The Contractor will not be compensated for any off-duty officers from other jurisdictions  
5 performing traffic control without prior approval from the Engineer, and the Contracting Agency  
6 may stop work in accordance with Section 1-08.6, "Suspension of Work".  
7

8 **1-10.3(3)A Construction Signs**  
9 **(January 11, 2006 Tacoma GSP)**

10 *The fifth paragraph is revised to read:*

11  
12 Signs, posts, or supports that are lost, stolen, damaged, destroyed, or which the Engineer  
13 deems to be unacceptable while their use is required on the project shall be replaced by the  
14 Contractor at their expense.  
15

16 **1-10.3(3)C Portable Changeable Message Sign**  
17 **(August 4, 2010 Tacoma GSP)**

18 *This section is supplemented with the following:*

19  
20 Portable Changeable Message Signs shall be required on arterials streets where construction  
21 occurs for durations longer than seven (7) calendar days. Signs shall be solar charged and  
22 programmable. Signs shall be provided a minimum of seven (7) calendar days prior to  
23 construction and remain through the duration of the construction on the arterial street. Signs  
24 shall be provided on each end of the arterial street construction zone notifying oncoming traffic  
25 of the construction conditions. All costs associated with providing and maintain the signs for the  
26 required duration shall be included in the proposal item, "Project Temporary Traffic Control", per  
27 lump sum.  
28

29 **(\*\*\*\*\*)**

30 To prevent hackers from getting access to the Portable Change Message Signs (PCMS), the  
31 contractor is required to change the default password and to take other appropriate measures  
32 for field access to message control features on the PCMS. In addition, the contractor shall verify  
33 the PCMS control box, if any, is secured and locked from tampering during the daily review of  
34 the work zone set up and conditions of the traffic control devices.  
35

36 **1-10.4(2) Item Bids with Lump Sum for Incidentals**  
37 **(January 11, 2006 Tacoma GSP)**

38 *This section is supplemented with the following:*

39  
40 No unit of measure will apply to the position of traffic control manager and it will be considered  
41 included in other unit contract prices in the Bid Proposal.  
42

43 "Uniformed Police Officer for Traffic Control" will be measured by the hour. Portions of an hour  
44 will be rounded up to a whole hour.  
45

46 **1-10.5(2) Item Bids with Lump Sum for Incidentals**  
47 **(January 11, 2006 Tacoma GSP)**

48 *This section is supplemented with the following:*

49  
50 "Uniformed Police Officer for Traffic Control", per hour

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

4  
5 **END OF SECTION**  
6 **END OF SPECIAL PROVISIONS**  
7

1 **2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP**  
2 **(March 17, 2016 Tacoma GSP)**  
3

4 **2-01.1 Description**

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

6 The Contractor shall clear, grub, and cleanup those areas contained within the "Clearing &  
7 Grubbing" or "Daylight Line" limits indicated on the Plans.

8  
9 *This section is supplemented with the following:*

10  
11 Trees, stumps, shrubs, and brush located outside the Clearing & Grubbing limits shall be  
12 considered as part of "Clearing and Grubbing" when identified for removal on the Plans.  
13

14 **2-01.2 Disposal of Usable Material and Debris**

15 *The second paragraph is revised to read:*

16  
17 The Contractor shall dispose of all debris in accordance with Section 2-01.2(2).  
18

19 **2-01.3(1) Clearing**

20 *This section is revised to read:*  
21

- 22 1. Fell trees only within the area to be cleared as shown on the Plans.
- 23 2. Close-cut parallel to the slope of the ground all stumps to be left in the cleared area  
24 outside the slope stakes.
- 25 3. Close cut all stumps that will be buried by fills 5-feet or less in depth.
- 26 4. Follow these requirements for all stumps that will be buried by fills deeper than 5-feet  
27 from the top, side, or end surface of the embankment or any structure and are in a  
28 location that will not be terraced as described in Section 2-03.3(14):
  - 29 a. Close-cut stumps under 18-inches in diameter.
  - 30 b. Trim stumps that exceed 18-inches in diameter to no more than 12-inches  
31 above original ground level.
- 32 5. Leave standing any trees or native growth indicated by the Engineer.
- 33 6. Trim all trees to be left standing to the height specified by the Engineer and certified  
34 Arborist, with a minimum height of eight (8) feet above sidewalk and fourteen (14)  
35 feet above the roadway surface. Neatly cut all limbs close to the tree trunk. All tree  
36 trimming must be done by or under the direction of a certified Arborist.
- 37 7. Thin clumps of native growth as the Engineer may direct.
- 38 8. Protect, by fencing if necessary, all trees or native growth from any damage caused  
39 by construction operations in accordance with Standard Plans LS-08 through LS-11.
- 40 9. Trim all shrubs and brush which covers sidewalks, curb, curb and gutter, and curb  
41 ramps to a minimum of four inches from the edge of sidewalk or as directed by the  
42 Engineer or Certified Arborist.
- 43 10. Remove and dispose of, or relocate the following existing features where necessary  
44 within the project limits or as indicated on the Plans:
  - 45 a. Cement concrete gutter boxes.
  - 46 b. Large rocks used for the purpose of landscaping or as a barrier when inside  
47 the paving limits.
  - 48 c. Wood curbs, logs, railroad ties, and other timber used for landscaping when  
49 inside the paving limits.
  - 50 d. All types of fence.
  - 51 e. Bollards inside the paving area and not designated to remain.

- f. Relocate Eco Blocks to a location outside of the paving limits.
11. Perform all work as required by the certified Arborist Reports, attached in the appendix to protect, remove, trim, prune roots or limbs, and any other works detailed in the Arborist Reports. This includes all labor, time, and materials for this work. This work shall be performed on Force Account per Section 1-09.6.
12. Remove trees as indicated on the plans or as directed by the Engineer or certified Arborist. The tree removal shall include stump grinding to eight inches below final grade and removal of roots according to the Plans and Specifications, and as directed by the Engineer and certified Arborist, such that a new tree can be planted in the same area.
13. All stumps identified for stump grinding or as directed by the Engineer or certified Arborist shall be ground to eight inches below final grade.

*This section is added:*

**2-01.3(1)A Tree Protection**

Trees not marked for removal or in clearing and grubbing limits shall be protected in accordance with Standard Specifications, Urban Forestry Manual, City of Tacoma Standard Plan, and certified arborist recommendations. Protection activities shall include, but are not limited to, use of straight edge buckets for excavation, hand digging where necessary, clean cutting roots that need removal, root shaving, installing wire mesh and fencing, protecting cut roots.

**2-01.3(2) Grubbing**

*Item e is revised to read:*

Upon which embankments will be placed, except stumps may be close-cut or trimmed as allowed in Section 2-01.3(1) item 4.

*Add the following sections:*

**2-01.3(5) Certified Arborist**

The Contractor shall provide a certified Arborist on site to assess and provide Arborist Reports for all work within the Tree Protection Zone of a tree in accordance with the Urban Forestry Manual and the Tacoma Municipal Code 13.06.502. All work done in the critical root zone shall be in compliance with the Arborist Report provided by the certified Arborist or under the direction of the certified Arborist.

The certified Arborist shall be on site to assess and provide direction for all tree trimming, limb or root pruning of greater than 4 inches, and tree removals as specified in the Plans or other tree work as directed by the Engineer.

The Arborist shall be certified by the International Society of Arboriculture (ISA).

**2-01.3(5) Definition of Vegetation**

A "tree" is defined as any self-supporting, woody perennial plant having a main stem (trunk) and which normally attains a height of at least ten (10) feet at maturity, usually with one (1) main stem or trunk and many branches.

1 A "shrub" is defined as any woody perennial plant which normally attains a height of less than  
2 ten (10) feet at maturity and which can be construed to have some landscape value.

3  
4 "Brush" is defined as any perennial vegetation which normally attains a height of ten (10) feet or  
5 less at maturity, which is not maintained as part of a landscape feature, which is "volunteer"  
6 growth or which exists in a naturalized state. Examples include but are not limited to stands of  
7 blackberries and scotch broom.

### 8 9 **2-01.3(5) Tree and Stump Classifications**

10  
11 Trees shall be classified by the measured diameter at a point four and one-half (4-½) feet above  
12 average ground level. Trees that have several stems at the four and one-half (4-½) foot height  
13 will be considered a tree clump. The largest diameter single stem will be measured and will  
14 dictate the class rating. Only the largest, single stem in the clump will be utilized for  
15 measurement and payment.

16  
17 Stumps shall be classified by the measured diameter at the highest point of the stump above  
18 the average ground level or a point four and one-half (4-1/2) feet above the average ground  
19 level, whichever is less.

20  
21 Trees and stumps will be classified as follows:

22		
23	Less than 4 inches	Class 0
24	4 inches up to but not including 12 inches	Class I
25	12 inches up to but not including 24 inches	Class II
26	24 inches up to and including 42 inches	Class III
27	Greater than 42 inches (Tree height greater than 30 feet)	Class IV
28	Greater than 42 inches (Tree height of 30 feet or less)	Class V
29		

### 30 **2-01.4 Measurement**

31 *This section is supplemented with the following:*

32  
33 No specific unit of measurement shall apply to the force account item "Certified Arborist".

### 34 35 **2-01.5 Payment**

36 *This section is supplemented with the following:*

37  
38 "Certified Arborist", Force Account

39  
40 The force account contract price for "Certified Arborist" shall be full pay for all labor, materials,  
41 and equipment to provide a certified Arborist on site prior to and during construction to perform  
42 all tree assessments, provide tree assessment reports, direct and assess all tree trimming, root  
43 and limb pruning, tree removals or other tree works as directed by the Engineer or  
44 Specifications not included in other bid items. No extra payment shall be made for any delays in  
45 construction schedule to provide a certified Arborist and comply with the certified Arborists  
46 assessments and reports.

47  
48 **END OF SECTION**

## **2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

**(\*\*\*\*\*)**

### **2-02.1 Description**

*This Section is revised to read:*

The Work described in this section includes removing and disposing of, or salvaging, relocating, materials and features or appurtenances as shown on the Contract Plans and according to the Specifications.

Backfilling of trenches, holes, or pits resulting from this Work is included.

### **2-02.2 Materials**

*This section is revised to read:*

Materials shall include all material or equipment needed to excavate, remove, shore, salvage and store, and to replace existing material.

### **2-02.3 Construction Requirements**

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

As shown per Plans, Specifications and per these Special Provisions, the Contractor shall relocate or raze, remove, and dispose of all underground structures and utilities, landscaping walls, and any other obstructions that form an obstacle to construction.

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

*This section is deleted.*

*This Section is supplemented with the following:*

The Contractor shall haul and dispose of all soil material excavated from the Project site in accordance with Special Provisions Sections 2-03 and 2-17.

*Section 2-02.3 is supplemented with the following:*

#### **2-02.3(5) Existing Traffic Signs**

Any street name signs, traffic signs and parking signs that exist in the work area shall be salvaged and replaced as shown in the Plans and as directed by the Engineer.

#### **2-02.3(7) Existing Irrigation Systems**

The Engineer shall verify, in the presence of the owner and Contractor, operation, location, and existing pressure capabilities and continuity of existing private systems prior to excavation and removal. Not all existing sprinkler heads may be shown on the plans.

The Contractor shall cut and cap the existing systems to remain in place. The work shall include testing the resulting sprinkler system operation, and making the necessary repairs and modifications as directed by the Engineer. Sprinkler heads, pipe, wiring, control valves or other irrigation materials removed will be given to the owner for their use in making necessary modifications to their remaining irrigation system. If the Contractor damages any of these materials during clearing & grubbing, excavation and removal and storage, the Contractor will

1 replace the damaged materials with new of same make and model, or approved equal.  
2 Replacement of damaged materials will be at the Contractor's expense.

3  
4 Removal of materials, cutting and capping, and all additional work of reconnecting, and making  
5 necessary modifications, including installation of new point of connection equipment and/ or  
6 improvements to provide a working, functional system shall be as directed by the Engineer and  
7 according to Section 8-03, except payment shall be according to Section 2-02.5.

#### 8 9 **2-02.4 Vacant**

10 *This Section including the heading is revised to read:*

#### 11 12 **2-02.4 Measurement**

13 *This section is supplemented with the following:*

14  
15 No specific unit of measurement will apply to "Existing Irrigation Systems" per force account,  
16 which shall be itemized by the contractor.

#### 17 18 **2-02.5 Payment**

19 *This section is revised to read:*

20  
21 Payment will be made in accordance with Section 1-04.1, for the following Bid items when they  
22 are included in the Proposal:

23  
24 "Removal of Structures and Obstructions", lump sum

25  
26 Any relocation, salvage, demolition and removal Work according to these specifications and not  
27 specifically included in other bid items shall be paid for under "Removal of Structures and  
28 Obstructions", lump sum.

29  
30 "Existing Irrigation Systems", by force account

31  
32 Cutting, removing, capping, and modifying, repairing existing irrigation systems in accordance  
33 with these Specifications and Special Provisions shall be paid by force account in accordance  
34 with Section 1-09.6.

35  
36  
37  
38 **END OF SECTION**  
39  
40

1 **2-03 ROADWAY EXCAVATION AND EMBANKMENT**  
2 **(August 14, 2019 Tacoma GSP)**  
3

4 **2-03.1 Description**

5 *The last sentence of the first paragraph is deleted.*  
6

7 **2-03.3 Construction Requirements**  
8

9 **2-03.3(5) Slope Treatment**

10 *This section is deleted.*  
11

12 **2-03.3(19) Removal of Pavement, Sidewalks, Curbs, and Gutters**

13 *This section is deleted.*  
14  
15

16 **END OF SECTION**  
17  
18  
19



1 **2-06 SUBGRADE PREPARATION**  
2 **(September 20, 2018 Tacoma GSP)**  
3

4 **2-06.3 Construction Requirements**

5 *This section is supplemented with the following:*  
6

7 **Subgrade Repair for Subgrade Not Constructed Under Same Contract**

8 Upon removal of pavement, the Contractor and City Inspector shall walk the subgrade surface  
9 to determine and delineate any subgrade areas that need to be repaired. Any Subgrade areas  
10 that require repair, from the initial walkthrough, shall be determined solely by the City Inspector.  
11 Any initial subgrade repairs shall be paid for according to Section 2-06.5(2). Subgrade repair  
12 shall be performed in accordance with Section 2-06 and immediately after it has been  
13 determined and delineated. In order to minimize damage to the subgrade, the Contractor is  
14 encouraged to minimize pavement removal during the work.  
15

16 **Subgrade Maintenance and Protection**

17 Immediately after the contractor constructs the subgrade or completes initial subgrade repair to  
18 the City's satisfaction, the contractor shall maintain and protect the subgrade. Any defects or  
19 damage of the subgrade thereafter shall be repaired or replaced according to Section 2-06, at  
20 the Contractor's expense before placement of any succeeding courses or pavement.  
21 Maintenance and protection of the subgrade shall be the responsibility of the Contractor. The  
22 Contractor shall be required to take precautionary measures to prevent damage by heavy loads  
23 or equipment, as well as from inclement weather.  
24

25 The Contractor and City Inspector should walk the exposed subgrade on a daily basis to  
26 determine if there is damage to the subgrade. Any Subgrade areas that require repair  
27 according to this section shall be determined solely by the City Inspector.  
28

29 **2-06.5 Measurement and Payment**

30 *This section is supplemented with the following:*  
31

32 If the contractor fails to protect the subgrade so that additional subgrade repairs are required as  
33 determined by the City Inspector, then the city shall not owe payment for these additional  
34 subgrade repairs in accordance with Section 2-06.3.  
35

36 **2-06.5(2) Subgrade Not Constructed Under Same Contract**

37 *Item 5 under this section is deleted.*  
38  
39

40 **END OF SECTION**

1 **2-07 WATERING**  
2 **(August 3, 2009 Tacoma GSP)**  
3

4 **2-07.3 Construction Requirements**

5 *The last sentence of the first paragraph is revised to read:*  
6

7 The Engineer may direct that the Contractor apply water during non-working hours such as  
8 evenings, weekends, or recognized holidays.  
9

10 *Section 2-07.3 is supplemented with the following:*  
11

12 **2-07.3(1) Water Supplied from Hydrants**  
13

14 There is no guarantee that all fire hydrants will be available for use for cleaning, lining, or any  
15 other construction activities associated with this project. Prior to construction activities, it shall  
16 be the Contractor's responsibility to verify which hydrants will be available by contacting  
17 Tacoma Water. The Contractor shall use only those hydrants designated by Tacoma Water.  
18

19 Water supplied from hydrants governed by Tacoma Water shall be used in strict compliance  
20 with the "Operating Procedures for the use of Water Division Hydrants" available at the Tacoma  
21 Water Permit Counter.  
22

23 The Contractor shall obtain a Hydrant Permit prior to start of work by contacting the Water  
24 Permit Counter at:  
25

26 Tacoma Public Utilities  
27 Administrative Building, 2<sup>nd</sup> floor  
28 3628 South 35<sup>th</sup> Street  
29 Tacoma, WA 98409  
30 (253) 502-8247  
31

32 A copy of the approved Hydrant Permit shall be submitted to the Engineer.  
33

34 Contractor personnel shall be in possession of a valid Tacoma Public Utilities Hydrant  
35 Certification Card prior to obtaining a permit. If necessary, contractor personnel shall undergo  
36 training to receive the required certification. Contact the Water Permit Counter to set up training  
37 as necessary.  
38  
39  
40

41 **END OF SECTION**  
42

1  
2 **2-09 STRUCTURE EXCAVATION**  
3 **(March 17, 2016 Tacoma GSP)**  
4

5 **2-09.4 Measurement**

6 *This section is supplemented with the following:*  
7

8 **Longitudinal Limits.** For all storm and sanitary sewers, the longitudinal measurement will be  
9 from center of manhole to center of manhole or to the inside face of catch basins and similar  
10 type structures.

11  
12 *The fourth paragraph is revised to read:*  
13

14 There will be no specific unit of measure for the excavation required for manholes, catch basins,  
15 grate inlets, and drop inlets.  
16

17 **2-09.5 Payment**

18 *The pay item for "Structure Excavation Class B" is supplemented with the following:*  
19

20 "Structure Excavation Class B", per cubic yard.  
21

22 The unit Contract price for "Structure Excavation Class B" shall be full payment for all  
23 excavation, removal of water; storing, protecting and re-handling of suitable backfill material;  
24 backfilling of the trench, compaction of backfill, and all other work necessary for the construction  
25 of the sewer trench.  
26

27  
28 **END OF SECTION**  
29  
30

**2-14 PAVEMENT REMOVAL**  
**(March 17, 2003 Tacoma GSP)**

**2-14.1 Description**

The Work described in this section includes the removal and disposal of pavement surfaces identified on the Plans or as marked in the field.

**2-14.2 Pavement Classification**

Removal of pavement will be according to type and class based on composition and thickness, as defined below:

<b>Type I</b>	Pavement removal where all or portions of the existing pavement is being removed in conjunction with street construction or any other removal not described below for Type II or Type III.
<b>Type II</b>	Pavement removal required for the placing of utilities at greater and varying depths, such as sewers.
<b>Type III</b>	Pavement removal required for narrow and shallow utility cuts in order to install light cables, conduits and similar shallow utilities.
<b>Class A2</b>	Class A2 pavement removal shall apply to the removal of asphalt concrete, bituminous road surfacing, multiple lift bituminous surface treatments or any combination of these components having an average thickness of two inches or less.
<b>Class A4</b>	Class A4 pavement removal shall apply to the removal of asphalt concrete, bituminous road surfacing, multiple lift bituminous surface treatments or any combination of these components having an average thickness between two inches and four inches.
<b>Class A8</b>	Class A8 pavement removal shall apply to the removal of asphalt concrete, bituminous road surfacing, multiple lift bituminous surface treatments or any combination of these components having an average thickness between four inches and eight inches.
<b>Class C6</b>	Class C6 pavement removal shall apply to all non-reinforced cement concrete pavements or slabs having an average thickness of six inches or less. After the curbs and pavement have been constructed, the Contractor may be required to remove additional sidewalk necessary to provide proper connections and grades, as determined by the Engineer.
<b>Class C12</b>	Class C12 pavement removal shall apply to all non-reinforced cement concrete pavements or slabs having an average thickness of between 6 inches and 12 inches.
<b>Class CA</b>	Class CA pavement removal shall apply to all pavements that have a wearing surface of asphalt concrete upon a cement concrete pavement or, cement

1 concrete base, and for which the total combined thickness of the pavement  
2 averages between six inches and twelve inches.

3  
4 **Class H** Class H pavement removal shall apply to early type pavement of a cement  
5 concrete base with a brick or cobblestone surface and potentially an  
6 additional layer of asphalt concrete pavement for which the total combined  
7 thickness of the pavement averages between ten inches and twenty inches.  
8

### 9 **2-14.3 Construction Requirements**

10  
11 All final meetlines shall be sawcut.

12  
13 Where monolithic cement concrete pavement and curb are being removed, the curb removal  
14 shall be considered as pavement removal, and the measurement for payment will be to the back  
15 of the curb.

16  
17 The removal of existing street improvements shall be conducted in such a manner as not to  
18 damage utilities and any portion of the improvement that is to remain in place. Any deviation in  
19 this matter will obligate the Contractor, at no expense to the Contracting Agency, to repair,  
20 replace, or otherwise make proper restoration to the satisfaction of the Engineer.

21  
22 In the event a pavement averages more than the maximum thickness specified for its class, an  
23 additional payment will be made to cover the extra thickness removed by a proportional  
24 conversion into additional square yards.

### 25 **2-14.4 Measurement**

26  
27  
28 Pavement removal will be measured per square yard.

29  
30 Type I pavement removal will be measured in its original position through the use of survey  
31 techniques.

### 32 **2-14.5 Payment**

33  
34  
35 Payment will be made in accordance with Section 1-04.1.

36  
37 "Remove Existing Pavement, Asphalt", per square yard

38  
39 "Remove Existing Pavement, Asphalt" shall include all costs remove pavement of all Types in  
40 Classes A2, A4, and A8 as defined in this section.

41  
42 "Remove Existing Pavement, Concrete", per square yard

43  
44 "Remove Existing Pavement, Concrete" shall include all costs to remove pavement of all Types  
45 in Classes C6, C8, and C12 as defined in this section.

46  
47 "Remove Existing Pavement, CA", per square yard

48  
49 "Remove Existing Pavement, CA" shall include all costs to remove pavement of all Types and  
50 Classes CA as defined in this section.  
51

1 All costs associated with saw cutting meet lines shall be included in the unit Contract price for  
2 associate pavement removal bid item.

3

4

5

**END OF SECTION**

6

7

8

1 **2-15 CURB AND CURB AND GUTTER REMOVAL**  
2 **(March 17, 2003 Tacoma GSP)**  
3

4 **2-15.1 Description**  
5

6 The Work described in this section includes the complete removal and disposal of curbs and  
7 curb and gutter identified on the Plans or as marked in the field.  
8

9 **2-15.2 Curb Classification**  
10

11 Removal of curb and/or curb and gutter will be based on composition, as defined below:  
12

13 **Integral Curb** - Integral curb shall consist of curb that is constructed monolithic with the  
14 adjacent cement concrete pavement.  
15

16 **Curb** - Curb may consist of cement concrete curb, granite curb, or any other combination of  
17 rigid material that extends below the pavement surface elevation.  
18

19 **Extruded/Precast Curb** - Extruded or precast curb may consist of asphalt or concrete extruded  
20 or precast curb that is installed on a pavement surface.  
21

22 **Curb and Gutter** - Curb and gutter may be cement concrete, or a cement concrete curb with a  
23 brick gutter on a cement concrete base, or other combination of rigid material.  
24

25 **2-15.3 Construction Requirements**  
26

27 Integral curb removal shall consist of the removal of the curb and the integral base section  
28 under the curb. The removal shall be accomplished by sawcutting along the face of the curb.  
29

30 The removal of the curb and/or curb and gutter shall be conducted in such a manner as not to  
31 damage utilities and any portion of the improvement that is to remain in place. Any deviation in  
32 this matter will obligate the Contractor, at no expense to the Contracting Agency, to repair,  
33 replace, or otherwise make proper restoration to the satisfaction of the Engineer.  
34

35 **2-15.4 Measurement**  
36

37 Curb and curb and gutter removal will be measured per linear foot.  
38

39 **2-15.5 Payment**  
40

41 Payment will be made in accordance with Section 1-04.1.  
42

43 "Remove Curb", per linear foot  
44

45 The unit Contract price per linear foot for "Remove Curb" shall include all types of curb as  
46 specified in the Section.  
47

48 All costs associated with saw cutting necessary for the removal of curb and/or curb and gutter  
49 shall be included in the unit Contract price for removal.  
50

51 **END OF SECTION**

1 **2-16 REMOVAL OF CATCH BASINS, MANHOLES, CURB INLETS, ETC.**  
2 **(March 17, 2003 Tacoma GSP)**  
3

4 **2-16.1 Description**  
5

6 The Work described in this section includes the complete removal and disposal of catch basins,  
7 manholes, and curb inlets as identified on the Plans.  
8

9 **2-16.2 Vacant**  
10

11 **2-16.3 Construction Requirements**  
12

13 Where the structures are removed, the excavation shall be backfilled with native material if  
14 deemed suitable by the Engineer or imported backfill material.  
15

16 Material determined by the Engineer to be unsuitable at the time of excavation shall be removed  
17 and replaced with imported backfill material. Payment will be made at the unit contract price of  
18 the item in the proposal, or as extra work under Section 1-04.4 if not included as an item in the  
19 proposal.  
20

21 All pipe openings shall be plugged in accordance with 7-08.3(4).  
22

23 The removal of the structures shall be conducted in such a manner as not to damage utilities  
24 and any portion of the improvement that is to remain in place. Any deviation in this matter will  
25 obligate the Contractor, at no expense to the Contracting Agency, to repair, replace, or  
26 otherwise make proper restoration to the satisfaction of the Engineer.  
27

28 **2-16.4 Measurement**  
29

30 The removal of catch basins, manholes, and curb inlets will be measured per each.  
31

32 **2-16.5 Payment**  
33

34 Payment will be made in accordance with Section 1-04.1.  
35

36 "Remove Catch Basin", per each  
37

38 "Remove Manhole", per each  
39

40 "Remove Curb Inlet", per each  
41

42 All costs associated with the placement and compaction of the backfill material shall be included  
43 in the unit Contract price for removal.  
44

45  
46 **END OF SECTION**  
47



1 **3-04 ACCEPTANCE OF AGGREGATE**  
2 **(April 1, 2012 Tacoma GSP)**  
3

4 **3-04.1 Description**

5 *The first and third paragraphs are deleted.*  
6

7 *The fourth paragraph is revised to read:*  
8

9 Nonstatistical evaluation will be used for the acceptance of aggregate materials.  
10

11 **3-04.3(1) General**

12 *The first sentence is revised to read:*  
13

14 For the purpose of acceptance sampling and testing, all test results obtained for a material type  
15 will be evaluated collectively.  
16

17 **3-04.3(4) Testing Results**

18 *This section is replaced with the following:*  
19

20 The results of all acceptance testing will be provided by the City's Project Engineer within 3  
21 working day of testing.  
22

23 **3-04.3(6) Statistical Evaluation**

24 *This section is deleted:*  
25  
26  
27

28 **END OF SECTION**  
29  
30

1  
2 **4-04 BALLAST AND CRUSHED SURFACING**  
3 **(March 17, 2003 Tacoma GSP)**  
4

5 **4-04.5 Payment**

6 *This section is supplemented with the following:*  
7

8 All costs for labor, equipment, and materials required to furnish, place, and compact the crushed  
9 surfacing top course for all asphalt concrete approaches and non-paved approaches shall be  
10 included in the unit Contract price for "Crushed Surfacing Top Course", per ton.  
11

12  
13 **END OF SECTION**  
14  
15

1 **5-04 HOT MIX ASPHALT**

2  
3 **(April 1, 2018 Tacoma GSP)**

4 *The title of this section is revised to read:*

5  
6 **5-04 HOT MIX ASPHALT**

7 **(April 1, 2018 Tacoma GSP)**

8 *This Section is revised according to the following overriding provisions:*

9  
10 Nonstatistical or test point evaluation shall be the method for HMA compaction acceptance for  
11 all HMA pavement, except where visual or commercial evaluation is specified. Visual evaluation  
12 shall be considered synonymous with commercial evaluation. The Contracting Agency will not  
13 be required to perform any acceptance by statistical evaluation.

14  
15 All references to “statistical” are revised to read “nonstatistical”, and “nonstatistical” evaluation  
16 shall be considered synonymous with “test point” evaluation. Thus, all Specifications for test  
17 procedures, methods, construction requirements, and requirements for evaluation and  
18 acceptance shall apply to the Work with the following exceptions:

- 19 • The Contracting Agency shall not be required to perform statistical analysis of any  
20 acceptance test results.
- 21 • Quantities for sublots and lots shall be as determined by the Engineer. If test results  
22 are found not to be within specification requirements, additional testing as needed to  
23 determine a CPF may be performed.
- 24 • The Contracting Agency shall not be required to make price adjustments based on pay  
25 factors and composite pay factors.

26  
27 **5-04.2 Materials**

28  
29 **5-04.2(1) How to Get an HMA Mix Design on the QPL**

30 **(April 1, 2018 Tacoma GSP)**

31 *For Subsection 5-04.2(1) the term “Contracting Agency” is revised to read “WSDOT”.*

32  
33 **5-04.2(2) Mix Design – Obtaining Project Approval**

34 **(April 1, 2018 Tacoma GSP)**

35 *This section is revised to read:*

36  
37 The Contactor shall submit each HMA mix design to the Contracting Agency on WSDOT Form  
38 350-042. The Contractor shall provide a mix design based upon 3 million ESAL’s.

39  
40 No paving shall begin prior to the HMA mix design acceptance by the Engineer for the Job Mix  
41 Formula (JMF) that will be used for the same paving. The Contracting Agency will evaluate  
42 HMA mix design submittals according to Visual Evaluation per Table 1. The mix design will be  
43 the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any  
44 adjustments to the JMF will require the approval of the Project Engineer and must be made in  
45 accordance with Section 9-03.8(7).

46  
47 Mix designs for HMA shall have the aggregate structure and asphalt binder content determined  
48 in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of  
49 Sections 9-03.8(2) and 9-03.8(6). The Contractor shall determine anti-strip additive  
50 requirements for the HMA and submit laboratory test data for anti-stripping and rutting in  
51 accordance with the following options:

- Hamburg Wheel track Test and Section 9-03.8(2), or
- Tensile Strength Ratio (TSR) Test per AASHTO T 283, or
- Previous WSDOT Lab mix design verification test data and stripping evaluation, per the Engineer's discretion and as stated below.

With the HMA mix design submittal 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.

At the discretion of the Engineer, the Contracting Agency 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.

For the use of 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. Commercial HMA can be accepted by a Contractor certificate of compliance letter stating the material meets the HMA requirements defined in the Contract.

#### **5-04.2(2)B Using HMA Additives (April 1, 2018 Tacoma GSP)**

*This section is revised to read:*

The Contractor may, at the Contractor's discretion, 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 in the production of High RAP/Any RAS mixtures.
- Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.

#### **5-04.3 Construction Requirements**

##### **5-04.3(2) Paving Under Traffic (April 1, 2018 Tacoma GSP)**

*The second paragraph is supplemented with the following:*

1 No traffic shall be allowed on any newly placed pavement without the approval of the Engineer.

2  
3 **5-04.3(3)C Pavers**

4 **(April 1, 2018 Tacoma GSP)**

5 *The second paragraph is deleted.*

6  
7 **5-04.3(3)D Material Transfer Device or Material Transfer Vehicle**

8 **(April 1, 2018 Tacoma GSP)**

9 *The first paragraph is revised to read:*

10  
11 A Material Transfer Device/Vehicle (MTD/V) shall not be used unless specific paving areas are  
12 specified below. A MTD/V shall only be used according to this special provision for the following  
13 paving areas:

14  
15 NONE

16  
17 **5-04.3(4)C Pavement Repair**

18 **(April 1, 2018 Tacoma GSP)**

19 *This section is revised to read:*

20  
21 Pavement repair shall be in accordance with the City of Tacoma Right-of-Way Restoration  
22 Policy found at:

23  
24 [https://www.cityoftacoma.org/government/city\\_departments/public\\_works/right-of-way](https://www.cityoftacoma.org/government/city_departments/public_works/right-of-way)

25  
26 Pavement repair consists of asphalt concrete saw-cutting, removing asphalt concrete pavement,  
27 removing crushed surfacing and subgrade, and installing Construction Geotextile for  
28 Separation, placing crushed surfacing top course over the Construction Geotextile, and HMA in  
29 accordance with the Contract or as directed by the Engineer.

30  
31 Pavement repair excavation may also be performed by the use of a milling machine of a type  
32 that has operated successfully on work comparable with that to be done under the Contract and  
33 shall be approved by the Engineer prior to use. If a milling machine is used for excavation, the  
34 excavation shall be as directed by the Engineer.

35  
36 In all types of excavation, after the removal of the asphalt, the base material will be evaluated by  
37 the Engineer to determine if it is suitable. If the base is determined not to be suitable, the  
38 Contractor shall remove the base material and restore the sub-grade in accordance with Section  
39 2-06 and the Plans, regardless of the method used for excavation.

40  
41 Estimated plan quantities for pavement repair are approximate and are provided for bidding  
42 purposes only. The actual dimensions to be used will be verified by the Engineer at the time of  
43 construction. Contrary to Section 1-04.6, no changes to the unit prices bid for the various items  
44 will be permitted due to any increase or decrease in the amount of pavement repair.

45  
46 Payment for pavement repair shall be by the unit Bid prices according to the Contract for all  
47 materials, labor, and equipment required to complete the pavement repair. Items not included  
48 in the Proposal shall be paid for according to Section 1-04.1(2).

1  
2 **5-04.3(6) Mixing**

3 **(Aug 1, 2020 Tacoma GSP)**

4 *The first paragraph is revised to read:*

5  
6 The asphalt supplier shall add any recycling agent and anti-stripping additive to the liquid  
7 asphalt binder prior to shipment to the asphalt mixing plant, when the mix design includes these  
8 additives. The Contractor shall submit the anti-stripping additive amount and the manufacturer's  
9 certification, together with the HMA mix design submittal in accordance with Section 5-04.2.  
10 Paving shall not begin before the anti-stripping additive submittal is accepted by the Engineer.

11  
12 **5-04.3(8) Aggregate Acceptance prior to Incorporation in HMA**

13 **(Aug 1, 2020 Tacoma GSP)**

14 *This section is revised to read:*

15  
16 Sample aggregate in accordance with Section 3-04 prior to being incorporated into HMA. The  
17 Contracting Agency shall evaluate the aggregate according to Special Provision 3-04.  
18 Aggregate contributed from RAP or RAS shall not be evaluated under Section 3-04.

19  
20 The combined aggregate bulk specific gravity (Gsb) blend as shown on the HMA Mix Design  
21 report or evaluation report per Special Provision 5-04.2(2) will be used for VMA calculations.  
22 The Contracting Agency shall not be required to perform a Gsb test.

23  
24 **5-04.3(9) HMA Mixture Acceptance**

25 **(April 1, 2018 Tacoma GSP)**

26 *The first paragraph is revised to read:*

27  
28 The Contracting Agency will evaluate the HMA mixture by nonstatistical or visual evaluation as  
29 determined from the criteria in Table 7 or as determined by the Engineer.

30  
31 **5-04.3(9)A Test Sections**

32 **(April 1, 2018 Tacoma GSP)**

33 *The first paragraph is revised to read:*

34  
35 At the start of paving, if requested by the Contractor, a compaction test section shall be  
36 constructed as directed by the Engineer to determine the compactibility of the mix design.  
37 Compactibility shall be based on the ability of the mix to attain the specified minimum density  
38 (91 percent of the maximum density determined by WSDOT SOP 729, and FOP for AASHTO T  
39 209).

40  
41 Following determination of compactibility, the Contractor is responsible for the control of the  
42 compaction effort. If the Contractor does not request a test section, the mix will be considered  
43 compactible. See also Section 5-04.3(10)C2.

44  
45 The Contractor shall also construct a test section when requested by the Engineer. Test  
46 sections that are in complete compliance with the requirements of Section 5-04 can be  
47 incorporated into the Work, and shall be included in the quantities for related Bid Items;  
48 otherwise, the Contractor shall remove the defective pavement in failed test sections as  
49 determined by the Engineer and at no cost to the Contracting Agency. The Contracting Agency  
50 will only pay for HMA pavement that is accepted and incorporated into the project at the  
51 discretion of the Engineer. See also Section 5-04.3(10)C2.

*The second paragraph is revised to read:*

The purpose of a test section is to determine whether or not the Contractor's mix design and production processes will produce HMA meeting the Contract requirements related to mixture. Construct HMA mixture test sections at the beginning of paving, using at least 100 tons and a maximum of 800 tons or as specified by the Engineer. Each test section shall be constructed in one continuous operation.

**5-04.3(9)B Mixture Acceptance – Statistical Evaluation  
(April 1, 2018 Tacoma GSP)**

*The title of this section is revised to read:*

**5-04.3(9)B Mixture Acceptance – Nonstatistical Evaluation**

**5-04.3(9)B1 Mixture Statistical Evaluation – Lots and Sublots  
(April 1, 2018 Tacoma GSP)**

*The title of this section is revised to read:*

**5-04.3(9)B1 Mixture Nonstatistical Evaluation – Lots and Sublots**

*This section is revised to read:*

For HMA in a structural application, sampling and testing for total project quantities less than 400 tons is at the discretion of the engineer. For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed:

- i. If test results are found to be within specification requirements, additional testing will be at the engineer's discretion.
- ii. If test results are found not to be within specification requirements, additional testing as needed to determine a CPF shall be performed.
- iii. For a mixture lot in progress with a mixture CPF less than 0.75, a new mixture lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.
- iv. If, before completing a mixture lot, the Contractor requests a change to the JMF which is approved by the Engineer, the mixture produced in that lot after the approved change will be evaluated on the basis of the changed JMF, and the mixture produced in that lot before the approved change will be evaluated on the basis of the unchanged JMF; however, the mixture before and after the change will be evaluated in the same lot. Acceptance of subsequent mixture lots will be evaluated on the basis of the changed JMF.

**5-04.3(9)E Mixture Acceptance – Notification of Acceptance Test Results  
(Aug 1, 2020 Tacoma GSP)**

*This section is revised to read:*

The Contracting Agency will endeavor to provide written notification (via email to the Contractor's designee) of acceptance test results within 24 hours of the sample being made available to the Contracting Agency. However, the Contractor agrees:

1. Quality control, defined as the system used by the Contractor to monitor, assess, and adjust its production processes to ensure that the final HMA mixture will meet the specified level of quality, is the sole responsibility of the Contractor.

- 1
- 2           2. The Contractor has no right to rely on any testing performed by the Contracting
- 3           Agency, nor does the Contractor have any right to rely on timely notification by
- 4           the Contracting Agency of the Contracting Agency's test results (or statistical
- 5           analysis thereof), for any part of quality control and/or for making changes or
- 6           correction to any aspect of the HMA mixture.
- 7
- 8           3. The Contractor shall make no claim for untimely notification by the Contracting
- 9           Agency of the Contracting Agency's test results (or statistical analysis thereof).

10

11 **5-04.3(10)B HMA Compaction - Cyclic Density**

12 **(April 1, 2018 Tacoma GSP)**

13 *This section is deleted.*

14

15 **5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots**

16 **(April 1, 2018 Tacoma GSP)**

17 *This section is deleted.*

18

19 **5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing**

20 **(April 1, 2018 Tacoma GSP)**

21 *The title of this section is revised to read:*

22 **5-04.3(10)C2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing**

23 *The second paragraph is revised to read:*

24

25 Compaction tests will be performed at a minimum of 5 various locations, as determined by the

26 Engineer, for each 400 tons placed. The locations will be determined by the stratified random

27 sampling procedure conforming to WSDOT Test Method T 716. For an area in progress with a

28 CPF less than 0.75, a new compaction sequence will begin at the Contractor's request after the

29 Project Engineer is satisfied that material conforming to the Specifications can be produced.

30 The Compaction Test Procedures will be provided to the Contractor by the Contracting Agency

31 at the Pre-Construction Conference or a Pre-Paving Meeting, prior to the placement of HMA

32 material on site.

33

34 *This section is supplemented with the following:*

35

36 Cores may be used as an addition to the nuclear density gauge tests. When cores are taken by

37 the Engineer at the request of the Contractor, the request shall be made by noon of the first

38 working day following placement of the mix. The Engineer shall be reimbursed for the coring

39 expenses.

40

41 The Engineer will inform the Contractor of field compaction test results as work is being

42 performed. Formal Test Report(s) will be provided to the Contractor within 3 Working Days.

43

44 HMA for preleveling shall be compacted to the satisfaction of the Engineer.

45

46 **5-04.4 Measurement**

47 **(April 1, 2018 Tacoma GSP)**

48 *The first paragraph is revised to read:*

49

50 HMA CI. \_\_\_\_ PG \_\_\_\_, HMA for \_\_\_\_ CI. \_\_\_\_ PG \_\_\_\_, and Commercial HMA will be measured by the

51 ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt



binder, blending sand, mineral filler, anti-stripping additive, or any other component of the mixture; and the measurement shall include asphalt wedge curbs and thickened edges in accordance with the Plans or as directed by the Engineer. If the Contractor elects to remove and replace mix as allowed in Section 5-04.3(11), the material removed will not be measured.

*The second paragraph is revised to read:*

No specific unit of measure will apply to roadway cores, which shall be included in the measurements for the HMA items that are included in the Proposal.

*This section is supplemented with the following:*

HMA for Approach Cl. \_\_\_ PG 58H-22 shall be measured per square yard of finished driveway and approach.

No specific unit of measure will apply to anti-stripping additive, which shall be included in the measurements for the HMA items that are included in the Proposal.

#### **5-04.5 Payment**

**(April 1, 2018 Tacoma GSP)**

*Pay items for "Job Mix Compliance Price Adjustment" and "Compaction Price Adjustment" are deleted.*

*The following pay items for HMA are revised to read:*

"HMA Cl. \_\_\_ PG \_\_\_", per ton.

"HMA for \_\_\_ Cl. \_\_\_ PG \_\_\_", per ton.

The unit Contract price per ton for "HMA Cl. \_\_\_ PG \_\_\_" and "HMA for \_\_\_ Cl. \_\_\_ PG \_\_\_" shall be full payment for all costs incurred to carry out the requirements of Section 5-04, including coring and testing, and shall include anti-stripping additive, asphalt wedge curbs, thickened edges, curb drains, and connection to existing drains in accordance with the Contract. Any costs that are already included in other Bid items in the Proposal shall not be included in the unit Contract prices per ton for these HMA Bid items.

*The pay item "HMA for Approach Cl. \_\_\_PG\_\_\_" is revised to read:*

"HMA for Approach Cl. \_\_\_PG 58H-22", per square yard.

The unit Contract price per square yard for "HMA for Approach Cl. \_\_\_PG 58H-22" shall be full payment for all costs incurred to carry out the requirements of Section 5-04, including anti-stripping additive; and shall include asphalt wedge curbs, thickened edges, curb drains, and connection to existing drains in accordance with the Contract. Any costs that are already included in other Bid items in the Proposal shall not be included in the unit Contract price per square yard for this HMA Bid item. The Contractor shall also include all costs associated with excavating for driveways and approach, including haul and disposal in the unit Contract price per square yard for "HMA for Approach Cl. \_\_\_ PG 58H-22", regardless of the depth.

*This section is supplemented with the following:*

"HMA Cl. \_\_\_ PG \_\_\_ for Pavement Patch", per ton.

1  
2 The unit Contract price for pavement patch shall be full pay for all labor, equipment, and  
3 materials required to complete the patching of the street, including joints, where required, and  
4 removal of temporary base.

5  
6 "Cold Plant Mix for Temporary Pavement Patch", per ton.

7  
8 The unit Contract price for "Cold Plant Mix for Temporary Pavement Patch" shall be full pay for  
9 all labor, equipment, and materials required to furnish and install; maintain; and remove and  
10 dispose of the temporary patch.

11  
12 Temporary pavement patches placed between October 1<sup>st</sup> and March 31<sup>st</sup> shall be HMA Cl. ½"  
13 PG 58H-22.

14  
15 **END OF SECTION**  
16  
17

1 **5-05 CEMENT CONCRETE PAVEMENT**  
2 **(October 14, 2020 Tacoma GSP)**  
3

4 **5-05.1 Description**

5 *This section is supplemented with the following:*  
6

7 All concrete pavement restoration shall be performed in accordance with the City of Tacoma's  
8 Right-of-Way Restoration Policy found at [www.govME.org](http://www.govME.org).  
9

10 **5-05.3 Construction Requirements**  
11

12 **5-05.3(1) Concrete Mix Design for Paving**

13 *The sixth paragraph is supplemented with the following:*  
14

15 The submittal for the concrete mix design shall provide the following: the date, the amount of  
16 materials (i.e. cement, sand, aggregates, water), the type and amount of each admixture, and  
17 the designated 28-day compressive strength specific to the mix design being submitted. The  
18 design compressive strength shall be a minimum of 4000 psi.  
19

20 **5-05.3(4)A Acceptance of Portland Cement Concrete Pavement**

21 *This section is supplemented with the following:*  
22

23 Acceptance of concrete will be on a non-statistical acceptance only.  
24

25 *The first, second, third and fourth paragraphs are deleted.*  
26

27 **5-05.3(8) Joints**

28 *The second paragraph is revised to read:*  
29

30 The Contractor shall submit a concrete panel jointing plan in accordance with the Plans and  
31 these Specifications. When a concrete panel jointing plan is included in the Plans, the  
32 Contractor may adopt or submit a revised jointing plan in accordance with Standard Plans and  
33 the Specifications at the Contractor's own expense. The Contractor's jointing plan shall be  
34 approved in writing by the Engineer before the start of concrete paving.  
35

36 When new pavement abuts existing pavement, the locations of the joints in the new pavement  
37 shall match with the joints in the existing pavement unless otherwise approved by the Engineer.  
38

39 **5-05.3(11) Finishing**  
40

41 *The third paragraph is revised to read:*  
42

43 In advance of curing operations, the pavement shall receive an initial texturing followed by final  
44 finishing. Initial texturing shall be performed with a burlap drag or broom device, creating  
45 striations in the same orientation as the final finish. The concrete roadway surface shall be  
46 finished with a transverse tining. Where integral concrete curbs are constructed, the roadway  
47 surface finish shall end 12 inches from the flowline.  
48

49 *The fourth paragraph is revised to read:*  
50

Burlap drags, brooms and tine devices may be installed on self-propelled equipment having external alignment control. When texturing the pavement with burlap, the area of burlap in contact with the pavement shall be maintained constant at all times. Broom and tine devices shall be provided with positive elevation control. Downward pressure on pavement surface shall be maintained at all times during texturing so as to achieve uniform texturing without measurable variations in pavement profile. If self-propelled texturing machines are used, these shall be operated so that travel speed during texturing is maintained constant. Failure of the texturing equipment to perform according to this section shall constitute cause for stopping placement of concrete until the equipment deficiency or malfunction is corrected.

*The fifth paragraph is revised to read:*

The surface finish shall be as shown per Plans and in accordance with these Special Provisions. The Engineer may specify either transverse tining, or longitudinal tining, or a heavy broom finish for any part of the project. Transverse tining is the standard concrete finish.

*The seventh paragraph is revised to read:*

**Test Panel:**

At the start of concrete pavement construction, the Contractor shall first finish a textured concrete test panel and the Engineer shall give approval of the achieved finish according to this section prior to further concrete pavement construction. If the test panel is rejected by the Engineer, the Contractor shall remove and replace the test panel at no additional cost to the Contracting Agency. The Contractor can designate one of the project panels as a test panel or create a sacrificial test panel on site of at least four feet by eight feet.

Project panels not meeting the characteristics of the test panel shall be removed and replaced at no additional cost to the Contracting Agency.

*The eighth through tenth paragraphs are deleted.*

**5-05.3(12) Surface Smoothness**

*The section is revised to read:*

The Contractor shall measure surface smoothness with a 10-foot straightedge as directed by the Engineer. The finished grade surface shall not vary more than 1/8 inch from the bottom edge of a 10-foot straightedge placed on the surface parallel to the centerline. Perpendicular to the centerline, the finished grade surface shall not vary more than 1/4 inch from the bottom edge of a 10-foot straightedge laid across any lane.

The completed surface shall be of uniform texture, smooth, shall conform to Plans as to crown and grade, and shall be free from defects of all kinds. Corrective work shall be as directed by the Engineer; and the Contractor shall complete corrective work at no additional expense, including traffic control, to the City of Tacoma.

**5-05.3(14) Cold Weather Work**

*This section is supplemented with the following:*

The following additional requirements for placing concrete shall be in effect from November 1 to April 1:

- Engineer shall be notified at least 24 hours prior to placement of concrete.
- All concrete placement shall be completed no later than 2:00 p.m. each day.

- Where forms have been placed and the subgrade has been subjected to frost, no concrete shall be placed until the ground is completely thawed. At that time, the forms shall be adjusted and subgrade repaired as determined by the Engineer.

#### **5-05.4 Measurement**

*This section is revised to read:*

Measurement for cement concrete pavement and concrete base pavement shall be by the square yard for the pavement completed and accepted according to Section 5-05 and the Plans, including the area underneath curbs. No deduction will be made for castings in pavement.

Cement Concrete Pavement for Pavement Patches will be measured by the square yard

Cement Conc. Pavement Raised Crossing will be measured per each raised crossing installed per the Plans

#### **5-05.5 Payment**

*This section is revised to read:*

Payment will be made in accordance with Section 1-04.1.

“Cement Conc. Pavement, \_\_\_\_-Inch Section”, per square yard.

The unit Contract price per square yard for “Cement Conc. Pavement, \_\_\_\_-Inch Section” shall be full payment for all costs incurred to carry out the requirements of Section 5-05 and the Plans, and shall include furnishing and installing epoxy coated dowel bars and tie bars except as specified for “Dowel Bar Retrofit” and “Epoxy-Coated Tie Bar with Drill Hole” in this section.

“Cement Conc. Base Pavement, \_\_\_\_-Inch Section”, per square yard.

The unit Contract price per square yard for “Cement Conc. Base Pavement, \_\_\_\_-Inch Section” shall be full payment for all costs incurred to carry out the requirements of Section 5-05 and the Plans, and shall include all costs associated with the furnishing and installing of all necessary dowel bars and tie bars except as specified for “Dowel Bar Retrofit” and “Epoxy-Coated Tie Bar with Drill Hole” in this section.

“Cement Conc. Pavement for Pavement Patch, \_\_\_\_-Inch Section”, per square yard.

The unit Contract price for “Cement Conc. Pavement for Pavement Patch, \_\_\_\_-Inch Section” shall be full payment for all costs incurred to carry out the requirements of Section 5-05 and the Plans, and shall include all costs associated with the furnishing and installing of all necessary dowel bars and tie bars except as specified for “Dowel Bar Retrofit” and “Epoxy-Coated Tie Bar with Drill Hole” in this section.

“Cement Conc. Pavement Raised Crossing”, per each.

The unit Contract price for “Cement Conc. Pavement Raised Crossing” shall be full payment for all costs incurred to carry out the requirements of Section 5-05 and the details provided in the Plans. Including but not limits to dowels, joints, saw cutting, asphalt transition section as shown in the details on Plans, and all other work as described in the Plans and these specifications.

**END OF SECTION**

## 6-02 CONCRETE STRUCTURES

(\*\*\*\*\*)

### 6-02.3(2)B Commercial Concrete

*This section is supplemented with the following:*

Where concrete Class 3000 is specified for driveways, the Contractor may use commercial concrete.

### 6-02.3(6)A2 Cold Weather Protection

*This section is revised to read:*

This Specification applies when the weather forecast on the day of concrete placement predicts air temperatures below 35°F at any time during the 7 days following placement. The weather forecast is based on predictions from the Western Region Headquarters of the National Weather Service. This forecast can be found at [www.wrh.noaa.gov](http://www.wrh.noaa.gov).

The temperature of the concrete shall be maintained above 40°F during the entire curing period or 7 days, whichever is greater. Prior to placing concrete in cold weather, the Contractor shall provide a written procedure for cold weather concreting to the Engineer. The procedure shall detail how the Contractor will adequately cure the concrete and prevent the concrete temperature from falling below 35°F. Extra protection shall be provided for areas especially vulnerable to freezing (such as exposed top surfaces, corners and edges, thin sections, and concrete placed into steel forms). Concrete placement will only be allowed if the Contractor's cold weather protection plan has been accepted by the Engineer.

The Contractor shall not mix nor place concrete while the air temperature is below 35°F, unless the water or aggregates (or both) are heated to at least 70°F. The aggregate shall not exceed 150°F. If the water is heated to more than 150°F, it shall be mixed with the aggregates before the cement is added. Any equipment and methods shall heat the materials evenly. Concrete placed in shafts and piles is exempt from such preheating requirements.

The Contractor may warm stockpiled aggregates with dry heat or steam, but not by applying flame directly or under sheet metal. If the aggregates are in bins, steam or water coils or other heating methods may be used if aggregate quality is not affected. Live steam heating is not permitted on or through aggregates in bins. If using dry heat, the Contractor shall increase mixing time enough to permit the aggregates to absorb moisture.

The Contractor shall provide and maintain a maturity meter sensor, continuously recording time and temperature during the curing period, in the concrete at a location specified by the Engineer for each concrete placement. The Contractor shall also provide recording thermometers or other accepted devices to monitor the surface temperature of the concrete. During curing, data from the maturity meter and recording thermometer shall be readily available to the Engineer. The Contractor shall record time and temperature data on hourly intervals. Data shall be provided to the Engineer upon request.

Starting immediately after placement, the concrete temperatures measured by the maturity meter and recording thermometer shall be maintained at or above 40°F and the relative humidity shall be maintained above 80 percent. These conditions shall be maintained for a minimum of 7 days or for the cure period required by Section 6-02.3(11), whichever is longer. During this time, if the temperature falls below 40°F on the maturity meter or recording

1 thermometer, no curing time is awarded for that day. Should the Contractor fail to adequately  
2 protect the concrete and the temperature of the concrete falls below 35°F during curing, the  
3 Engineer may reject it.

4  
5 The Contractor is solely responsible for protecting concrete from inclement weather during the  
6 entire curing period. Permission given by the Engineer to place concrete during cold weather  
7 will in no way ensure acceptance of the Work by the Contracting Agency. Should the concrete  
8 placed under such conditions prove unsatisfactory in any way, the Engineer shall still have the  
9 right to reject the Work although the plan and the Work were carried out with the Engineer's  
10 permission.

11  
12  
13 **END OF SECTION**  
14

**7-04 STORM SEWERS**  
**(March 17, 2003 Tacoma GSP)**

*This section is deleted. The requirements of Section 7-17 shall apply to storm sewers.*

**END OF SECTION**



1 **7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS**  
2 **(March 23, 2010 Tacoma GSP)**  
3

4 **7-05.1 Description**

5 *This section is supplemented with the following:*  
6

7 All references to sanitary sewers shall be construed to also mean storm sewers.  
8

9 **7-05.3 Construction Requirements**

10 *The first sentence of the eleventh paragraph is revised to read:*  
11

12 A flexible pipe-to-manhole connector shall be used in all connections of rigid and thermoplastic  
13 pipes to **new** precast concrete manholes to provide a watertight joint between the pipe and the  
14 manhole, unless otherwise directed by the Engineer. The connector shall be "Kor-N-Seal" with  
15 "Wedge Korband" (Type I or II as required for pipe diameter), manufactured by NPC, Inc.,  
16 Milford, New Hampshire, or Engineer approved equal. The connectors shall be installed in  
17 accordance with the manufacturer's recommendations.  
18

19 **7-05.3(1) Adjusting Manholes and Catch Basins to Grade**

20 *This section is revised to read:*  
21

22 **7-05.3(1) Adjusting Utility Structures to Grade**  
23

24 Where shown in the Plans or where directed by the Engineer, utility structures shall be adjusted  
25 to grade as staked or as otherwise designated by the Engineer.  
26

27 The materials and methods of construction shall conform to the requirements specified in  
28 Section 7-05.3 and Standard Plan No. SU-25 and Standard Plan SU-37 for valves. The finished  
29 structure shall conform to the requirements of the standard plan for the specific structure.  
30

31 **7-05.3(3) Connections to Existing Manholes**

32 *The first sentence is revised to read:*  
33

34 The Contractor shall inspect the existing manholes in the field to verify invert elevations and the  
35 scope of work necessary to make the connection(s) prior to construction.  
36

37 **7-05.4 Measurement**

38 *The sixth paragraph is revised to read:*  
39

40 Connections to existing structures will be measured per each.  
41

42 *This section is supplemented with the following:*  
43

44 Reconnecting existing sewer pipes to new manhole structures will be measured per each.  
45

46 Manholes with Cast-in-Place Base will be measured per each.  
47

48 Catch Basin Type 2 \_\_ in excess of 10 feet in height will be measured per linear foot for each  
49 additional foot of height over 10 feet. Measurement will be the distance from the flow line of the  
50 outlet pipe to the top of the manhole ring measured to the nearest foot.

**7-05.5 Payment**

*The first paragraph is supplemented with the following:*

The unit Contract price for "Manhole\_\_\_\_\_" shall be full pay for all work required to furnish and install the new manhole to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), channeling, covers, frames, ladders, steps, and handholds, as applicable per Standard Plans.

The unit Contract price for "Catch Basin\_\_\_\_\_" shall be full pay for all work required to furnish and install the new catch basin to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), frame, cover, as applicable per Standard Plans.

*The pay item for "Drop Manhole Connection" is revised to read:*

"Drop Manhole Connection, \_\_\_\_-Inch Diam.", per each.

*The pay item for "Connection to Drainage Structure" is revised to read:*

"Connect New Sewer Pipe to Existing Structure", per each.

The unit Contract price per each "Connect New Sewer Pipe to Existing Structure" shall be full pay for all labor, equipment and materials necessary to connect the new sewer pipe of all diameters to the existing structure as specified in Section 7-05.3. The contractor shall be responsible to confirm connection sizes, no extra payment shall be made for varying pipe diameters.

*This section is supplemented with the following:*

"Reconnect Existing Sewer Pipe, \_\_\_\_-In. Diam., to New Structure", per each.

The unit Contract price per each shall be full pay for all labor, equipment and materials necessary to reconnect the existing sewer pipe to the new structure as specified in Section 7-05.3. The contractor shall be responsible to confirm reconnection sizes, no extra payment shall be made for varying pipe diameters.

"Adjust Existing Catch Basin, Furnish New Frame and Grate", per each

The unit Contract price per each for "Adjust Existing Catch Basin, Furnish New Frame and Grate" shall be full pay for all costs associated with adjusting the frame and grate to finished grade, including but not limited to, excavating, furnish and place backfill, furnishing and installing the new frame and grate, compacting, surfacing, and restoration.

"Adjust Existing Manhole, Furnish New Frame and Cover", per each

The unit Contract price per each for "Adjust Existing Manhole, Furnish New Frame and Cover" shall be full pay for all costs associated with adjusting the frame and cover to finished grade, including but not limited to, excavating, furnish and place backfill, furnishing and installing the new frame and cover, compacting, surfacing, and restoration.

"Adjust Existing Valve Chamber to Grade", per each

1  
2 The unit Contract price per each for "Adjust Existing Valve Chamber to Grade" shall be full pay  
3 for all costs associated with the adjusting the valve chamber to finished grade, including but not  
4 limited to, excavating, furnish and place backfill, compacting, surfacing, and restoration.

5  
6 "Manhole \_\_\_\_-In. Diam. Type \_\_\_\_, with Cast-in-Place Base", per each.  
7

8 The unit Contract price per each for "Manhole \_\_\_\_-In. Diam. Type \_\_\_\_, with Cast-in-Place Base"  
9 shall be full pay for all labor, equipment and materials required to furnish, excavate for, furnish  
10 and place backfill, compact, and install to finished grade the new manhole with a cast-in-place  
11 base, including, but not limited to, insuring proper support of existing main, channeling,  
12 connection of new pipe, covers, frames, ladders, steps, and handholds, as applicable per  
13 Standard Plans  
14

15 "Catch Basin Type 2 Additional Height, \_\_\_\_ In. Diam.", per linear foot.  
16  
17

18 **END OF SECTION**  
19

1  
2 **7-07 CLEANING EXISTING DRAINAGE STRUCTURES**  
3 **(March 23, 2010 Tacoma GSP)**  
4

5 **7-07.3 Construction Requirements**

6 *Item three of paragraph two is revised to read:*  
7

- 8           1. If sediment and water from structures does not meet the conditions described in  
9           1 or 2 above, the Contractor shall collect and dispose of all water used and all  
10           debris generated in cleaning operations. No cleaning water or debris shall be  
11           flushed downstream beyond the limits of the work.  
12

13 *This Section is supplemented with:*  
14

15 All lines shall be cleaned prior to any inspection of an existing drainage line or structure.  
16

17 **7-07.5 Payment**

18 *This section is revised to read:*  
19

20 All costs for cleaning existing drainage structures shall be included in other bid items in the Bid  
21 Proposal.  
22

23 **END OF SECTION**  
24  
25  
26

1 **7-08 GENERAL PIPE INSTALLATION REQUIREMENTS**  
2 **(September 20, 2018 Tacoma GSP)**

3  
4 **7-08.3 Construction Requirements**

5  
6 **7-08.3(1)A Trenches**

7 *The tenth paragraph of this section is deleted. All dewatering requirements are found in section*  
8 *8-01.3(1)C.*

9  
10 **7-08.3(1)C Bedding the Pipe**

11 *This section is supplemented with the following:*

12  
13 Pipe bedding for sanitary and storm sewers shall be in accordance with City of Tacoma  
14 Standard Plan No. SU-16.

15  
16 **7-08.3(2)F Plugs and Connections**

17 *This section is supplemented with the following:*

18  
19 Rigid Couplings, manufactured by Romac Industries, Inc., or Engineer approved equal, shall be  
20 used at any pipe joint in which bell and spigot or fused joints are not used. Flexible couplings  
21 are not permitted, except for side sewer installation.

22  
23 **7-08.3(2)G Jointing of Dissimilar Pipe**

24 *This section is revised to read:*

25  
26 Dissimilar pipe shall be joined by use of rigid couplings manufactured by Romac Industries, Inc.,  
27 or Engineer approved equal, except for side sewer installation.

28  
29 **7-08.3(3) Backfilling**

30 *The second paragraph is revised to read:*

31  
32 Pipe zone bedding and trench backfill shall be in accordance with City of Tacoma Standard Plan  
33 No. SU-16. (Pipe zone backfill shall meet the requirements of Section 9-03.9(3) for Crushed  
34 Surfacing Top Course. Backfill above pipe zone and extra excavation area backfill material  
35 shall meet the requirements of Section 9-03.12(2), Gravel Backfill for Walls.) Recycled concrete  
36 shall not be used for pipe zone bedding, pipe zone backfill, backfill above pipe zone, and extra  
37 excavation area backfill.

38  
39 *The fourth paragraph is revised to read:*

40  
41 Backfill above the pipe zone shall be accomplished in such a manner that the pipe will not be  
42 shifted out of position nor damaged by impact or overloading. If pipe is being placed in a new  
43 embankment, backfill above the pipe zone shall be placed in accordance with Section 2-  
44 03.3(14)C. If pipe is being placed under existing paved areas, or roadways, backfill above the  
45 pipe zone shall be placed in horizontal layers no more than 12-inches thick and compacted to  
46 95-percent maximum density. If pipe is being placed in non-traffic areas, backfill above the pipe  
47 zone shall be placed in horizontal layers no more than 12-inches thick and compacted to 85-  
48 percent maximum density. All compaction shall be in accordance with the Compaction Control  
49 Test of Section 2-03.3(14)D. Material excavated from the trench shall be used for backfill above  
50 the pipe zone, except that organic material, frozen lumps, wood, rocks, or pavement chunks  
51 larger than 6-inches in maximum dimension shall not be used. Material determined by the

1 Engineer to be unsuitable for backfill at the time of excavation shall be removed and replaced  
2 with imported backfill material meeting the requirements of Section 9-03.12(2). Material  
3 determined to be suitable for backfill at the time of excavation shall be stockpiled and used for  
4 backfill material. If the stockpiled material becomes unsuitable, the Contractor shall furnish  
5 suitable material in an amount equal to that, which became unsuitable, at no expense to the  
6 Contracting Agency.

7  
8 *Section 7-08.3 is supplemented with the following:*

9 **7-08.3(5) Temporary Bypass Pumping**

10  
11 It shall be the Contractor's responsibility to maintain operation of the existing storm and/or  
12 sanitary sewer systems throughout the duration of the project without any interruption of sewer  
13 service. The Contractor shall divert all flows around each segment of the pipe designated for  
14 replacement. This diversion shall consist of redirecting flow from an upstream manhole and  
15 pumping it to a manhole downstream of the replacement operation. After the pipe replacement  
16 work is completed and accepted by the City, flow shall be returned to the reconstructed storm or  
17 sanitary sewer. The area affected by the bypass operation shall be fully restored.

18  
19 Bypass pumping shall be scheduled for continuous operation with back-up equipment available  
20 at all times for periods of maintenance and refueling or failure of the primary bypass pump(s) or  
21 diversion system. If the Contractor's operation requires bypass pumping at night, he/she must  
22 provide monitoring personnel at all times to ensure the system remains functional.

23  
24 Bypass pumping shall be done in such a manner as not to damage private or public property, or  
25 create a nuisance or public menace. The pumped sewage or stormwater shall be in enclosed  
26 hoses or pipes that are adequately protected from traffic, and shall be redirected into the  
27 appropriate sewer system. The discharge of storm water to private property, city streets,  
28 sidewalks, sanitary sewer, or any location other than an approved storm sewer is prohibited.  
29 The discharge of sewage to private property, city streets, sidewalks, storm sewer, or any  
30 location other than an approved sanitary sewer is prohibited. The Contractor shall be liable for  
31 all cleanup, damages, and resultant fines should the Contractor's operation cause any backups,  
32 overflows, or property damage.

33 The Contractor's bypass operation shall be sized to handle, at a minimum, the full pipe capacity  
34 in each subject line removed from service. If flow conditions are greater than full pipe, the  
35 Contractor may elect to wait for flow conditions to subside prior to removing the subject line from  
36 service. Working days may be adjusted per Specification 1-08.5. Once the Contractor removes  
37 a section of line from service he/she is responsible to bypass any and all flow in the system  
38 during construction, even in the event the system surcharges and exceeds the full pipe capacity,  
39 until the line is returned to service.

40  
41  
42 The Contractor shall submit a Bypass Pumping Plan in accordance with Section 1-05. The  
43 Contractor's plan for bypass pumping shall be reviewed by the City before the Contractor will be  
44 allowed to commence bypass pumping. The review of the bypassing system and equipment by  
45 the Engineer shall in no way relieve the Contractor of his responsibility and public liability.

46  
47 The Contractor shall use hard pipe to bypass sewers 12-inches in diameter or greater. The  
48 Contractor shall not block any driveways or intersections, but shall bury the pipe to allow  
49 continuous access through intersections and driveways.

1 The Contractor may use lay-flat hose to bypass storm and sanitary sewers that are less than 12  
2 inches in diameter. The Contractor shall ensure that sewage spills do not occur with the use of  
3 lay flat hoses. If sewage spills occur, the Contractor will be required to use hard pipe for all  
4 sanitary sewers.

#### 6 **7-08.3(6) Abandon Existing Pipe**

8 If construction of the new sewer pipe does not result in the removal of the existing pipe due to  
9 differing alignments, then the existing pipe shall be abandoned in place as shown in the Plans.  
10 The Contractor shall plug all pipe branches, stubs, or other open ends of the pipe to be  
11 abandoned and fill with CDF. The Contractor shall submit a Pipe Abandonment Plan in  
12 accordance with Section 1-05.3 describing the proposed methods for filling the pipes with CDF,  
13 specifically addressing how the pipes will be filled in a manner that will prevent air pockets from  
14 being left in the abandoned pipe. The CDF mix design shall meet the requirements of Section  
15 2-09.3(1)E.

16  
17 If the pipes to be abandoned are removed and disposed of during construction of the new  
18 sewers, all costs for the removal and disposal shall be included in the unit contract price for  
19 "Structure Excavation, Class B," at per cubic yard.

#### 21 **7-08.4 Measurement**

22 *This section is supplemented with the following:*

23  
24 No specific measurement shall apply to the lump sum item "Temporary \_\_\_\_ Sewer Bypass".

25  
26 No specific measurement shall apply to the lump sum item "Temporary \_\_\_\_ Sewer Bypass  
27 Plan".

28  
29 Abandonment of existing sewer pipes will be measured by the cubic yard of CDF necessary to  
30 fill the existing pipes.

#### 32 **7-08.5 Payment**

33 *This section is supplemented with the following:*

34  
35 "Temporary \_\_\_\_ Sewer Bypass", per lump sum.

36  
37 The lump sum Contract prices for "Temporary \_\_\_\_ Sewer Bypass" shall be full payment for  
38 labor, equipment, and materials, including but not limited to, personnel, fuel, monitoring, power,  
39 pumps, piping, barricades, emergency stand-by equipment, trenching, surface restoration costs,  
40 and all other work necessary to maintain uninterrupted storm and sanitary sewer services by  
41 bypassing the applicable sewer system flows.

42  
43 "Temporary \_\_\_\_ Sewer Bypass Plan", per lump sum

44  
45 The lump sum Contract price for "Temporary \_\_\_\_ Sewer Bypass Plan" shall be full pay for all  
46 costs, including but not limited to, preparing, submitting, revising, and resubmitting revisions for  
47 the Temporary Bypass Plan.

48  
49 "CDF for Pipe Abandonment", per cubic yard.

1 The unit Contract price for "CDF for Pipe Abandonment" shall be full payment for all labor,  
2 materials, and equipment necessary to abandon the sewer pipes.

3

4

5

**END OF SECTION**

6

7



1 **7-17 SANITARY SEWERS**  
2 **(March 4, 2014 Tacoma GSP)**

3  
4 **7-17.1 Description**

5 *This section is supplemented with the following:*

6  
7 All references to sanitary sewer shall also mean storm sewers.

8  
9 **7-17.2 Materials**

10 *The first paragraph is revised to read:*

11  
12 Pipe materials used for storm and sanitary sewers shall be as shown on plans. All references to  
13 PVC shall mean Solid Wall PVC Sewer Pipe. Profile Wall PVC will not be permitted.

14  
15 *This section is supplemented with the following:*

16  
17 Polyvinyl Chloride (PVC) Pressure Pipe (4-inches and over) 9-30.1(5)A

18  
19 **7-17.3 Construction Requirements**

20  
21 **7-17.3(2)A General**

22 *The first paragraph is revised to read:*

23  
24 Sewers and appurtenances shall be cleaned and tested after backfilling by either exfiltration or  
25 low-pressure air method at the option of the Contractor, except where the ground water table is  
26 such that the Engineer may require the infiltration test.

27  
28 **7-17.3(2)H Television Inspection**

29 *The first sentence is revised to read:*

30  
31 The Contractor is to provide the City 72 hours of advanced notice so that a City representative  
32 may be present during the inspection if so elected. The video shall be submitted for review  
33 which may take up to ten (10) working days. If more than ten (10) working days are required for  
34 the Engineer's review of the videos, an extension of time will be considered in accordance with  
35 1-08.8. At a minimum, the video files shall meet the technical requirements of 7-17.3(3). No  
36 claim will be allowed for damages, or extensions of time resulting from the rejection of a video  
37 due to not meeting the technical requirements, or issues as seen visually with the constructed  
38 assets as shown by the video.

39  
40 **7-17.3(3) Technical Requirements**

41 *Add the following new section:*

42  
43 **General**

44 The Contractor shall hire a third-party television inspection company to perform television  
45 inspection services on all new full segments and partial segments of sanitary and storm sewer  
46 mains and side sewers, including the connection point between new and existing pipes, and  
47 newly constructed manholes. The television inspection subcontractor must attend the Pre-  
48 Construction Conference in order to discuss the submittal process and required formatting of  
49 videos and databases, as described in this Section.

## **Schedule & Review Requirements**

CCTV inspections shall be performed in accordance with the excavation and paving criteria defined in Section 1-08.4 of these Specifications. Final pavement restoration shall not occur until the Contracting Agency has approved all applicable pipe segments, video files, and databases within the paving limits.

The Contractor shall provide the Contracting Agency 72 hours of advance notice so that the Engineer may be present during the inspection if so elected. The inspection video and associated database file for each pipe segment, including all side sewers (if applicable), shall be submitted to the Contracting Agency for review and approval within ten (10) working days of the installation. The Engineer may take up to three working days to review the files. If more than three working days are required for the Engineer's review of the videos, an extension of time will be considered in accordance with Section 1-08.8. No claim will be allowed for damages and no extension of time will be granted resulting from the rejection of a video or database due to not meeting the technical requirements or construction defects identified in the video.

## **Inspection and Video Criteria**

CCTV inspection work shall be completed by certified National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) trained operator(s) using established PACP coding and observations. Coding and observation results shall be recorded and presented on a per asset basis, from structure to structure. A pipe asset is defined as one continuous pipe from the upstream structure to the downstream structure. Footage shall be recorded with the starting and ending points being the center of the manholes and/or catch basins, with the exception that if partial segments are constructed in this Contract, including side sewers, the inspection only needs to show all new work up to and including the connection to the existing pipe. Inspections shall be performed after the manhole has been channeled and the camera operator shall pan around and record the inside of each manhole and/or catch basin constructed in this project at the start and end of each inspection. The television camera shall have a resolution of 700 lines minimum and shall have a source of illumination attached to it.

The video files shall be recorded and submitted in WMV format and include an unmodified NASSCO-PACP Certified Access Database conducted entirely in digital format with electronic reference to the survey which is intended to be imported into the Contracting Agency's viewing software, GraniteNet. The PACP database must be in MDB format and shall include the Contracting Agency's SAP ID for pipe segments and structures. No other file formats will be accepted unless approved by the Contracting Agency.

All videos and database files shall be submitted via the Internet web-based project management communications tool, e-Builder software. The Contractor shall review each video and database prior to submitting to confirm formatting is correct and no pipe repairs are needed.

The Contractor shall provide video identifying each pipe segment by manhole, catch basin, and pipe segment SAP ID numbers. The inspection shall identify all connections, general conditions of the sewer pipelines, problem areas, location of all connections or problem areas by linear footage, and observations concerning the condition of the pipe joints. The camera system used shall be capable of travelling up to 500 linear feet.

Although newly constructed, the sewers will likely be in service with flow present during inspections. The Contractor shall clean the main within 24 hours of the CCTV inspection. The lens shall remain clean and clear for the duration of the inspection. Should the lens become

1 soiled, or fogged, or otherwise impaired to any degree that impedes the ability to clearly see the  
2 condition of the pipe, the inspection shall be halted to clean and clear the lens. No additional  
3 compensation will be made for re-inspections required by the Contracting Agency due to soiled,  
4 fogged, or otherwise impaired camera lenses.

5  
6 The Contractor shall maintain sufficient light levels within the main to allow for visual inspection  
7 of the pipe walls for a minimum of four feet for all pipe sizes. Additionally, the Contractor shall  
8 make certain that the light levels are not so bright that visual inspection is impeded.

9  
10 The CCTV Inspection shall be a continuous, unedited video and shall include the following  
11 information:

- 12 • Date of Inspection
- 13 • Main segment number
- 14 • Upstream and downstream manhole and/or catch basin numbers
- 15 • Current distance along the mainline

16  
17 In addition, the Contractor shall perform wastewater side sewer inspections where they exist via  
18 a mainline camera with a lateral launching setup. The lateral launch camera shall be capable of  
19 extending at least 30 feet from the main into side sewers and shall include an on-screen footage  
20 counter. The quality of the side sewer inspection shall meet the same requirements as the  
21 mainline camera. The lateral launch camera must be self-leveling and shall also include a  
22 sonde transmitter to locate the side sewer in the event of a defect. All side sewer inspections  
23 within a given segment shall be incorporated into the same video and database file as the  
24 mainline inspection.

25  
26 The Contractor shall bear all costs incurred in correcting any deficiencies found during television  
27 inspection including the cost of any additional cleaning and television inspection that may be  
28 required by the Engineer to verify the correction of said deficiency.

29  
30 The Contractor shall be responsible for all costs incurred in any television inspection performed  
31 solely for the benefit of the Contractor.

### 32 **7-17.4 Measurement**

33 *This section is supplemented with the following:*

34  
35  
36 Removal and replacement of unsuitable, contaminated and non-contaminated, backfill material  
37 will be determined by the cubic yard in place, based on a neat line measurement per this  
38 Section and Section 2-09. Any removal and replacement of unsuitable material outside neat  
39 line measurement shall be incidental to the Bid item.

40  
41 No specific unit of measurement will apply for television inspection as required in this section.  
42 All costs shall be included in the per foot price of pipe installed.

43  
44 **Horizontal Limits:** The horizontal limits shall be as defined in Section 2-09.4.

45  
46 **Longitudinal Limits:** The longitudinal limits shall be as defined in Section 2-09.4.

47  
48 **Lower Limits:** The lower limits shall be the top of the pipe zone as shown on Standard Plan  
49 No. SU-16.

1 **Upper Limits:** The upper limits shall be the subgrade elevation of the proposed roadway  
2 section or pavement patch section.

3  
4 All costs associated with the disposal of material located above the upper limits shall be  
5 included in the unit contract price for other items of work, unless a proposal item is included for  
6 this specific item of work.

7  
8 Pipe zone limits are as defined in Standard Plan SU-16.

#### 9 10 **7-17.5 Payment**

11 *The first paragraph is supplemented with the following:*

12  
13 "PVC Storm Sewer Pipe \_\_\_\_ In. Diam.", per linear foot.

14  
15 *The second paragraph is revised to read:*

16  
17 The unit Contract price per linear foot for sewer pipe of the kind and size specified shall be full  
18 pay for the furnishing, hauling, and assembling in place the complete installation, including but  
19 not limited to, disposal of material excavated within the pipe zone, furnishing and installing pipe  
20 bedding and backfill material within the pipe zone, and all wyes, tees, special fitting, joint  
21 materials, pipe cleaning and testing, and other appurtenances necessary for the completion of  
22 the installation to the required line and grade, unless proposal items are included for these  
23 specific items of work, and shall also include all costs associated with cleaning the pipe and  
24 performing and submitting television inspection videos. Sewer pipe per linear foot shall not be  
25 paid until the Contracting Agency has approved the CCTV inspection video and database, and  
26 provided approval of the pipe segment.

27  
28 *The pay item "Removal and Replacement of Unsuitable Material" is revised to read:*

29  
30 "Removal and Replacement of Unsuitable Material", per cubic yard.

31  
32 The unit Contract price per cubic yard for "Removal and Replacement of Unsuitable Material"  
33 shall be full pay for all work required to haul and dispose of the unsuitable material as specified  
34 in Section 7-08.3(1)A and the furnishing of suitable backfill material as specified in Section 7-  
35 08.3(3).

36  
37 For the purpose of providing a common proposal for bidders, the proposal quantity for "Removal  
38 and Replacement of Unsuitable Material" is based on removal and replacement of all backfill  
39 material.

40  
41  
42 **END OF SECTION**  
43

## 8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

(\*\*\*\*\*)

### 8-01.1 Description

*This section is supplemented with the following:*

The City of Tacoma Stormwater Management Manual is available on the City's website at [www.cityoftacoma.org/stormwatermanual](http://www.cityoftacoma.org/stormwatermanual).

The City of Tacoma has been issued a Washington State Department of Ecology NPDES Construction Stormwater General Permit for this project. This Work also consists of administration and compliance with the requirements of this permit for this project. A copy of this permit is included in the Appendix of these Special Provisions.

### 8-01.3(1) General

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

The adaptive management shall use the means and methods identified in this section and the means and methods identified in the Washington State Department of Transportation's *Temporary Erosion and Sediment Control Manual* or the City of Tacoma's *Stormwater Management Manual* for construction stormwater.

*This section is supplemented with the following:*

The Contractor shall perform all work in compliance with the NPDES Construction Stormwater General Permit issued for this project.

The permit shall be transferred to the Contractor prior to issuance of a Notice to Proceed and terminated upon completion of the project per the following:

1. The City will provide the Contractor with a Transfer of Coverage form prior to issuing a Notice to Proceed.
2. The Contractor shall sign and return the Transfer of Coverage form to the City.
3. The City will process the transfer and pay any associated transfer fees to the Washington State Department of Ecology.
4. Once the transfer is complete and a Notice to Proceed has been issued, the Contractor is responsible for performing all work in compliance with the permit and the plans and specifications.
5. The Contractor shall pay any renewal fees if the need for permit renewal is caused by contractor, otherwise the City will pay all renewal fees.
6. Upon Physical Completion of the Work the Contractor shall submit a Notice of Termination to the Washington State Department of Ecology and provide the City documentation that the termination is effective.

### 8-01.3(1)A Submittals

*This section is revised to read:*

The Contractor shall prepare and implement a project-specific Construction Stormwater Pollution Prevention Plan (SWPPP) in accordance with the City of Tacoma Stormwater Management Manual (SWMM), Volume 2. The SWPPP is a document that describes the

1 potential for pollution problems on a construction site and explains and illustrates the measures  
2 to be taken on the construction site to control those problems.

3  
4 The Construction SWPPP shall be prepared as a stand-alone document consisting of two  
5 sections: Section 1) Construction SWPPP Narrative and Section 2) Temporary Erosion and  
6 Sediment Control (TESC) Plans.

7  
8 The Contracting Agency has prepared the Construction Stormwater Pollution Prevention Plan  
9 Checklist to aid the Contractor in development of the SWPPP. This checklist provides the  
10 Contractor with a tool to determine if all the major items are included in the Construction  
11 SWPPP and on the TESC Plans and can be found in Volume 2, Chapter 2 of the SWMM.  
12 Contractors are encouraged to complete and submit this checklist with the Construction  
13 SWPPP.

14  
15 The Department of Ecology has prepared a SWPPP template that can be used for projects in  
16 the City of Tacoma. The template can be found on Ecology's website at:  
17 <http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html>. The  
18 Contractor developing the SWPPP must ensure that all references are appropriate for the City  
19 of Tacoma.

20  
21 The SWPPP is considered a "living" document that shall be revised to account for additional  
22 erosion control/pollution prevention BMPs as they become necessary and are implemented in  
23 the field during project construction. A copy of the most current SWPPP and TESC Plan shall  
24 remain on-site at all times and an additional copy shall be forwarded to the Engineer. At the  
25 Contractor's preference, revisions to the SWPPP and TESC Plan may be forwarded to the  
26 Engineer rather than submitting a complete document. Revisions to the SWPPP and TESC  
27 Plan may be kept on-site in a file along with the original SWPPP document.

28  
29 The Contractor shall provide Stormwater Pollution Prevention Plan inspection reports or forms  
30 per 8-01.3(1) B to the Project Engineer no later than the end of the next working day following  
31 the inspection.

### 32 33 **8-01.3(1)B Erosion and Sediment Control (ESC) Lead**

34 *This section is revised to read:*

35  
36 The Contractor shall identify the ESC Lead at the Preconstruction Meeting and the contact  
37 information for the ESC Lead shall be added to the Stormwater Pollution Prevention Plan  
38 (SWPPP) Report and the Temporary Erosion and Sediment Control (TESC) Plan Sheet. The  
39 ESC Lead shall maintain, for the life of the contract, a current Certified Erosion and Sediment  
40 Control Lead (CESCL) certificate or maintain a current Certified Professional in Erosion and  
41 Sediment Control (CPESC) certificate from a course approved by the Washington State  
42 Department of Ecology. The CESCL or CPESC shall be listed on the Emergency Contact List  
43 required under Section 1-05.13(1).

44  
45 The CESCL or CPESC shall direct implementation of the measures identified in the SWPPP  
46 and as shown on the TESC plan. Implementation shall include, but is not limited to the  
47 following:

- 48  
49 1. Installing and maintaining all temporary erosion and sediment control Best  
50 Management Practices (BMPs) included in the SWPPP and as shown on the TESC  
51 plan. Damaged or inadequate BMPs shall be corrected as needed to assure

- 1 continued performance of their intended function in accordance with BMP  
2 specifications and Permit requirements.
- 3 2. Performing monitoring as required by the NPDES Construction Stormwater General  
4 Permit.
- 5 3. Inspecting all on-site erosion and sediment control BMPs at least once every  
6 calendar week and within 24 hours of any discharge from the site. A SWPPP  
7 Inspection report or form shall be prepared for each inspection and shall be included  
8 in the SWPPP file. A copy of each SWPPP Inspection report or form shall be  
9 submitted to the Engineer no later than the end of the next working day following the  
10 inspection. The report or form shall include, but not be limited to the following:  
11 a. When, where, and how BMPs were installed, maintained, modified, and  
12 removed.  
13 b. Observations of BMP effectiveness and proper placement.  
14 c. Recommendations for improving future BMP performance with upgraded or  
15 replacement BMPs when inspections reveal SWPPP inadequacies.  
16 d. Approximate amount of precipitation since last inspection and when last  
17 inspection was performed.
- 18 4. Updating and maintaining a SWPPP file on site that includes, but is not limited to the  
19 following:  
20 a. SWPPP Inspection Reports or Forms.  
21 b. SWPPP narrative.  
22 c. National Pollutant Discharge Elimination System Construction Stormwater  
23 General Permit (Notice of Intent).  
24 d. All documentation and correspondence related to the NPDES Construction  
25 Stormwater General Permit.  
26 e. Other applicable permits.  
27

28 Upon request, the file shall be provided to the Engineer for review.  
29

### 30 **8-01.3(1)C Water Management**

31 *This section is revised to read:*  
32

33 **General.** The Contractor is responsible for keeping excavations free from standing water during  
34 construction and disposing of the water in a manner that will not cause pollution, injury to public  
35 or private property, or cause a nuisance to the public. Groundwater flowing toward, into, or  
36 within excavations shall be controlled to prevent sloughing of excavation walls, boils, uplift, and  
37 heave in the excavation, and to eliminate interference with orderly progress of construction.  
38 The control of groundwater shall be such that softening of the bottom of excavations, or  
39 formation of "quick" conditions or "boils" during excavation, shall not occur. The Contractor is  
40 responsible for all foundation material required due to lack of dewatering efforts.  
41

42 All "normal trench dewatering" work associated with maintaining a trench or excavation area  
43 suitable for pipeline and Stormwater Treatment Facility construction will be incidental and  
44 included in the other items of work. "Normal trench dewatering" is defined as dewatering  
45 methods occurring in or directly adjacent to the trench, including trash pumps, sump pumps, or  
46 other methods in excavated areas. Normal trench dewatering does not include a dewatering  
47 system, such as well points, well screens, or deep wells.  
48

### 49 **8-01.3(2) Temporary Seeding and Mulching**

50

**8-01.3(2)B Temporary Seeding**

*The first paragraph is supplemented with the following:*

All seeding areas shall be seeded with the following mix:

Type of Seed	% by Weight
Chewings or Annual Bluegrass <i>Festuca rubra var. commutate</i> or <i>Poa anna</i>	40
Perennial Rye <i>Lolium perenne</i>	50
Redtop or Colonial Bentgrass <i>Agrostis alba</i> or <i>Agrostis tenuis</i>	5
White Dutch Clover <i>Trifolium repens</i>	5

The rate of application shall be 120 lbs per acre.

Seeding fertilizer shall be per seed supplier's recommendations for hydroseed application.

*The fifth paragraph is supplemented with the following:*

Seed shall be distributed uniformly over the designated area. Half of the seed shall be sown with the sower moving in one direction, and the remainder with the sower moving at right angles to the first sowing.

**8-01.3(2)D Temporary Mulching**

*This section is supplemented with the following:*

The Contractor shall reapply mulch as needed to protect exposed soil and seeded areas from erosion.

**8-01.3(2)E Tackifiers**

*This section is supplemented with the following:*

The Contractor shall follow the requirements of the City of Tacoma Surface Water Management Manual BMP C120 for using tackifiers with hydro seeding.

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

*The third paragraph is revised to read:*

When the contract requires a wheel wash in conjunction with the stabilized entrance, the details for the wheel wash and the method for containing and treating the sediment-laden runoff shall be included as part of the SWPPP and TESC Plan.

**8-01.3(8) Street Cleaning**

*The fourth paragraph is revised to read:*

Street washing with water shall not be permitted.



1 **8-01.3(9)D Inlet Protection**

2 *Replace the third paragraph of this section with the following:*

3  
4 When the depth of accumulated sediment and debris reaches approximately 1/3 the height of  
5 an internal device or 1/3 the height of the external device (or less when so specified by the  
6 manufacturer), or as designated by the Engineer, the sediment and debris shall be removed and  
7 disposed of per SWMM BMP C220 or as specified on the Plans or within the SWPPP.

8  
9 *The section is supplemented with the following:*

10  
11 Only bag-type filters are allowed for use in the public right of way.

12  
13 **8-01.3(10) Wattles**

14 *The fifth and sixth sentences of the first paragraph are revised to read:*

15  
16 On gradually sloped or clay-type soils trenches shall be 3 to 5 inches deep. On loose soils, in  
17 high rainfall areas, or on steep slopes, trenches shall be 3 to 5 inches deep, or 1/2 to 2/3 the  
18 thickness of the wattle, whichever is greater.

19  
20 **8-01.4 Measurement**

21  
22 **8-01.4(2) Item Bids**

23 *This section is supplemented with the following:*

24  
25 No specific unit of measurement shall apply to the lump sum item "Stormwater Pollution  
26 Prevention Plan (SWPPP)".

27  
28 No specific unit of measurement shall apply to the lump sum item "Dewatering Plan".

29  
30 No specific unit of measurement shall apply to the lump sum item "NPDES Construction  
31 Stormwater General Permit".

32  
33 No specific unit of measure shall apply to the lump sum item "Erosion Control".

34  
35 **8-01.5 Payment**

36 *This section is supplemented with the following:*

37  
38 Where removal of erosion control BMPs is directed by the Engineer according to 8-01.3(16) or  
39 according to these specification and the plans, removal shall be included in the lump sum or unit  
40 cost for these respective BMPs.

41  
42 **8-01.5(2) Item Bids**

43 *This section is supplemented with the following:*

44  
45 "Stormwater Pollution Prevention Plan (SWPPP)", per lump sum

46  
47 The lump sum contract price for "Stormwater Pollution Prevention Plan (SWPPP)" shall be full  
48 pay for all costs, including but not limited to, preparing, submitting, revising, and resubmitting  
49 revisions for the Stormwater Pollution Prevention Plan.

50  
51 "Erosion/Water Pollution Control", per lump sum.

1  
2 The lump sum contract price for "Erosion/Water Pollution Control" shall be full pay for all cost for  
3 labor, equipment, and materials to perform all work associated with erosion control. Work shall  
4 include, but shall not be limited to, furnishing, purchase and delivery or required materials,  
5 installation and maintenance of temporary erosion and sediment control measures, and all costs  
6 incurred by the Contractor in performing the Contract Work defined in Section 8-01, except for  
7 unit bid items in Section 8-01 when these are included in the bid proposal. It is the Contractor's  
8 responsibility to maintain, repair, and replace any and all erosion control measures as required  
9 to maintain compliance with the NPDES Construction Stormwater General Permit and Tacoma  
10 Municipal Code 12.08 for the entire duration of the Project.

11  
12  
13 **END OF SECTION**  
14

## 1 **8-02 ROADSIDE RESTORATION**

2 **(\*\*\*\*\*)**

### 3 4 **8-02.2 Materials**

5 *This section is supplemented with the following:*

6  
7 Root barrier shall be rigid-type root barrier module panels and shall be at least 75 percent  
8 recycled polypropylene or high-impact polystyrene with added ultraviolet inhibitors. Material  
9 shall have 0.060-inch to 0.075-inch wall thickness, 18-inch height. Panels shall have reinforcing  
10 ribs 1/2-inch deep, raised vertical ribs running perpendicular to sheet, 6 inches on center.

11  
12 Compost shall meet the requirements of Section 9-14.5(8).

### 13 14 **8-02.3 Construction Requirements**

#### 15 16 **8-02.3(4) Topsoil**

17 *This section is supplemented with the following:*

18  
19 The Contractor shall use Topsoil Type A in accordance with Special Provisions Section 9-14.2  
20 unless otherwise shown on the Plans or as approved by the Engineer.

#### 21 22 **8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation**

23 *This section is supplemented with the following:*

24  
25 All grades shall be maintained in the areas to be planted in a true and even condition. The  
26 contractor shall be careful not to disturb any of the existing or cut slopes. Where final grades  
27 have not been established, the areas shall be finish graded and all surfaces left in an even and  
28 compacted condition. The finished grade shall be such that after planting, the grade shall be  
29 flush with adjoining surfaces; positive drainage shall also be maintained.

#### 30 31 **8-02.3(5)A Seeding Area Preparation**

32 *Item 4. of this section is revised to read:*

- 33  
34 4. Amended topsoil shall be cultivated to a depth of **8** inches or imported and  
35 placed in accordance with Standard Plans GSI-01b through GSI-01d. Rake to a  
36 smooth even grade without low areas that trap water and compact. The finished  
37 grade of the soil shall be 1 inch below the top of all curbs, junction and valve  
38 boxes, walks, driveways and other structures.

#### 39 40 **8-02.3(5)B Lawn Area Preparation**

41 *Item 3 is supplemented with the following:*

42  
43 The depth of cultivation shall be 4 inches.

44  
45 *Item 4 is revised to read:*

- 46  
47 4. Amended topsoil shall be cultivated to a depth of **8** inches settled depth or  
48 imported and placed in accordance with Standard Plans GSI-01b through GSI-  
49 01d. Rake to a smooth even grade without low areas that trap water and  
50 compact. The finished grade of the soil shall be 1 inch below the top of all curbs,  
51 junction and valve boxes, walks, driveways and other structures.

1  
2 **8-02.3(5)C Planting Area Preparation**

3 *Items 5. And 6. of this section is revised to read:*

- 4  
5 4. Amended topsoil shall be cultivated to a depth of **8** inches or imported and  
6 placed in accordance with Standard Plans GSI-01b through GSI-01d. Do not till  
7 or place loose topsoil without compaction and stabilization measures on slopes  
8 3H:1V or steeper.  
9 5. The finished grade of the mulch or woodchips shall be 1 inch below the top of all  
10 curbs, junction and valve boxes, walks, driveways and other structures.

11  
12 *Item 7 is supplemented with the following:*

13  
14 The finished grade shall be such that after planting, the grade shall be flush with adjoining  
15 vegetative surfaces; positive drainage shall also be maintained.

16  
17 *Add the following new Item:*

- 18  
19 9. The contractor shall be careful not to disturb any of the existing or cut slopes.

20  
21 **8-02.3(6) Mulch and Amendments**

22 *This section is supplemented with the following:*

23  
24 Existing Topsoil areas shall be amended in place with Compost in accordance with Standard  
25 Plan GSI-01b as specified or as shown per Plans.

26  
27 Compost amendment shall be included in Topsoil Type A, B, or C in accordance with Standard  
28 Plans GSI-01c and GSI-01d, and compost content is included in the Topsoil quantity.

29  
30 Coarse Compost can be used as mulch for Planting Areas in accordance with Section 8-  
31 02.3(6)A below.

32  
33 **8-02.3(6)A Compost**

34 *This section is supplemented with the following:*

35  
36 Compost as a surface applied mulch shall be Coarse Compost in accordance with BMP C125,  
37 Section 1.12 and A900 – Compost, Chapter 21.9, of the City of Tacoma Stormwater  
38 Management Manual.

39  
40 The Contractor shall report the amount of cubic yards of Compost incorporated into the project,  
41 both as mulch and as topsoil amendment or content. The Contractor shall submit the quantity  
42 of Compost per type and supplier.

43  
44 **8-02.3(8)C Pruning, Staking, Guying and Wrapping**

45 *This section is supplemented with the following:*

46  
47 Crossed or rubbing branches shall be removed providing the natural shape of the tree is  
48 preserved. Under no circumstances shall pruning be done prior to inspection and approval of  
49 plants by the Engineer. All cuts shall be made flush with the parent stem leaving no stubs.  
50 Pruning cuts shall be made in a manner to favor the earliest possible covering of the wound by  
51 callus growth. Cuts that produce large wounds and weaken the tree will not be acceptable.

1  
2 Top growth removal to compensate for root loss shall not exceed one-third (1/3) of the top  
3 growth unless otherwise specified or directed by the Engineer. Cuts created 3/4 inch in  
4 diameter shall be treated with an approved tree wound dressing. All pruning shall produce a  
5 clean cut without bruising or tearing the bark and shall be in living wood where the wood can  
6 properly heal over.

7  
8 Evergreens shall not be pruned, except to remove injured branches. The use of pole shears  
9 and/or hedge shears for pruning deciduous and evergreen trees will not be permitted. All  
10 trimmings and other debris left over from the planting operations shall be collected and disposed  
11 of off the site.

12  
13 All evergreen trees and deciduous trees over 15 feet in height shall be guyed with three wires or  
14 cables.

15  
16 All deciduous and evergreen trees shall be staked the same day of planting.

#### 17 18 **8-02.3(8)D Root Barrier**

19  
20 The Contractor shall stake location for approval of the Engineer before proceeding with  
21 installation. Assemble the appropriate number of root barrier panels as required in the Plans.  
22 Trench immediately adjacent to hardscape to the appropriate depth for installation of specified  
23 root barrier so that top of barrier is 1/2 inch to 1 inch (12.7 mm to 25.4 mm) above finished soil  
24 grade. Place root barrier in trench, vertical ribs facing toward planting area and tree roots.  
25 Where possible, use pavement edge as a guide for root barrier alignment. Backfill adjacent  
26 planting soil against the root barrier to promote clean fit to hardscape. Fill to finish grade.

#### 27 28 **8-02.3(8)E Tree Watering Bags**

29  
30 The Contractor shall install one Tree Watering Bag per tree as shown on the plans, following  
31 completion of the planting at the start of the watering season. Install Tree Watering Bag in  
32 accordance with manufacturer's instructions and 8-02.3(13) Plant Establishment.

#### 33 34 **8-02.3(9) Seeding, Fertilizing, and Mulching**

##### 35 36 **8-02.3(9)A Dates for Seed Application**

37 *The first paragraph is supplemented with the following:*

38  
39 Where no irrigation system is to be installed, the lawn shall be placed during the following period  
40 only:

41  
42 March 1<sup>st</sup> – June 30<sup>th</sup>

43 September 1<sup>st</sup> - October 25

44

**8-02.3(9)B Seeding and Fertilizing**

*This section is supplemented with the following:*

All seeding areas shall be seeded with the following mix:

Type of Seed	% by Weight
Dwarf Tall Fescue (several varieties) <i>Festuca arundinacea</i> var.	45
Dwarf Perennial Rye (Barclay) <i>Lolium perenne</i> var. <i>Barclay</i>	30
Red Fescue <i>Festuca rubra</i>	20
Colonial Bentgrass <i>Agrostis tenuis</i>	5

The rate of application shall be 120 lbs per acre.

**8-02.3(10) Lawn Installation**

**8-02.3(10)A Dates and Conditions for Lawn Installation**

*The second paragraph is supplemented with the following:*

Where no irrigation system is to be installed, the lawn shall be placed during the following period only:

March 1<sup>st</sup> – June 30<sup>th</sup>

September 1<sup>st</sup> - October 25

**8-02.3(10)B Lawn Seeding and Sodding**

*The first paragraph is supplemented with the following:*

Seed type, rate, and methods of application shall be in accordance with Section 8-02.9.

*The third paragraph is supplemented with the following:*

Topsoil shall be tilled in accordance with City of Tacoma Standard Plan GSI-01b. On sloped areas, the sod strips shall be laid perpendicular to the flow of water.

**8-02.3(10)C Lawn Establishment**

*This section is supplemented with the following:*

Lawn that is replaced shall be of the same mixture and grade as the surviving lawn.

**8-02.3(11) Mulch**

*The first paragraph is supplemented with the following:*

Mulch shall be of the type and applied at the rate required in BMPs C120 & 121 of the City of Tacoma Surface Water Management Manual. The contractor shall re-apply mulch to protect exposed soil and seeded areas from erosion.

1 **8-02.3(11)B Bark or Wood Chip Mulch**

2 *The third sentence of the first paragraph is revised to read:*

3  
4 Bark or Wood Chip Mulch shall be feathered to plant material trunks, stems, canes, or root  
5 collars, Mulch shall be placed so that it is 1-inch below the top of junction and valve boxes,  
6 curbs and pavement edges.

7  
8 *The second sentence of the third paragraph is revised to read:*

9  
10 Bark or wood chip mulch shall be feathered to plant material trunks, stems, canes, or root  
11 collars, and level with the top of junction and valve boxes, curbs and pavement edges.

12  
13 *This section is supplemented with the following:*

14  
15 Bark or wood chip mulch in accordance with Section 9-14.5(3) shall be applied to a minimum  
16 depth of 3 inches at the location indicated on the Plans or as directed by the Engineer.

17  
18 Bark or Wood Chip Mulch shall be placed over all planting beds to the depth and at the locations  
19 indicated on the Plans. Thoroughly water and hose down plants with a fine spray to wash the  
20 leaves of the plants immediately after application.

21  
22 Mulch shall meet the requirements of Section 9-14.4(3) Bark or Wood Chips of these Special  
23 Provisions.

24  
25 Contractor shall not apply Bark or Wood Chip Mulch directly to the base of tree trunks.

26  
27 **8-02.3(14) Plant Replacement**

28 *This section is revised to read:*

29  
30 The Contractor shall provide the Contracting Agency a one (1) year non pro-rated, full labor and  
31 materials warranty for all planted material. The warranty shall cause the Contractor to remove  
32 and replace all rejected plant material during the warranty period. The warranty period shall  
33 begin at the date of physical completion of the contract and end one calendar year from that  
34 date.

35  
36 The Contractor shall be responsible for growing or providing enough plants for replacement of  
37 all plant material rejected during the warranty period. All rejected plant material shall be  
38 replaced at dates approved by the Engineer.

39  
40 All replacement plants shall be of the same species and quality as the plants they replace.  
41 Plants may vary in size reflecting one season of growth should the Contractor elect to hold plant  
42 material under nursery conditions for an additional year to serve as replacement plants.

43  
44 Replacement plants will be subject to the original warranty provision as stated above.

45  
46 **Tree Watering Bag**

47  
48 Each tree watering bag shall be filled to capacity not less than once per week, during the  
49 watering season, which is considered to be April 15th through September 30th. It is the  
50 Contractor's responsibility to monitor the water in each watering bag and advise the City if  
51 additional water cycles are required. The Contractor shall ensure that each watering bag is

functioning correctly and shall replace any malfunctioning, damaged, or stolen watering bags. If watering a bag is stolen or damaged by the acts of others, the City will pay invoice cost with no markup only for the replacement watering bags and the Contractor will be responsible for the labor to install the replacement bags.

Watering will be weather dependent. It is the responsibility of the Contractor to monitor the watering requirements and the frequency may increase or decrease throughout the term of the Agreement. If more than 0.5 inches of rainfall occurs within a 48-hour period, the contractor may elect to forgo tree watering until the rainfall has ceased and for a period of 48 hours following the rain.

Upon completion of the contract, the watering bags in good working condition shall become the property of the City. All other watering bags shall be disposed of by the Contractor. The Contractor shall deliver the watering bags that are good working condition to Environmental Services.

The Contractor shall not use hoses, equipment, or water from private properties when watering trees.

*Add the following new section:*

#### **8-02.3(17) Site Restoration**

During the construction of the roadway or HMA overlay, curb ramp construction, curb and gutter construction, and sidewalk construction; the Contractor shall replace in kind, including but not limited to: any lawn, topsoil, plants, wood chip mulch, garden walls, rockery, or irrigation heads/pipes, affected by the work. Each location of work shall be graded to a smooth and even surface, matching existing grades. Grading shall be accomplished to blend the new work with the existing ground lines and to maintain natural drainage courses. In areas abutting the roadway, or where it is common for pedestrians to walk, lawn restoration shall either be protected from any kind of traffic until the end of the establishment period or left in a manner that is firm when subjected to foot traffic. Restoration of grass areas by placement of seed shall be done through hydro-seeding. Hand seeding will not be allowed, except in small areas as allowed by the Engineer. In addition landscaping items not included in the Proposal shall be included under "Site Restoration", lump sum.

All excess materials shall be removed from the site.

#### **8-02.4 Measurement**

*The first paragraph is revised to read:*

Topsoil, mulch, and soil amendments will be measured by the cubic yard in the haul conveyance at the point of delivery when included in the proposal.

*The third paragraph is revised to read:*

Compost will be measured by the cubic yard in the haul conveyance at the point of delivery when included in the proposal.

*The fifteenth paragraph is revised to read:*

Irrigation water used to establish vegetation will be considered included in the cost of plants.

*This section is supplemented with the following:*



1  
2 No specific unit of measure will be applied to the lump sum bid item Site Restoration.

3  
4 **8-02.5 Payment**

5 *The pay unit of square yards will be used in lieu of acres.*

6 "Plant Selection \_\_\_\_", per each.

7  
8 Payment for "Plant Selection \_\_\_\_" shall be full pay for all materials, labor, tools, equipment and  
9 supplies necessary for weed control within planting areas, planting area preparation, mulch,  
10 topsoil, excavation, root barrier, tree watering bags, maintenance of tree watering bags, fine  
11 grading, planting, cultivating, and clean-up for the particular items called for in the Plans until the  
12 physical completion date of the contract. A one (1) year plant warranty shall be included in the  
13 unit contract price.

14  
15 *Paragraphs 14 through 17, pertaining to partial payment, are deleted.*

16  
17 *Paragraphs 20 through 26, pertaining to partial payment, are deleted.*

18  
19 "Site Restoration", per lump sum.

20  
21 The lump sum payment for "Site Restoration" shall be full pay for all materials, labor, tools,  
22 equipment, and supplies necessary for restoration of the job site and any landscape items  
23 according to the Plans and Specifications, including but not limited to, grass sod/seed, planting  
24 area preparation, soil amendment, grading, cultivating, planting, mulching, compost, cleanup,  
25 and water necessary to complete the site restoration, as specified.

26  
27 *The last paragraph is deleted.*

28  
29  
30 **END OF SECTION**  
31  
32

1  
2 **8-03 IRRIGATION SYSTEM**  
3 **(April 1, 2018 Tacoma GSP)**  
4

5 **8-03.3 Construction Requirements**

6 *The third paragraph is supplemented with the following:*  
7

8 All electrical work from the electrical source to the controller junction box must be completed by  
9 a licensed electrical contractor  
10

11 **8-03.3(5) Installation**

12 *The first sentence of the second paragraph is revised to read:*  
13

14 Final position of turf heads shall be level or ½ inch below finished grade measured from the top  
15 of the sprinkler.  
16

17 *The fourth paragraph is revised to read:*  
18

19 Final position of valve boxes, capped sleeves, and quick coupler valves shall be level with the  
20 finished grade or mulch.  
21

22 *This section is supplemented with the following:*  
23

24 The Contractor shall advise the Engineer at least 24 hours before pressure tests are to be  
25 conducted.  
26

27 A zone diagram shall be posted in the controller to facilitate the selection of the valves to be  
28 operated.  
29

30  
31 **END OF SECTION**  
32  
33

1  
2 **8-04 CURBS, GUTTERS, AND SPILLWAYS**  
3 **(April 1, 2018 Tacoma GSP)**  
4

5 **8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways**

6 *The first paragraph is revised to read:*  
7

8 Cement concrete curb, curb and gutters, gutters, and spillways shall be constructed with air  
9 entrained concrete Class 3000 conforming to the requirements of Section 6-02.  
10

11 *Section 8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways is supplemented with the*  
12 *following:*  
13

14 **8-04.3(1)C Integral Cement Concrete Curb**  
15

16 When integral curb is being constructed with the pavement, fresh concrete for the integral curb  
17 shall be placed at such time as will enable the top section of the curb to be consolidated,  
18 finished, and bonded to the pavement slab while the concrete is plastic.  
19

20 Where curb is not being placed integral with the pavement slab, reinforcing steel dowels shall  
21 be placed in the base section for the curb in accordance with the standard drawing.  
22

23 *Section 8-04.3 Construction Requirements is supplemented with the following:*  
24

25 **8-04.3(6) Cold Weather Work**  
26

27 The following additional requirements for placing concrete shall be in effect from November 1 to  
28 April 1:  
29

- 30 • The Engineer shall be notified at least 24 hours prior to placement of concrete.
- 31 • All concrete placement shall be completed no later than 2:00 p.m. each day.
- 32 • Where forms have been placed and the subgrade has been subjected to frost, no
- 33 concrete shall be placed until the ground is completely thawed. At that time, the forms
- 34 shall be adjusted and subgrade repaired as determined by the Engineer.
- 35 • For temperatures under 35 degrees Fahrenheit forecasted within 7 days after pouring,
- 36 the Contractor shall cover the poured concrete with blankets.  
37

38 **8-04.5 Payment**

39 *This section is supplemented with the following:*  
40

41 "Integral Cement Conc. Traffic Curb", per linear foot  
42 "Extruded Curb Type \_\_\_\_\_", per linear foot.  
43  
44

45 **END OF SECTION**  
46  
47  
48

1  
2 **8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES**  
3 **(April 1, 2018 Tacoma GSP)**  
4

5 **8-06.3 Construction Requirements**

6 *The first paragraph is revised to read:*  
7

8 Cement concrete driveway approaches shall be constructed with air entrained concrete Class  
9 3000 conforming to the requirements of Section 6-02 or Portland Cement Concrete Pavement  
10 conforming to the requirements of Section 5-05.

11  
12 *This section is supplemented with the following sub-section:*  
13

14 **8-06.3(1) Cold Weather Work**  
15

16 The following additional requirements for placing concrete shall be in effect from November 1 to  
17 April 1:  
18

- 19 • The Engineer shall be notified at least 24 hours prior to placement of concrete.
- 20 • All concrete placement shall be completed no later than 2:00 p.m. each day.
- 21 • Where forms have been placed and the subgrade has been subjected to frost, no  
22 concrete shall be placed until the ground is completely thawed. At that time, the forms  
23 shall be adjusted and subgrade repaired as determined by the Engineer.
- 24 • For temperatures under 35 degrees Fahrenheit forecasted within 7 days after pouring,  
25 the Contractor shall cover the poured concrete with blankets.  
26

27 **8-06.5 Payment**

28 *This section is revised to read:*  
29

30 Payment will be made in accordance with Section 1-04.1, for the following Bid item:  
31

32 (\*\*\*\*\*)  
33 "Cement Conc. Driveway Entrance", per square yard.  
34

35 The unit contract price per square yard for "Cement Conc. Driveway Entrance" shall be full pay  
36 for all labor, tools, equipment, and materials required to construct concrete driveways in  
37 segments; excavation and construction and removal of Temporary Driveway Access shall be  
38 included. All types of concrete driveway entrances are included in this bid item.  
39

40 Excavation required for the construction of the driveway entrance shall be paid for under the unit  
41 Contract price for "Roadway Excavation, Incl. Haul" when included in the Proposal. Otherwise,  
42 the Contractor shall include all costs associated with excavating, including haul and disposal,  
43 regardless of the depth in the unit Contract price for "Cement Conc. Driveway Entrance".  
44

45  
46 **END OF SECTION**  
47  
48

1  
2 **8-13 MONUMENT CASES**  
3 **(March 17, 2003 Tacoma GSP)**  
4

5 *This section is revised to read:*  
6

7 **8-13 MONUMENTS**  
8

9 **8-13.1 Description**  
10

11 This Work shall consist of constructing monuments in accordance with the Standard Plan and  
12 these Specifications, in conformity with the lines and locations shown in the Plans or as staked  
13 by the Engineer.  
14

15 **8-13.2 Materials**  
16

17 Concrete shall be Class 3000 in accordance with the requirements of Section 6-02. 'Ready Mix'  
18 bag concrete shall not be used.  
19

20 Bronze markers will be supplied by the Contracting Agency on City funded projects.  
21

22 **8-13.3 Construction Requirements**  
23

24 The Contractor shall construct the poured monument in accordance with the City of Tacoma  
25 Standard Plan SU-01.  
26

27 **8-13.4 Measurement**  
28

29 Measurement of the poured monument will be per each.  
30

31 **8-13.5 Payment**  
32

33 Payment will be made in accordance with Section 1-04.1.  
34

35 "Poured Monument", per each.  
36

37 The unit Contract price per each for "Poured Monument" shall be full pay for all labor,  
38 equipment, and materials required to furnish and install the monument, including the removal of  
39 existing monuments and necessary pavement removal to accommodate the installation in  
40 accordance with the standard plan and specifications.  
41

42  
43 **END OF SECTION**  
44  
45

**8-14 CEMENT CONCRETE SIDEWALKS**  
**(March 23, 2010 Tacoma GSP)**

**8-14.3 Construction Requirements**

**8-14.3(3) Placing and Finishing Concrete**

*The fourth paragraph is revised to read:*

Curb ramps shall be of the type specified in the Plans. The detectable warning pattern shall have the truncated dome shape shown in the Standard Plans.

**8-14.3(4) Curing**

*The second sentence is revised to read:*

Curing shall be in accordance with Section 5-05.3(13).

*Section 8-14 is supplemented with the following:*

**8-14.3(20) Cold Weather Work**

The following additional requirements for placing concrete shall be in effect from November 1 to April 1:

- The Engineer shall be notified at least 24 hours prior to placement of concrete.
- All concrete placement shall be completed no later than 2:00 p.m. each day.
- Where forms have been placed and the subgrade has been subjected to frost, no concrete shall be placed until the ground is completely thawed. At that time, the forms shall be adjusted and subgrade repaired as determined by the Engineer.
- For temperatures under 35 degrees Fahrenheit forecasted within 7 days after pouring, the Contractor shall cover the poured concrete with blankets.

**8-14.3(21) Thickened Edge for Sidewalk**

Thickened edge shall be constructed in accordance with the standard plan.

**8-14.5 Payment**

*The pay item "Cement Conc. Sidewalk" is supplemented with the following:*

All additional costs related to the construction of thickened edges shall be included in the unit contract cost for "Cement Conc. Sidewalk".

*The bid item "Cement Conc. Curb Ramp Type ---", per each is revised to read:*

"Cement Conc. Curb Ramp", per each

The unit Contract price per each for "Cement Conc. Curb Ramp" shall be full pay for installing the complete curb ramp per Plans and Specifications, and as directed by the Engineer, including ramps, landing, flares, wings, and detectable warning surfaces as specified. This bid item shall include all curb ramp types.

1  
2 *The sixth paragraph is revised to read:*

3  
4 Excavation required for the construction of the sidewalk shall be paid for under the unit contract  
5 price for "Roadway Excavation, Incl. Haul" when included in the proposal. Otherwise, the  
6 Contractor shall include all costs associated with excavating, including haul and disposal,  
7 regardless of the depth in the unit contract price for "Cement Conc. Sidewalk" and/or "Cement  
8 Conc. Curb Ramp Type \_\_\_\_".  
9

10  
11 *The sixth paragraph is revised to read:*

12  
13 Excavation required for the construction of the sidewalk shall be paid for under the unit contract  
14 price for "Roadway Excavation, Incl. Haul" when included in the proposal. Otherwise, the  
15 Contractor shall include all costs associated with excavating, including haul and disposal,  
16 regardless of the depth in the unit contract price for "Cement Conc. Sidewalk" and/or "Cement  
17 Conc. Curb Ramp Type \_\_\_\_".  
18

19  
20 **END OF SECTION**  
21  
22  
23

1 **8-20 ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, AND ELECTRICAL**  
2 **(June 14, 2021 Tacoma GSP)**

3  
4 **8-20.1(3) Permitting and Inspections**

5 *The third paragraph is revised to read:*

6  
7 All new services require a Tacoma Public Utilities Permit and inspection by Tacoma Power. All  
8 work on the load side of the service will be inspected by the Signal and Streetlight Shop  
9 Inspector.

10  
11 **8-20.2 Materials**

12 *This section is supplemented with the following:*

13  
14 The Contractor shall warranty all electrical and mechanical equipment described in this section  
15 for satisfactory in service operation for one year following project acceptance. Warranty shall  
16 include troubleshooting, labor, materials and all other costs to bring the equipment to a  
17 satisfactory level of service. Normal maintenance is not included in the warranty.

18  
19 **8-20.2(1) Equipment List and Drawings**

20 *This section is revised to read:*

21  
22 Within 20 days following execution of the Contract, the Contractor shall submit to  
23 the Engineer a completed "Request for Approval of Material" that describes the material  
24 proposed for use to fulfill the Plans and Specifications.

25  
26 The Contractor shall submit Type 2 Working Drawings consisting of supplemental data, sample  
27 articles, or both, of the material proposed for use. Supplemental  
28 data includes such items as catalog cuts, product Specifications, shop drawings, wiring  
29 diagrams, etc.

30  
31 The Contractor shall submit Type 2 Working Drawings consisting of the following information for  
32 each different type of luminaire required on the Contract:

- 33  
34 1. Isocandela diagrams showing vertical light distribution, vertical control limits, and  
35 lateral light distribution classification.  
36 2. Details showing the lamp socket positions with respect to lamp and refractor for each  
37 light distribution type. This requires that the Contracting Agency know what the light  
38 pattern available are and the light distribution.

39  
40 Additional submittals for proposed alternate LED Roadway Luminaires shall be in conformance  
41 with section 9-29.10.

42  
43 The Contractor shall submit for approval Type 3E Working Drawings in accordance with [Section](#)  
44 [1-05.3](#) for each type of light standard and each type of signal standard called for on this project.

45  
46 The Engineer's acceptance of any submitted documentation shall in no way relieve the  
47 Contractor from compliance with the safety and performance requirements as specified herein.

48  
49 Submittals required shall include but not be limited to the following:  
50



1. A Type 2 Working Drawing consisting of a material staging plan, should the Contractor propose Contracting Agency-owned property for staging areas.
2. A Type 2 Working Drawing consisting of a cable vault installation plan showing the exact proposed installation location by Roadway station, offset and the scheduled sequence for each cable vault installation.
3. A Type 2E Working Drawing consisting of a pit plan, for each boring pit, depicting the protection of traffic and pedestrians, pit dimensions, shoring, bracing, struts, walers, sheet piles, conduit skids, and means of attachment, casing type, and casing size.
4. A Type 2E Working Drawing consisting of a boring plan depicting the boring system and entire support system.

### **8-20.3 Construction Requirements**

#### **8-20.3(1) General**

*This section is supplemented with the following:*

The Contractor shall call 24 hours prior for inspection before covering any underground conduit, prior to installing any detection loops, or placing concrete for foundations. For inspections, notify Traffic Signal/Streetlighting at (253) 591-5287.

Work shall be sequenced such that after the new signal is placed in operation, the Contractor shall remove any equipment not required for the operation of the new signal. The Contractor shall remove the old vehicle and pedestrian signal heads immediately after the new system is operational.

For new signals, the contractor shall provide a Portable Message Change Sign in each direction and operate the PMCS for one week before, and one week after activating the new signal. This work shall be paid for in accordance with Section 1-10.

Uniformed police officers shall be provided by the Contractor to direct traffic at any time the signal is not in normal operation. This work shall be paid for in accordance with Section 1-10.

The following existing and temporary equipment shall be deconstructed/removed by the Contractor and delivered to the City of Tacoma Signal/Streetlight Shop located at 3401A South Orchard Street. Care shall be exercised in removing and salvaging the equipment. Any equipment damaged during removal, hauling, and stockpiling shall be repaired or replaced by the Contractor at no expense to the City.

- All signal heads and mounting hardware
- Flashing beacons, and flasher control panel
- Steel poles, mast arms, and hardware
- Aluminum poles, mast arms, and hardware
- Controller cabinets and all internal hardware and wiring
- Vehicle detection systems, including video, microwave, and infrared systems, and associated hardware
- All Opticom equipment or other preemption and priority equipment.
- LED luminaries, LED retrofit kits, and LED lamps
- Ornamental/Decorative fixtures and poles/posts
- Pedestrian signals, poles, and pushbuttons.
- Signs, brackets, and hardware

- Locking junction box security lids, security bolts, and all other wire theft deterrent security hardware

All other equipment shall be removed of and disposed of by the Contractor, including but not limited to the following:

- Wood poles
- All wiring outside of the controller cabinet
- Loops
- Non-LED cobra-head fixtures

#### **8-20.3(4) Foundations**

*This section is supplemented with the following:*

Breakaway Base Connection brackets for pedestrian pushbutton poles (Type PPB) shall be installed with the flanges parallel to the traveled way, as shown on WSDOT standard plan J-20.15-03.

Anchor bolts for streetlight standards and for strain poles shall extend a minimum of two threads and a maximum of six threads above the top heavy-hex-nut. A minimum of three threads shall remain between bottom of the leveling hex-nut and the top of the foundation.

Foundations shall be excavated using an auger and poured against undisturbed material unless otherwise approved by the Engineer. Vacuum excavation should be used where there is a possibility of conflict with utilities or other facilities.

Forming the foundation with galvanized culvert pipe or similar forming methods will only be allowed when soil conditions or other factors make this method of construction necessary and is approved by the Engineer. Biodegradable forming tubes shall be fully removed from the cured concrete prior to backfilling. When using culvert or tubes, the following backfill requirements will apply. The area between the form and undisturbed material shall be filled with CDF. For lightly loaded installations and only with the approval of the Engineer, Crushed Surfacing Top Course meeting the requirements of Section 9-03.9(3) may be used. Placement shall be in accordance with Section 2-09.3(1)E and shall be backfilled and compacted in the presence of the Engineer.

#### **8-20.3(5) Conduit**

##### **8-20.3(5)A General**

*This section is supplemented with the following:*

Unless otherwise specified in the plans and specifications, standard conduit sizes shall be as follows:

- Underground Streetlight Conduit: 2 inch diameter
- Pole Riser Service Installations: 1-1/2 inch diameter
- Traffic Signal Conduit: 3 inch diameter
- Traffic Signal Communication: 3 inch diameter
- All other conduit: 2 inch diameter, unless otherwise specified.

As soon as the mandrel has been pulled through, both ends of the conduit shall be sealed in an approved manner. Location wire, in conformance with 9-29.3(2)A4 and Pull Tape, in conformance with 9-29.1(10), shall be installed in all empty conduits. At least three (3) feet of

the location wire and pull tape shall be neatly coiled and secured to the conduit in the same manner as is shown in Washington State Department of Transportation Standard Plan J-28.70-01, Details A and B.

#### **8-20.3(5)B Conduit Type**

*This section is supplemented with the following:*

Conduit under driveways and other vehicular access ways shall be Schedule 80 high-density polyethylene (HDPE), Schedule 80 PVC, or rigid metal conduit (RMC)

Conduit installed in a joint trench, with power, and that is installed a minimum of 36-inches from finished grade may utilize Schedule 40 PVC in lieu of Schedule 80 PVC. This allowance shall not be construed to permit the use of dissimilar materials in a single run.

Pole riser conduit material types shall be in accordance with applicable City of Tacoma standard plans.

#### **8-20.3(5)D Conduit Placement**

*This Section is supplemented with the following:*

Conduit terminating in pole foundations shall extend to 3 inches below the handhole.

Conduit terminating in controller foundations shall terminate 1 inch above the foundation.

#### **8-20.3(5)E1 Open Trenching**

*Subsection 5 is revised to read:*

5. Trenches located within the paved roadway shall be backfilled with 3 inches of sand over the conduit, followed by material meeting the requirements of Section 9-03.12(3).  
Compaction shall be in conformance with Section 2-09.3(1)E. All street cuts shall be repaired in accordance with the standard plans.

*This section is supplemented with the following new Subsections:*

7. Where multiple conduit are installed in the same trench, the trench shall be of sufficient width to accommodate all conduit, with a minimum 3-inch separation between each conduit, and a minimum clearance of 1-inch on the sides of the trench. When conduit is laid horizontal to one another, the conduit shall be laid at the same elevation, parallel with one another. When conduit is laid vertically in the same trench, conduit spacers shall be used to maintain the 3-inch separation. Spacers shall be installed in accordance with the manufacturer's recommendations for conduit of that size and type. Additional spacers shall be required where the supported conduit is sagging more than 20% of the nominal diameter of the conduit.
8. In all conduit trenches, metallic, detectible, utility warning tape shall be placed at twelve (12) inches below final grade.

#### **8-20.3(6) Junction Boxes, Cable Vaults, and Pull boxes**

*This section is supplemented with the following:*

Unless otherwise specified in the plans, or as otherwise directed by the engineer, all junction boxes exposed to vehicular traffic shall be Heavy-Duty. Field adjustment of junction boxes,

1 which cause junction boxes to be installed within an intersection radius and within four feet of  
2 the curb face may be required to be Heavy-Duty. Final placement and type of all junction boxes  
3 within an intersection shall be as directed by the Engineer.

4  
5 Adjacent junction boxes shall be separated by a minimum of three-inches.

6  
7 Concrete meeting the requirements of 6-02.3(2)B shall be placed surrounding all junction boxes  
8 except as otherwise provided for below. Concrete shall be flush with the top of the junction box  
9 and the adjacent improvements. Concrete shall be cast in place. Junction boxes shall be  
10 secured with the concrete border as follows:

- 11
- 12 1. When the junction box is located within a concrete or asphalt section and is located a  
13 minimum of 12-inches from the edge of the section, a concrete border will not be  
14 required.
  - 15 2. Where junction boxes are located within 12-inches from the edge of the concrete or  
16 asphalt section, the junction box shall be secured on all sides with a minimum 12-inch wide,  
17 6-inch deep concrete section. Concrete shall be finished in the same manner as the  
18 adjacent concrete where applicable.
  - 19 3. Where junction boxes are located within a planter strip, a landscaped area, or other non-  
20 hardened surface, the junction box shall be bordered on all sides with a minimum 6-inch  
21 wide, 12-inch deep concrete section flush with the top of the junction box.
- 22

23 When setting a new junction box on an existing streetlight circuit where no equipment ground is  
24 present, a non-conductive junction box and lid shall be utilized.

25  
26 All junction box lids for illumination systems shall be welded in place using two one and one-half  
27 inch long welds on opposite corners of the junction box lid and frame. Welding shall occur after  
28 inspection and testing of the illumination system and confirmation from the Engineer. An  
29 Illumination System may consist of a separate illumination service or circuit.

30  
31 When an existing junction is noted to be replaced or relocated, the contractor shall confirm the  
32 existing type of junction and replace or relocate in-kind.

33  
34 **8-20.3(7) Messenger Cable, Fittings**

35 *The second paragraph of this section is deleted.*

36  
37 *This section is supplemented with the following:*

38  
39 Cable ties shall be used to neatly secure the signal cable to the span wire at 10-inch centers  
40 and shall be tightened at top. Excess tie material shall be completely cut off. The signal control  
41 cable shall be below the span wire and shall be straight with no twisting or spiraling.

42  
43 A minimum 5% sag shall be provided in the span wire when fully loaded with all vehicular signal  
44 heads, unless otherwise directed by the Engineer.

45  
46 **8-20.3(8) Wiring**

47 *The third paragraph is revised to read:*

48  
49 All splices in underground illumination circuits, induction loop circuits, and magnetometer  
50 circuits shall be installed at junction boxes. The only splice allowed in an induction loop circuit

1 shall be the shielded cable to loop wire splice. The only splice allowed in a magnetometer  
2 circuit shall be the probe lead-in cable to the magnetometer cable splice.

3  
4 Induction loop splices and magnetometer splices shall be heat shrink type with moisture  
5 blocking material, sized for the conductors. Magnetometer and induction loop splices shall be  
6 soldered. The end of the sheathing shall be sealed with a heat shrink insulator.

7  
8 *The fourth paragraph is revised to read:*

9  
10 Signal wiring shall be in conformance with the following:

- 11 1. All termination for traffic signal control systems shall be in accordance with City of  
12 Tacoma Standard Plan TS-15.
- 13 2. All signal wiring shall be 14 gauge 5-conductor or 12 gauge 2-conductor stranded  
14 copper wire unless otherwise shown in the plans.
- 15 3. For 5-section heads, 2-5c-14 gauge conductors shall be utilized.
- 16 4. 5c wire shall not be split between high voltage and low voltage. Where a pedestrian  
17 head and a pedestrian push button share a common pole, a separate 2c shall be  
18 pulled in for the push button.
- 19 5. A single 5c may be split between two pedestrian heads on a common pole with a  
20 jumper across the neutral.
- 21 6. Opticom and detection wiring shall be per manufacturer's recommendations.

22  
23  
24 Field wiring of the cabinet shall be done by City of Tacoma Signal Electricians after all wiring  
25 has been pulled into the cabinet and properly labeled with a temporary label consisting of white  
26 electricians tape with permanent marker. The Contractor shall provide a detailed  
27 description/key of all temporary labeling. The cabinet and labeling shall be inspected by the  
28 Signal/Streetlight inspector prior to cabinet wiring. The Contractor shall allow five working days  
29 for City Electricians to field wire the cabinet after the inspection is complete. Improper or  
30 incorrect labeling requiring additional effort by the City may result in additional time required by  
31 City forces to wire the cabinet.

32  
33 *The fifth paragraph is revised to read:*

34  
35 Splices and taps on underground and overhead circuits shall be made with solderless crimp  
36 connectors, installed with an approved tool designed for the purpose, to securely join the wires  
37 both mechanically and electrically. Splices and taps will be sealed in accordance with this  
38 section.

39  
40 *The seventh paragraph is revised to read:*

41  
42 Aerial illumination splices shall be taped with thermoplastic electrical insulating tape equivalent  
43 to the original wire insulation rating and thickness. It shall be well lapped over the original  
44 insulation.

45  
46 *The eighth paragraph is revised to read:*

47  
48 All splices in junction boxes and handholes shall be taped and sealed with an electrical coating.  
49 Tape splice insulation shall consist of thermoplastic electrical insulating tape equivalent to the  
50 original wire insulation rating and thickness. It shall be well lapped over the original insulation  
51 and moisture resistant electrical coating shall be applied and allowed to dry. Two layers of

thermoplastic tape will then be applied, followed by a second layer of moisture resistant electrical coating.

*The ninth paragraph is revised to read:*

Illumination cable in light standards shall be #10 AWG USE or "Pole and Bracket" cable, as specified in Section 9-29.3(2)D of the Standard Specifications.

*The tenth paragraph is revised to read:*

Fifteen (15) feet of slack cable shall be provided at the controller end of all cables terminating in the controller cabinet. A minimum of three (3) feet of slack cable shall be left at all strain poles and junction boxes.

#### **8-20.3(10) Service, Transformer, and Intelligent Transportation System (ITS) Cabinets**

*The second, third, and fifth paragraphs are deleted.*

#### **8-20.3(13) Illumination Systems**

##### **8-20.3(13)A Light Standards**

*The sixth, seventh, and eighth paragraphs (regarding pole identification numbers) are deleted.*

*This section is supplemented with the following:*

Conventional Base installation shall conform to the following:

The light standards shall be assembled and mounted complete on foundations perfectly straight and in good alignment. Proper leveling of the standards shall be accomplished by means of four leveling nuts that are to be employed with the anchor bolts. Standards shall be plumb within 1/50-inch per foot.

Luminaires shall be securely attached to the mast arm in a straight and level position. The luminaires shall be installed at a specified number of degrees from level if directed by the Engineer. After the poles are plumbed, grout shall be neatly placed between the pole base and the concrete. The Contractor shall form a 1/2-inch diameter weep hole in the grout. The nuts and bolts required for this foundation shall be furnished by the Contractor.

All above grade signal and streetlight infrastructure, including streetlight standards, traffic signal poles, push-button poles, cabinets, and enclosures, shall not be installed closer than three (3) feet from face of curb to the nearest part of the pole or structure and no closer than five (5) feet from fire hydrants and utility poles.

##### **8-20.3(13)B Vacant**

*This vacant section is renamed and replaced with the following:*

##### **8-20.3(13)B Temporary Lighting**

*This section is supplemented with the following*

The Contractor shall schedule the work to minimize the outage between any existing lights and new lights. The temporary lighting shall be installed and operational before the existing lighting is removed from service. Temporary lighting shall be provided by the Contractor. City Signal/Streetlight Maintenance Crews will hot splice the final connection or connections. The Contractor shall provide 72 hours notice to schedule the City crews for the hot splicing.

1  
2 **8-20.3(13)C Luminaires**

3 *This section is supplemented with the following:*

4  
5 All luminaires supplied by the project shall be identified with a green "H-1" label on the bottom of  
6 the luminaire. H-1 labels can be obtained at the Signal and Streetlight shop or through the  
7 Signal and Streetlight Inspector.

8  
9 **8-20.3(14) Signal Systems**

10  
11 **8-20.3(14)A Signal Controllers**

12 *This section is revised to read:*

13  
14 The fully wired control cabinet, the controller, the MMU, and detection hardware for the cabinet  
15 shall be delivered to the City of Tacoma Traffic Signal Shop for configuration, programming,  
16 testing, and certification prior to installation. At the Contractor's request, the City will off load the  
17 equipment. The Contractor shall notify the City 24 hours in advance of the equipment delivery.

18  
19 A minimum of two weeks shall be required for the City to configure and test the cabinet and  
20 controller for each intersection. If multiple cabinets and controllers are delivered, the Contractor  
21 shall identify the sequence for configuration and allow one additional week for each additional  
22 cabinet and controller delivered.

23  
24 The Contractor shall be responsible for transporting the controller cabinet from the  
25 Signal/Streetlight Shop site to the jobsite, and for installation of the cabinet and all field wiring.  
26 Field wiring shall be performed in accordance with 8-20.3(8) and as directed by City of Tacoma  
27 Signal and Streetlight personnel in the field.

28  
29 **8-20.3(14)B Signal Heads**

30 *This section is supplemented with the following:*

31  
32 For span wire installation, the red indications shall be leveled to within 1 inch for each direction  
33 as approved by the City. The height to the bottom of the lowest head shall be 17 feet, plus or  
34 minus 3 inches. Height to the bottom of the lowest four-section or five-section head shall be a  
35 minimum of 16 feet-3 inches, plus or minus 3 inches.

36  
37 For span wire installation, the signal stem (drop pipe) shall be 1 to 3 feet long unless otherwise  
38 approved by the Engineer.

39  
40 **8-20.3(14)C Induction Loop Vehicle Detectors**

41 *Subsections 2, 4, 9, and 10 are deleted.*

42  
43 **8-20.3(14)E Signal Standards**

44 *This section is supplemented with the following:*

45  
46 Unless otherwise shown in the plans, a terminal cabinet shall be installed on all new traffic  
47 signal strain poles and traffic signal mast arm standards. Where modifications to existing signal  
48 systems include replacement, addition, or modifications to existing signal head wiring, a terminal  
49 cabinet shall be added to the existing strain pole or mast arm standard.

For strain poles and mast arm poles supporting signal indications for one leg of the intersection, an 8" deep, 16" high, and 12" wide terminal cabinet shall be installed. For strain poles and mast arm poles supporting signal indications for two or more legs of the intersection an 8" deep, 24" high, and 18" wide terminal cabinet shall be installed.

Terminal cabinets shall be in conformance with 9-29.25.

*Section 8-20.3(14) is supplemented with the following new section:*

**8-20.3(14)F Thermal, Microwave, Fish-Eye, and LED Optical Vehicle Detection**

A representative from the City of Tacoma Signal and Streetlight operations shop shall be on site during all work within the signal cabinet. The Contractor shall notify the Engineer two working days in advance of work within the cabinet.

The Contractor shall install and test the detection system in accordance with the manufacturer's recommendations and these special provisions. Detection units shall be mounted and all cabling shall be in accordance with the manufacture's recommendations. The installation shall include all field equipment as well as all equipment required in the controller cabinet.

Detection unit locations as shown on the plans are approximate. Detection units shall be mounted at a sufficient height to prevent occlusion from cross traffic. Detection units shall be field adjusted as directed by the Engineer and equipment manufacturer for maximum coverage. A factory-certified representative of the equipment manufacturer shall inspect and provide a written verification that the installation has been performed in accordance with the manufacturers requirements.

The factory-certified representative of the equipment manufacturer shall supervise all testing of the equipment and shall provide written documentation showing acceptance of the testing and verification that the system is a complete, fully functional system.

All equipment shall be warranted against manufacturing defects in materials and workmanship for a period of 3 years from the date of signal turn-on.

**8-20.3(17)B "As Built" Plans**

*This section is supplemented with the following:*

These drawings shall show the routing of all underground conduits. The locations of the conduit shall be dimensioned with a precision and accuracy of 1 foot.

**8-20.4 Measurement**

*This section is revised to read:*

When a bid item is shown as a Pedestrian-Activated Crosswalk Beacon System, lump sum in the proposal, no specific unit of measurement will apply, but measurement will be for the sum total of all items for a complete system to be furnished and installed in accordance with approved methods, the Plans, the Special Provisions, and these Specifications.

**8-20.5 Payment**

*This section is supplemented with the following:*

Payment will be made for the following Bid items that are included in the Proposal:



1  
2 "Pedestrian-Activated Crosswalk Beacon System, S 40<sup>th</sup> & M St., Complete", lump sum  
3 "Pedestrian-Activated Crosswalk Beacon System, S 60<sup>th</sup> & Oakes St., Complete", lump sum  
4

5 The lump sum Contract price for "Pedestrian-Activated Crosswalk Beacon System" shall full pay  
6 for the construction of the complete electrical and beacon system as described above and as  
7 shown in the Plans, and herein specified, including fb poles, ppb poles, junction boxes,  
8 excavation, backfilling, concrete foundations, conduit, wiring, restoring facilities destroyed or  
9 damaged during construction, salvaging existing materials, and for making all required tests. All  
10 additional materials, and labor, not shown in the Plans or call for herein and which are required to  
11 complete the electrical and beacon system, shall be included in the lump sum Contract price.  
12

13 "Remove and Relocate Junction Box", per each.  
14

15 The unit Contract price per each for "Remove and Relocate Junction Box" shall be full pay for all  
16 work to remove the existing junction box, replacing or new placement of the junction box with  
17 the specified type as shown in the Plans or as directed by the Engineer. The costs for this work  
18 shall include all handling, hauling, disposing, furnishing, excavation, and placing the junction  
19 box. Any work to restore facilities, such as but not limited to, providing conduit, rerouting  
20 conduit, pulling wire, reconnecting the system and testing the system as directed by the  
21 Engineer shall be included in this bid item.  
22

23 Prior to removing any junction boxes noted to replacement or relocation, the Contractor shall  
24 confirm the existing junction box type. All relocated and replaced junction boxes shall be of the  
25 same kind as the existing junction box.  
26  
27  
28  
29  
30  
31

32 **END OF SECTION**  
33

1 **8-22 PAVEMENT MARKING**  
2 **(April 1, 2018 Tacoma GSP)**  
3

4 **8-22.1 Description**

5 *This section is supplemented with the following:*  
6

7 **Chevrons**

8 A "Chevron" shall be provided on speed humps for each approach. For a street width less than  
9 28 feet, the "Chevron" shall start at the edge of roadway (gutter line). For a street width greater  
10 than 28 feet, the "Chevron" shall start at the center of the roadway. Refer to details specified  
11 within the plans. Chevrons shall be provided along bike lane buffers at locations specified on  
12 the plans or as directed by the Engineer.  
13

14 **Green Durable Product**

15 Green Durable Product shall be provided at locations identified on the plans such as "Bike Box"  
16 and "Bike Transition Lane" locations and as directed by the Engineer. Refer to details specified  
17 within these plans and specifications. The product shall be a durable, color stable, non-slip  
18 surface.  
19

20 **Sharrow Pavement Marking**

21 Sharrow pavement marking shall be provided at locations identified in the plans. Refer to City  
22 of Tacoma Standard Plan CH-11 and/or other details specified within these plans and  
23 specifications. The product shall be a durable, color stable, non-slip surface.  
24

25 **8-22.2 Materials**

26 *This section is supplemented with the following:*  
27

28 All legends and arrows including "Plastic Arrow", "Plastic Sharrow Symbol", and "Plastic Letter"  
29 markings shall be a Preformed retro-reflective thermoplastic pavement marking material  
30 incorporating a pre-applied bead coating that can be adhered to asphalt, concrete and Portland  
31 Cement Concrete pavements by means of heat fusion. All "Plastic Chevron", "Plastic Crosswalk  
32 Line", and "Plastic Stop Line" shall be hot applied thermoplastic. The applied markings shall be  
33 very durable, oil and grease impervious, and provide immediate and continuing retro-reflectivity  
34 meeting the requirements of Section 9-34.3(2).  
35

36 "Green Durable Product" materials shall meet the requirements of section 9-34.3(4) for MMA.  
37

38 Materials used for curb paint shall be the same as for pavement marking paint per Section 9-  
39 34.2.  
40

41 **8-22.3 Construction Requirements**  
42

43 **8-22.3(3)E Installation**

44 *This section is supplemented with the following for applying Type B material:*  
45

46 **Effective Performance Life:** When properly applied, in accordance with manufacturer's  
47 instructions, the preformed marking materials shall be neat and durable. The markings shall  
48 remain skid resistant and show no lifting, shrinkage, tearing, roll back, or other signs of poor  
49 adhesion.  
50

1 **Packaging:** The flexible preformed marking material, for use as transverse or bike symbols as  
2 well as legends, shall be available in flat form material up to a maximum of 2 foot width by 4 foot  
3 length. The material shall be packed in suitable cartons clearly labeled for ease of identifying  
4 the contents. Packaging shall not use plastic liners within to separate material from itself.  
5 Product packaging shall identify part number and mil thickness.  
6

7 **Material Replacement Provisions:** Any properly applied preformed marking materials that  
8 shall smear or soften independent of pavement movement or condition within a period of one  
9 year from date of application shall be replaced by the supplier.  
10

11 **Installation:** The preformed marking materials shall be applied in accordance with the  
12 manufacturer's recommendations on clean and dry surfaces. New Portland concrete cement  
13 surfaces must be sandblasted to entirely remove curing compound. Marking configuration shall  
14 be in accordance with the "Manual on Uniform Traffic Control Devices," where applicable.  
15

16 **New Surfaces:** Preformed marking materials specified for newly paved asphalt road surfaces  
17 shall be capable of being applied as the original permanent marking on the day the surface is  
18 paved.  
19

20 **Fusion:** The preformed marking materials shall be fusible to the pavement by means of a  
21 propane torch recommended by the manufacturer.  
22

23 **Technical Services:** The supplier shall provide technical services as may be required.  
24

#### 25 **8-22.3(3)F Application Thickness**

26 *The Section is supplemented with the following:*  
27

28 **Green Durable Product:** Approximately 4.2 Gallon mixture of Green colored MMA,  
29 hardwearing aggregate, and catalyst should cover 70-75 SF at 90 mils thickness.  
30

#### 31 **8-22.3(4) Tolerances for Lines**

32 *The allowable tolerance for "Length of Line" is revised to read:*  
33

34 **Length of Line:** The longitudinal accumulative error within a 32-foot length of skip stripe shall  
35 not exceed plus or minus 1 inch.  
36

#### 37 **8-22.4 Measurement**

38 *The last sentence of the sixth paragraph is revised to read:*  
39

40 Crosswalk lines will be measured by the linear foot of marking installed.  
41

42 *This section is supplemented with the following:*  
43

44 Plastic Chevrons will be measure by each chevron symbol installed.  
45

46 Green Durable Products will be measured by the square foot of marking area installed.  
47

48 Painted curb will be measured by the linear foot of curb line as "Painted Curb."  
49

50 Plastic Sharrow Symbols will be measured by each typical sharrow symbol installed.  
51

1 **8-22.5 Payment**

2 *This section is supplemented with the following:*

3  
4 "Painted Crosswalk Line", per linear foot.

5  
6 "Plastic Crosswalk Line", per linear foot.

7  
8 "Painted Curb", per linear foot.

9  
10 "Green Durable Product", per square foot.

11  
12 "Plastic Chevron Symbol". Per each.

13  
14 "Plastic Sharrow Symbol", per each.

15  
16 "Remove Paint Line", per linear foot.

17  
18 "Remove Traffic Marking," per each.

19  
20 **END OF SECTION**

21

## **8-40 TRAFFIC CIRCLE**

### **8-40.1 Description**

This Work consists of installing Traffic Circles as shown in on the Plans.

### **8-40.2 Materials**

Materials shall meet the requirements of the following sections:

Cement	9-01
Aggregates	9-03
Premolded Joint Filler	9-04.1
Corrosion Resistant Dowel Bars	9-07.5(2)
Raised Pavement Marker	9-21
Concrete Curing Materials and Admixtures	9-23
Epoxy Resins	9-26

### **8-40.3 Construction**

The Traffic Circles shall be constructed as detailed in the Plans. The locations for the Traffic Circles are shown in the Plans.

#### **8-40.3(1) Cold Weather Work**

The following additional requirements for placing concrete shall be in effect from November 1 to April 1:

- The Engineer shall be notified at least 24 hours prior to placement of concrete.
- All concrete placement shall be completed no later than 2:00 p.m. each day.
- Where forms have been placed and the subgrade has been subjected to frost, no concrete shall be placed until the ground is completely thawed. At that time, the forms shall be adjusted and subgrade repaired as determined by the Engineer.
- For temperatures under 35 degrees Fahrenheit forecasted within 7 days after pouring, the Contractor shall cover the poured concrete with blankets.

### **8-40.4 Measurement**

Traffic Circles shall be measured per each traffic circle installed.

### **8-40.5 Payment**

"Traffic Circle" per each.

The unit Contract price per each for "Traffic Circle" shall be full pay for a material, labor, time necessary to install the Traffic Circle as detailed in the Plans. This includes but is not limited to all topsoil, compaction, curb, raised pavement markers, dowels, and all other items shown in the detail on the Plans or as directed by the Engineer.

**END OF SECTION**

**9-03 AGGREGATES**  
**(September 20, 2018 Tacoma GSP)**

**9-03.1 Aggregates for Portland Cement Concrete**

**9-03.1(1) General Requirements**  
**(June 16, 2016 Tacoma GSP)**

*The seventh paragraph is deleted*

**9-03.6 Vacant**  
**(Jun 16, 2016 Tacoma GSP)**

*This section, including the title, is revised to read:*

**9-03.6 Aggregates for Asphalt Treated Base (ATB)**

**9-03.6(1) General Requirements**

Aggregates for asphalt treated base shall be manufactured from ledge rock, talus, or gravel, in accordance with the provisions of Section 3-01 that meet the following test requirements:

Los Angeles Wear, 500 Rev. 30% max.  
Degradation Factor 15 min.

**9-03.6(2) Grading**

Aggregates for asphalt treated base shall meet the following requirements for grading:

Sieve Size	Percent Passing
2"	100
1½"	56-100
No. 4	32-72
No. 10	22-57
No. 40	8-32
No. 200	2.0-9.0

All percentages are by weight.

**9-03.6(3) Test Requirements**

When the aggregates are combined within the limits set forth in Section 9-03.6(2) and mixed in the laboratory with the designated grade of asphalt, the mixture shall be capable of meeting the following test values:

% of Theoretical Maximum Specific Gravity (GMM) (approximate)	93@
100 gyrations	
AASHTO T324, WSDOT TM T718 or ASTM D3625	Pass
(Acceptable anti-strip evaluation tests)	

The sand equivalent value of the mineral aggregate for asphalt treated base (ATB) shall not be less than 35.

### **9-03.8 Aggregates for Hot Mix Asphalt (March 9, 2016 APWA GSP)**

*Supplement section 9-03.8 with the following:*

### **Aggregates for Porous Hot Mix Asphalt/Porous Warm Mix Asphalt (PHMA/PWMA) General Requirements**

Aggregates for Porous Hot Mix Asphalt (PHMA) or Porous Warm Mix Asphalt (PWMA) shall be manufactured from ledge rock, talus, or gravel, in accordance with the provisions of Section 3-01 that meet the following test requirements:

Los Angeles Wear, 500 Rev. 30% max.  
Degradation Factor 15 min.

### **Grading**

Aggregates for PHMA/PWMA shall meet the following requirements for grading:

<b>Sieve Size</b>	<b>Percent Passing*</b>
¾" square	100
½" square	90 - 100
⅜" square	55 - 90
U.S. No. 4	10 - 40
U.S. No. 8	0 - 20
U.S. No. 40	0 - 13
U.S. No. 200	0 - 5

\* All percentages are by weight.

The aggregate for PHMA/PWMA shall consist of crushed stone with a percent fracture greater than 90% on two faces on the No. 4 sieve and above, and shall be tested in accordance with the field operating procedures for AASHTO T 335.

### **9-03.12 Gravel Backfill**

*Add the following new Section:*

### **9-03.12(10) Pea Gravel (September 20, 2018 Tacoma GSP)**

<b>Sieve Size</b>	<b>Percent Passing*</b>
¾" square	100
⅜" square	95-100
U.S. No. 8	0 - 10
U.S. No. 200	0 - 3

Sand Equivalent 35 Minimum

\* All percentages are by weight

1 **9-03.21 Recycled Material**

2  
3 **9-03.21(1) General Requirements**  
4 **(Jun 16, 2016 Tacoma GSP)**

5 *This section is supplemented with the following:*

6  
7 Recycled materials will only be permitted upon approval of the Engineer. Recycled concrete  
8 shall not be permitted for use as pipe zone backfill, backfill above pipe zone, and extra  
9 excavation area backfill material.

10  
11  
12 **END OF SECTION**  
13



## 9-14 EROSION CONTROL AND ROADSIDE PLANTING

(\*\*\*\*\*)

### 9-14.2 Topsoil

#### 9-14.2(1) Topsoil Type A

*This Section is revised to read:*

Topsoil Type A shall meet the following requirements:

- The source Topsoil shall be friable and loamy, and can contain loam, sandy loam, silty loam, clay loam, or a sandy clay loam.
- Topsoil shall be organically amended with Compost before delivery to the job site, and the Compost shall conform to Special Provision 9-14.5(8).
- The amended Topsoil shall have minimum 10% organic matter for use in planting beds.
- The amended Topsoil shall have minimum 5% organic matter for grass seeding and lawn areas.
- The pH shall be between 6.0 and 8.0.
- The amended Topsoil shall have maximum 25% passing the #200 sieve.
- The amended Topsoil shall not exhibit visible water or dust during handling.

### 9-14.4 Mulch and Amendments

#### 9-14.4(3) Bark or Wood Chips

*This section is supplemented with the following:*

Bark or Wood Chip mulch shall be Arborist Wood Chip Mulch (AWCM).

1. **Quality:** Arborist Wood Chip Mulch shall be coarse ground wood chips (approximately ½" to 6" along the longest dimension) derived from the mechanical grinding or shredding of the above-ground portions of trees. It may contain wood, wood fiber, bark, branches, and leaves; but may not contain visible amounts of soil. It shall be free of weeds and weed seeds including but not limited to the plants on the Pierce County Noxious Weed list available at: [www.piercecountyweedboard.wsu.edu](http://www.piercecountyweedboard.wsu.edu), and shall be free of invasive plant portions capable of resprouting, including but not limited to horsetail, ivy, clematis, knotweed, etc. It may not contain more than ½% by weight of manufactured inert material (plastic, concrete, ceramics, metal, etc.).
2. **Gradation.** Arborist Wood Chip Mulch, when tested, shall meet the following loose volume gradation:

Sieve Size	Percent Passing	
	Minimum	Maximum
2"	95	100
1"	70	100
5/8"	0	50
1/4"	0	40

No Particles may be longer than eight inches.

3. **Submittals.** At the Engineer's request, prior to delivery the contractor shall provide the following:

- a. The source of the product and the species of trees included in it;
- b. A sieve analysis verifying the product meets the above size gradation requirement; and,
- c. A 5 gallon sample of the product, for the Engineer's approval.

#### **9-14.5(8) Compost**

*This Section is supplemented with the following:*

The Compost supplier shall produce Compost from a certified composting facility. Certified compost facilities are included on a list and an interactive map available on the Washington State Department of Ecology Composting website:

<https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Organic-materials/Managing-organics-compost>

Compost shall meet the definition for "composted material" per WAC 173-350-100 and comply with standards in WAC 173-350-220, except the feedstock may contain bio solids or manure feed stocks. City of Tacoma TAGRO Potting Soil Mix, which is derived from the municipal solid waste compost program, can be used as Compost or shall be added as part of the Compost mix.

Compost shall meet the following additional criteria:

- No visible water or dust during handling
- 40% minimum to 65% maximum organic content per TMECC
- Carbon to Nitrogen ratio below 25:1, or up to 35:1 for plants native to Puget Sound lowland region, or up to 40% as a coarse compost for surface mulch only.

For use as Topsoil amendment in BMP L613, Post Construction Soil Quality and Depth

Compost shall meet the following additional criteria:

- The Compost must originate from a feedstock that contains compost derived from municipal solid waste compost programs. Those facilities that produce compost from food waste post consumer, yard debris, and food scraps can be found on this [Department of Ecology WA composting facilities and material types table](#).

The compost must originate from a feedstock that has a minimum of 65% recycled plant waste comprised of "yard debris", "crop residues", and "bulking agents". A maximum of 35% post-consumer food waste can be substituted for recycled plant waste. The Compost may have up to 35% bio solids or manure. Percentages are specified by volume. Quoted terms are defined in WAC 173-350-100.

- Stable and mature per TMECC, meaning the Compost tests results show low oxygen use and low CO2 generation, and as capable of supporting plant growth.
- Use a Fine Compost per gradation in Section 9-14.5(8).
- Refer to Standard Plan series GSI-01b through GSI-01d for application.

Detailed BMP specific Compost Specifications are referred to in the City of Tacoma Stormwater Management Manual, Chapter 21.9, A900 – Compost.

**END OF SECTION**

1 **9-28 SIGNING MATERIALS AND FABRICATION**  
2 **(April 1, 2012 Tacoma GSP)**  
3

4 **9-28.1 General**

5 *The second sentence of the first paragraph is hereby revised to read:*  
6

7 Permanent signs which measure 36 inches or less on a side and are to be mounted on a single  
8 post shall be constructed of single 0.080-inch aluminum panels.  
9

10 *The third sentence of the first paragraph is hereby revised to read:*  
11

12 Sign overlay panels shall be 0.050-inch aluminum panels.  
13

14 **9-28.9 Fiberglass Reinforced Plastic Signs**

15 *This section is deleted in its entirety.*  
16  
17

18 **END OF SECTION**  
19  
20

1 **9-29 ILLUMINATION, SIGNALS, ELECTRICAL**  
2 **(June 14, 2021 Tacoma GSP)**  
3

4 **9-29.1(6) Detectable Underground Warning Tape**

5 *This section is supplemented with the following:*  
6

7 For electrical circuits detectable underground warning tape shall be high visibility red, with  
8 continuous legend of "Caution Electric Line Buried Below" or equal. The warning tape shall be  
9 polyethylene with a metallic backing. The polyethylene shall be a minimum 3 inches wide, 4 mils  
10 thick.

11  
12 **9-29.2 Junction Boxes, Cable Vaults and Pull Boxes**  
13

14 Unless otherwise specified, all junction boxes containing illumination and signal control cable  
15 shall be Type 1, Standard Duty with alternate 2 locking lid per state standard plan J-40.10-02.  
16

17 Unless otherwise specified, all junction boxes containing interconnect cabling shall be Type 2,  
18 Standard Duty with alternate 2 locking lid per state standard plan J-40.10-02.  
19

20 **9-29.2(4) Cover Markings**

21 *The second paragraph of this section is revised to read:*  
22

23 Covers shall be marked or embossed with "LT" for boxes containing illumination circuits.  
24 Covers shall be marked or embossed with "TS" for boxes containing traffic signal circuits  
25

26 **9-29.3 Fiber Optic Cable, Electrical Conductors, and Cable**

27 *This section is supplemented with the following:*  
28

29 Where not otherwise specified, all wiring shall meet standard of the industry for the application  
30 employed. Wiring shall be consistent with manufacturers' recommendations and meet all  
31 applicable codes.  
32

33 **9-29.3(1) Fiber Optic Cable**

34 *This section is supplemented with the following:*  
35

36 Unless otherwise specified, all fiber optic trunk communication lines (lines between  
37 intersections) shall be 24 count singlemode fiber optic cable. Fiber Optic cables connecting the  
38 Fiber Optic Termination Panel in the signal cabinet to the Fiber Optic Splice Closure in the  
39 signal communications junction box shall be 6 count singlemode fiber optic cable.

40 *This section is supplemented with the following New Sections:*  
41

42 **9-29.3(1)C Sealed Fiber Optic Splice Closures**  
43

44 Fiber optic splice closure shall be a sealed dome closure designed for small count fiber splicing  
45 in a butt configuration. Splice closure shall be fully sealed and suitable for aerial and  
46 underground environments. Splice closure shall be able to receive up to 5 cables with an  
47 outside diameter between 0.30 inches and 0.62 inches and shall be fully kitted with all parts  
48 required to enable installation. Splice closure shall support stranded loose tube or ribbon fiber  
49 cables in either armored or dielectric configurations. Splice closure shall require only a common  
50 can wrench for installation and re-entry. Splice closure shall be a maximum of 18.25 inches  
51 long with a maximum diameter of 8.75 inches.

Splice trays shall be of the same manufacturer as the splice closure, and designed to operate with the specific splice closure provided. Splice closure shall house between 1 and 4 splice trays with a splice capacity of 12 mechanical fused single splices in each tray for a maximum splice capacity of 48 mechanical fused single splices. One splice tray shall be provided with each splice closure unless otherwise identified in the project documents.

Cable grounding kits shall be of the same manufacturer as the splice closure, and designed to operate with the specific splice closure provided. Cable grounding kits shall be installed in accordance with the manufacturer's recommendations.

Splice closure shall be designed and tested to Telcordia® GR-771 requirements Splice closure shall be Rural Utilities Service (RUS) Listed.

### **9-29.3(1)D Fiber Optic Termination Box**

Unless otherwise specified, all fiber optic termination boxes located in signal cabinets shall be Fibertronics FOTB-6-12.

One coupler/adaptor shall be provided and installed in the fiber optic termination box. Coupler shall be a female LC duplex to female LC duplex coupler designed for installation in a standard 12.8mm x 9.3mm adaptor port. Coupler color shall be blue, consistent with singlemode OS2 installations. Coupler shall be installed in the last (right most) adaptor port of the termination box and secured with 2 M2x6mm Philips head screws.

Two pre-terminated patch cables shall be provided, one 1-foot (0.3m) in length, and one 6 feet (2m) in length. Patch cables shall be LC duplex singlemode OS2 9/125 fiber patch cables and rated for indoor/outdoor use. Patch cables shall have a yellow colored 3mm diameter jacket, and blue LC duplex connectors, consistent with singlemode OS2 installations.

### **9-29.3(2)A Single Conductor**

#### **9-29.3(2)A1 Single Conductor Current Carrying**

*This section is supplementing with the following:*

Service connections shall be stranded copper size AWG #6 USE unless otherwise shown in the plans. Black conductor insulation shall be used for the service and the neutral conductor shall be white. Color tape marking shall not be acceptable for the neutral conductor.

#### **9-29.3(2)A2 Grounding Electrode Conductor**

*This section is supplemented with the following:*

Grounding electrode conductor shall be minimum #8 AWG unless otherwise shown in the plans. When the ground is pulled through a conduit, the wire shall be insulated. Color tape marking shall not be acceptable for marking the ground.

#### **9-29.3(2)A3 Equipment Grounding and Bonding Conductors**

*This section is supplemented with the following:*

Equipment grounding shall be minimum #8 AWG unless otherwise shown in the plans. When the ground is pulled through a conduit, the wire shall be insulated. Color tape marking shall not be acceptable for marking the ground.

**9-29.3(2)B Multi-Conductor Cable**

*This section is supplemented with the following:*

Two-conductor through 10-conductor unshielded signal control cable, shall have stranded copper conductors, size AWG 14, and shall conform to International Municipal Signal Association (IMSA) signal cable 20-1.

**9-29.3(2)F Detector Loop Wire**

*This section is revised to read:*

The loop wire shall be IMSA 51-7, #14 AWG, encased in an orange colored HDPE jacket. Shielded loop lead-in wire shall be #18 stranded tinned-copper, twisted pair, 2 conductor cable with polyethylene insulation, conductors cabled, and shall have aluminum-polyester foil-shield furnished in 100% coverage, stranded tinned-copper drain wire and an overall chrome-vinyl jacket.

**9-29.3(2)I Twisted Pair Communication Cable**

*This section is revised to read:*

The cable for interconnect for underground installation shall be IMSA 40-2 #19 AWG 6 twisted pair, shielded, PE outer jacket or IMSA 40-4 #19 AWG 6 twisted pair, figure 8, shielded, PE outer jacket for overhead installation.

**9-29.4 Messenger Cable, Fittings**

*This section is supplemented with the following:*

Messenger cable shall be 5/16-inch, seven-wire strand messenger cables conforming to ASTM A 475, extra-high strength grade, 11,200 lbs. min. breaking strength, Class B galvanized.

All guy eye anchor rods shall be double-hub type.

Weatherheads shall be clamp-on type PVC. Where used for signal or flashing beacon conductors, the center of the wire entrance shall be cut or machined out to a large diameter to accommodate entry of multi-conductors. All edges shall be smoothed to avoid chaffing.

All miscellaneous nuts, bolts, washers and fittings shall be stainless steel or brass unless otherwise noted.

All metal line hardware shall be hot-dipped galvanized in conformance with the requirements of ASTM Designation A-153. All eyebolts shall be thimble eye design cast or welded to form a solid eye.

5-strand, class B galvanized steel, pretwisted guy strand dead ends, high strength cable conforming to ASTM Designation A-475, shall be utilized at all span wire terminations. 1/2" rope wire thimbles shall be required where span wire connects to all poles or bull rings, except where thimble eye bolts are used. Span wire shall normally be installed directly pole to pole, unless otherwise directed or specified.

Strain insulators shall be installed where connecting to wood poles. Where span wire is connected to a steel or concrete pole, insulators shall not be installed. Strain insulators shall be

wet process, porcelain, conforming to EEL-NEMA Class 54-2 standards for 12,000-pound ultimate strength and shall be installed 9 feet from the pole.

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

*This section is supplemented with the following:*

All light and signal standards shall be fixed base.

The head of the handhold security bolt shall be flush with the face of plate. The face plate of the handhole shall be flush with pole.

#### **9-29.6(3) Timber Light Standards, Timber Strain Poles, Timber Service Supports**

*This section is supplemented with the following:*

All timber poles shall be Class II unless otherwise specified.

Mast arms for wood poles shall be "tapered elliptical" or "tapered truss" style, of a size sufficient to be used with a luminaire weight of 48 pounds with an EPA of 1.1 square feet. Arms shall have 2-3/8 inches O.D. x 8-inch long slip fitter for mounting luminaire.

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

*This section is supplemented with the following:*

All pedestrian pushbutton poles (Type PPB) shall be installed utilizing a Breakaway Base Connection system in conformance with WSDOT standard plan J-20.15-03. Bracket shall be sized to accommodate a standard push button pole with an outside diameter of 3.5-inches. Anchor bolt receivers shall be installed at 2-3/4-inch by 7-15/16 inch on center.

*Section 9-29.6 is supplemented with the following new section:*

#### **9-29.6(6) City of Tacoma Universal Pole**

Unless otherwise specified, light standards and strain poles shall be in conformance with the following City of Tacoma standard design.

##### **Strength**

Each pole and mast arm shall have adequate strength for the designated luminaire with 1.8 safety factor for maximum combined stresses using 90 mph isotach (117 mph gusts) per AASHTO specifications for structure supports for highway luminaires. Design shall be based on total loading of 50 pounds and EPA of 2.0 square feet.

##### **Standard Bolt Spacing**

30 Foot poles -- Baseplate shall accommodate 1 inch anchor bolts. The bolt circle shall be between 11 inches and 13 inches.

40 Foot Poles -- Baseplate shall accommodate 1 inch anchor bolts. The bolt circle shall be between 12.5 inches and 14.5 inches.

#### **9-29.6(6)A Steel Strain Poles**

Each pole shall be of tapered round or octagonal construction.

CLASS 1 POLE: Design for dead load tensions up to 1500 pounds

1 CLASS 2 POLE: Design for dead load tensions up to 2600 pounds

2  
3 Class 1 poles shall have a minimum base diameter of 12-inches for octagonal poles and 12-1/4-  
4 inches for round poles. Poles shall have a minimum wall thickness of 0.3125-inches. Anchor  
5 bolts shall be 1-1/2-inch by 60-inches and shall have a spacing of 11-5/16-inches on center, on  
6 the square. It is the responsibility of the pole manufacturer to maintain proper clearance  
7 between the pole shaft and nuts for the anchor bolts.

8  
9 Class 2 poles shall have a minimum base diameter of 13-1/2-inches for octagonal poles and 14-  
10 inches for round poles. Poles shall have a minimum wall thickness of 0.375-inches. Anchor  
11 bolts shall be 2-inch by 66-inches and shall have a spacing of 12-3/4-inches on center, on the  
12 square. It is the responsibility of the pole manufacturer to maintain proper clearance between  
13 the pole shaft and nuts for the anchor bolts

14  
15 Poles shall be of single-ply construction. Multiple-ply poles shall not be allowed.

16  
17 Each pole shall be of tapered round or octagonal construction. Pole taper shall be in the range  
18 of 0.13 to 0.14 in/ft.

19  
20 A base plate and top casting shall be securely attached to each pole. The attachment of the  
21 base plate to the pole shall be a welded connection sufficient to develop the full strength of the  
22 pole. The base plate shall have four (4) holes which will sufficiently accommodate the specified  
23 anchor bolts for the pole class.

24  
25 Pole shall be of sufficient strength to allow for the span wire to be installed to sag an amount  
26 equal to 5% of the span length.

27  
28 The maximum acceptable deflection, at 30 feet above the base, is 5 inches. The specified  
29 deflection shall be at a loading condition of 1,500 pounds horizontal pull at 30 feet above the  
30 base for Class 1 Poles. For Class 2 Poles, the loading condition shall be 2,600 pounds  
31 horizontal pull at 30 feet above the base.

32  
33 Structural material shall be zinc-coated by a "hot-dip" process in accordance with ASTM A123  
34 and the final coating shall measure 0.0039 inch or more in thickness as determined by a  
35 magnetic thickness gauge. All tapped holes shall be chased after galvanizing. Hardware shall  
36 be coated in accordance with ASTM A307.

37  
38 The finished pole shall be reasonably straight and free from injurious defects. If galvanizing is  
39 damaged, the maximum area to be repaired is defined in accordance with ASTM A123 Section  
40 4.6. The maximum area to be repaired in the field shall be determined in advance by the  
41 Engineer. Repair areas damaged during construction, handling, transport or installation by one  
42 of the approved methods in accordance with ASTM A780 whenever damage exceeds 3/16  
43 inches in width. Minimum thickness for repair shall measure 0.0039 inches.

44  
45 The company shall furnish the purchaser with template prints showing spacing and size of holes  
46 in base for the anchor rods.

47  
48 The material shall carry the manufacturer's standard guarantee against any defect in material or  
49 workmanship for a minimum period of one year following the date of installation. The Contractor  
50 shall submit mil test reports for all steel used in the manufacturing of strain poles and pedestals.  
51



1 The Contractor shall submit a Certificate of Compliance with ASTM Standards and  
2 Specifications for galvanizing. The certificate, signed by the galvanizer, shall detail galvanizing  
3 process and testing procedure to determine that galvanizing meets minimum thickness  
4 specified.

5  
6 The contractor shall submit welder certification. Welders must be certified to AWS standards.

7  
8 Each pole shall include the following:

- 9 1. One (1) rain-tight pole cap.
- 10 2. One (1) 4-inch by 6-1/2-inch handhole at base end with cover plate opposite to mast  
11 arm.
- 12 3. Anchor bolts shall be hot dipped galvanized steel with two (2) galvanized nuts and  
13 two (2) washers for each bolt. Only 12-inches of threaded end of the bolts must be  
14 galvanized. 1-1/2-inch diameter bolts shall have 8-inches of top thread and 2-inch  
15 diameter bolts shall have 10-inches of top thread.
- 16 4. Anchor bolts shall have threaded bottom ends to receive an anchor plate and nut.  
17 The nut shall be tack-welded to the anchor plate. Anchor plates for 1-1/2-inch  
18 diameter anchor bolts shall be 4-inch square by 1-inch thick. Anchor plates for 2-  
19 inch diameter anchor bolts shall be 6-inch square by 1-inch thick
- 20 5. One (1) adjustable strain clamp to be mountable between 26 to 28 feet above the  
21 base. Clamp shall provide facility to attach span wire at four-quarter points.
- 22 6. Provisions for mounting a mast arm of specified length. All poles shall be supplied  
23 with one mast arm mounting flange. The centerline of the flange shall be  
24 approximately 6 inches below the top of 38-foot poles and 24 inches below the top of  
25 30-foot poles. The flanges shall conform with the detail drawing included in the  
26 Special Provisions. Poles ordered without mast arms but with provisions for a later  
27 addition of a mast arm shall be provided with a metal cover and gasket to protect the  
28 opening being provided. The cover shall be bolted to the pole using the holes  
29 provided for fastening the mast arm.
- 30 7. One (1) two-inch coupling to receive clamp-on type aluminum weatherhead  
31 positioned at 27 feet, and no more than 45° from the location of the mast arm, unless  
32 otherwise specified.
- 33 8. One (1) 1-1/4-inch coupling for wire inlet located directly opposite the mast arm.
- 34 9. One (1) grounding lug-hole in lip of handhole for 1/2-NC brass bolt.

### 35 36 **9-29.6(6)B Luminaire Mast Arms**

37  
38 Each mast arm shall have sufficient strength with a 1.8 safety factor to support a 70-pound  
39 luminaire on an 18-foot mast arm per the latest AASHTO Specifications for Structural Supports  
40 for Highway Signs, Luminaires and Traffic Signals.

41  
42 Material and workmanship shall conform to the best commercial standards of the industry.

43  
44 The mast arm and its fastening shall be constructed of steel conforming to Section 9-29.6

45  
46 Each mast arm shall support a ballast-in-head luminaire and shall provide a luminaire mounting  
47 height of approximately two (2) feet above the strain pole mounting flange.

48  
49 The mast arm shall provide a horizontal extension from the center of the pole to the center of  
50 the luminaire as shown in the Plans.

1 The mast arm shall be of tapered construction. The luminaire end of the mast arm shall not  
2 exceed 2.375 inches O.D. for a minimum distance of 8 inches. The outside arm diameter at the  
3 pole flange shall not exceed 5.88 inches.

4  
5 The mast arm shall be capable of being fastened to the mast arm mounting flange dimensioned  
6 in the detail drawing. All mounting bolt heads shall clear the weld.

#### 7 8 **9-29.10 Luminaires**

9 *This section is supplemented with the following:*

10  
11 Unless otherwise shown in the plans all new luminaires shall be Light Emitting Diode (LED)  
12 fixtures conforming to these specifications.

13  
14 Cobra-head style luminaires and other overhead fixtures, such as shoebox style fixtures, shall  
15 be provided with utility labels. Ornamental post top fixtures shall not have utility labels. Utility  
16 labels for LED fixtures shall be green and show actual total system wattage.

#### 17 18 **9-29.10(1) Conventional Roadway Luminaires**

19 *This section is replaced in its entirety with the following:*

20  
21 All Conventional Roadway Luminaires shall be LED meeting the following requirements:

##### 22 23 1. Applicable Standards:

- 24 a. American National Standards Institute (ANSI) C78 and C136
- 25 b. Electrical and Electronics Engineers (IEEE) C62
- 26 c. Illuminating Engineering Society of North America (IESNA or IES)
- 27 d. Underwriters Laboratories (UL)

##### 28 2. General:

- 29 a. Luminaire shall be UL Listed
- 30 b. Luminaire shall be listed as a Qualified Product on one of the following lists:
  - 31 i. Energy Star
  - 32 ii. Design Lights Consortium
  - 33 iii. Lighting Design Lab
- 34 c. LED light source and driver shall be compliant with the requirements of the
- 35 European Union (EU) Restriction of Hazardous Substances (RoHS) Directive.
- 36 d. Luminaire shall have an external label per ANSI C136.15.
- 37 e. Luminaire shall have an internal label per ANSI C136.22.

##### 38 3. Luminaire Performance:

- 39 a. Operating Temperature Range: -4 F to +122 F
- 40 b. Correlated Color Temperature: (CCT)
  - 41 i. Residential- 3000K Nominal
  - 42 ii. Arterials - 4000K Nominal
- 43 c. Calculated Lumen Maintenance Factor (LMF): 100,000 hours or more (L70
- 44 at 25°C/77°F) in accordance with IESNA TM-21 and IESNA LM-80
- 45 d. Color Rendering Index (CRI) : >70
- 46 e. Light Distribution per IES Handbook: Best fit to meet design criteria
- 47 f. Minimum Efficacy: 80 Lumens/Watt

##### 48 4. Power Supply and Driver Performance:

- 49 a. Input Voltage: Auto-sensing 120 to 277 VAC 50/60HZ
- 50 b. Power factor: >0.90
- 51 c. Drive current maximum of 1.0A

- d. Total harmonics distortion at full power at specified voltage: <20%
  - e. Surge Suppression Protection 10kV Minimum (IEEE/ANSI C62.41.2)
  - f. Replaceable surge module
  - g. Interference FCC 47 CFR part 15/18, Class A
  - h. Driver life >100,000 hours
  - i. Dimming: 0-10V DC
5. Lighting and Dimming Controls:
- a. The luminaire shall be provided with a 7-pin terminal locking type photoelectric control mounting receptacle in accordance with ANSI C136.10 and ANSI C136.41.
  - b. Photocell receptacle dimming contacts shall be factory connected to driver dimming leads (violet and gray) per ANSI C136.41.
6. Luminaire Housing and Door:
- a. The luminaire housing shall be cast or extruded aluminum. All hardware shall be stainless steel.
  - b. Cast housing components shall have a light gray polyester powder coat finish. Extruded components shall be anodized. Finish shall meet the requirements of ANSI C57.31, latest revision.
  - c. The power-door shall be fabricated from either aluminum or a UV resistant polymer.
  - d. The door shall be easily removable and shall allow for tool-less entry.
7. Slipfitter and Vibration Resistance:
- a. Slipfitter shall be capable of accepting a 1-1/4" through 2" IP pipe tenon (1-5/8" to 2-3/8" OD) with maximum allowable insertion lengths of 7-1/2" and 10" respectively in accordance with Table 2 of ANSI C136.3, latest revision.
  - b. The Slipfitter shall have provisions for clamping the luminaire securely to the tenon and for leveling  $\pm 5^\circ$  with respect to horizontal.
  - c. Luminaire shall be certified to ANSI C136.31 3G bridge and overpass vibration standards with 4-bolt configurations.
8. Ingress Protection:
- a. The luminaire components shall have minimum moisture rating as specified in IEC 60529, with the ability to shed water from inside the housing(weep holes), and designed to minimize water collection and icing.
  - b. Internal Components: IP66
  - c. Enclosure: IP65
9. Terminal and Grounding Block:
- a. Components shall be pre-wired to the terminal board requiring only supply power connections to clearly identified terminals.
  - b. The terminal board shall be located so that there is adequate tool-less access to accommodate user wearing electrical gloves to connect the supply leads.
10. Manufacturer Warranty:
- a. 10 Year Minimum including power driver and LED chips.

#### **9-29.10(1)A Luminaire Classifications**

The City of Tacoma has established five (5) classes of LED Conventional Roadway with specific design criteria to ensure long-term lighting continuity. Luminaires are divided into classes based on function, typical use and historical High Intensity Discharge (HID) equivalents. Current classes are 100WEQ, 200WEQ, 250WEQ, 400WEQ, and RES-45. Each conventional luminaire installed shall meet the design criteria of one of these five luminaires.

Design assumptions and criteria listed for each luminaire classification may not reflect the actual conditions on the project. The design assumptions and criteria identified are only to be utilized to determine luminaire equivalency, such that another luminaire meeting the same criteria can be used to replace a failed unit without a complete redesign of the entire system.

Equivalence will be determined as follows:

1. The City of Tacoma will use Lighting Analysts AGi32 lighting software program for determination of equivalence using the design assumptions and criteria identified for each class of luminaire.
2. The roadway optimizer will be used to evaluate the performance criteria in all cases, except for the Res-45 class luminaire, where model view will be utilized to calculate the photometrics.
3. Proposed fixtures may not be tilted, rolled, or spun to meet the criteria.
4. All calculations shall be to the 100<sup>th</sup>. Rounding will not be permitted.
5. A copy of the published IES photometric file and BUG (Backlight, Uplight, and Glare) Rating shall be provided as a part of product submittal.
6. It is recognized that there are an infinite number of design variables and it is not practical to create a published IES photometric file and BUG rating for each combination. In those cases where the wattage is reduced to meet the design criteria, the base IES photometric file for the higher wattage configuration shall be used as follows:
  - a. Where no IES photometric file exists for the specific configuration, all information required to allow the City to duplicate the results and assure that the fixture meets the criteria must be provided.
  - b. When reducing the system wattage, the BUG rating of the base IES photometric file must be utilized, but may be scaled based on IES LM-79.
  - c. For modified fixtures, the City may require that a representative fixture be provided prior to acceptance. The City reserves the right to have an independent NVLAP approved lab perform an IES LM-79 report for verification of the output for the submitted fixture. A 10 percent margin of error will be allowed in the analysis and comparison of the actual test results. Failure to meet the photometrics within the allowance may be cause for rejection.

Full design assumptions and design criteria for each of the five luminaire classes can be found at the end of this section. Excessive glare or light trespass onto private property is not acceptable. Typical usage for luminaire classes:

- 100WEQ Luminaires are typically installed along residential roadways at a height of 25 to 30 feet. 100WEQ Luminaires have a long and narrow light distribution to fit a typical residential road.
- 200WEQ Luminaires are typically installed along local classified arterial roadways and along arterials with lower pedestrian conflicts. 200WEQ Luminaires are typically installed at a height of 30 feet and will have a slightly wider distribution to cover the additional width.
- 250WEQ Luminaires are typically installed along collector to minor classified arterial roadways. 250WEQ Luminaires can be installed at a height of 30 feet or 40 feet depending on pedestrian conflict level, road width, and lighting levels required.
- 400WEQ Luminaires are typically installed along principal classified arterial roadways or areas where a higher pedestrian conflict exists. 400WEQ Luminaires

- are typically installed at a height of 40 feet, often installed on both sides of the roadway, in a staggered pattern to adequately light the full roadway width.
- RES-45 Luminaires are typically installed at residential street intersections or for cul-de-sacs. For residential intersections, these lights are typically installed on one corner of the intersection at a 45 degree angle to the traveled ways. The light distribution is designed to provide illumination for the intersection, but not create unacceptable light trespass on adjacent properties.

## **9-29.11 Control Equipment**

### **9-29.11(2) Photoelectric Controls**

*This section is revised to read:*

The photoelectric control shall be the twistlock type and the light sensitive element shall be a solid state photo diode. The control shall be designed to turn on at 2.6 foot-candles (+/- 20%) and turn off at 2.6 foot-candles (+/- 20%). The lighting control shall not drift by more than 1 per cent over a 10-year period.

The output control relay shall be electro-mechanical. The time delay for both turn on and turn off shall be a minimum of one second and maximum of 5 seconds. The output relay shall be rated 1000 watts incandescent or 15 amps inductive load. The contacts shall be normally closed.

The lighting control shall have a built in metal oxide varistor (MOV) rated a minimum of 160 joules for lightning and transient protection. The control shall also have secondary zener diode and transient filter. The relay shall be suitable for operation on 240 volt, 60 hertz electrical circuits.

Dimensions shall conform to ANSI specifications for twistlock photocells.

## **9-29.12 Electrical Splice Materials**

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

*This section is revised to read:*

Splices and taps shall be made with solderless crimp connectors on underground and overhead circuits to securely join the wires both mechanically and electrically. Splices shall be sealed in accordance with 8-20.3(8).

### **Thermoplastic Electrical Insulating Tape**

Electrical tape shall be made by the same manufacturer and compatible with the electrical coating utilized to form a complete system that both insulates and protects the splice. Electrical tape shall be based on polyvinyl chloride (PVC) and/or its copolymers and have a rubber-based, pressure-sensitive adhesive. The tape shall have a voltage rating of 600V (UL510). The tape shall be 7 mils thick, and be UL Listed and marked per UL Standard 510 as "Flame Retardant, Cold and Weather Resistant." The tape shall be resistant to abrasion, moisture, alkalis, acids, corrosion, and varying weather conditions, including ultraviolet exposure. The tape must be applicable at temperatures ranging from 0°F through 100°F (-18°C through 38°C) without loss of physical properties. The tape shall have an operating temperature up to 220°F (105°C). The tape shall be classified for use in outdoor environments. The tape shall be compatible with synthetic cable insulations, jackets and splicing compounds. The tape will

1 remain stable and will not telescope more than 0.1 inches when maintained at temperatures  
2 below 120°F (50°C).

#### 4 **Moisture Resistant Electrical Coating**

5 Electrical Coating shall be made by the same manufacturer and compatible with the vinyl  
6 electrical tape utilized to form a complete system that both insulates and protects the splice.  
7 Electrical Coating shall seal and bond the tape and be suitable for direct burial, direct water  
8 immersion, and above ground applications. Electrical coating shall be flexible when dry.  
9 Electrical coating shall consist of the solvents Acetone, Methyl Ethyl Ketone and Toluene and  
10 shall contain synthetic rubber and resin solids.

#### 12 **9-29.12(2) Traffic Signal Splice Material**

13 *This section is revised to read:*

14  
15 Induction loop splices and magnetometer splices shall include an uninsulated barrel-type  
16 crimped connector capable of being soldered. The insulating material shall be a heat shrink  
17 type meeting requirements of 9-29.

#### 19 **9-29.13 Control Cabinet Assemblies**

20 *This section is revised to read:*

21  
22 The Traffic Controller Cabinet Assembly shall be completely wired and tested to Section 5  
23 Terminals and Facilities of the NEMA TS2 Specification, unless modified by these  
24 specifications.

25  
26 Cabinets shall be compatible with both Siemens M50 and M60 series controllers.

27  
28 The following submittals will be required for the review and approval by the City prior to  
29 fabrication and wiring:

- 31 1. Proposed cabinet layout diagram including shelving/rack locations. In addition, detailed  
32 diagrams shall be provided for the left side, right side, and back panels. Drawings shall  
33 be clearly labeled and dimensioned.
- 34 2. Proposed cabinet wiring diagram shall be submitted for the review and approval by the  
35 City. Wiring of cabinets shall not commence prior to City approval of the cabinet wiring  
36 plan.

37 All submittal comments shall be incorporated into a final set of prints and each cabinet shall be  
38 furnished to three (3) complete sets of cabinet prints. All cabinet wiring, and layout shall come  
39 on (1) E1 size sheet, multiple pages shall not be allowed. Upon request (1) CDROM or USB  
40 flash drive with AutoCAD v2018 cabinet drawing for the cabinet wiring.

#### 42 **9-29.13(1) Traffic Control Cabinets**

43 Each Traffic Controller Cabinet shall meet the following general operating requirements:

- 44 1. The wired cabinet facility shall use the latest technology applicable meeting the  
45 requirements identified by these specifications.
- 46 2. The cabinet shall be designed for 16 channel operation using dual load switches. Load  
47 switches 1-4 shall be vehicle phases 1-8; load switches 5-6 shall be pedestrian phases  
48 2, 4, 6, 8; load switches 7-8 shall be overlaps A, B, C, & D. All load switches shall be  
49 routed through a transfer relay.

3. The cabinet shall be wired for (32) channels of detection and (4) channels of Opticom™ preemption.
4. The use of PC boards shall not be allowed except in detector racks and SDLC interface panels. With the exception of detection racks, the use of plug and play modules shall not be allowed
5. All cabinet 120VAC wires shall be 18AWG or greater, including controller “A” and MMU “A & B” cables.
6. All welds shall be free from burrs, cracks, blowholes or other irregularities.
7. The cabinet shall be UL listed.

#### **9-29.13(1)A Cabinet Enclosures**

All Cabinet enclosures shall meet the following requirements:

1. Controller cabinets that are not designated in the project plans and specifications as UPS Controller Cabinets shall be sized in accordance with NEMA P44 Controller Cabinet standards.
2. The cabinet shall meet NEMA 3R rating for enclosures.
3. The cabinet shall be fabricated from 0.125” minimum thickness 5052 H32 ASTM B209 aluminum alloy and be of clean cut design and appearance. The Cabinet shall be supplied with a natural mill finish inside and out, unless otherwise specified.
4. All exterior seams shall be manufactured with a neatly formed continuous weld construction.
5. All external fasteners shall be stainless steel. Interior cabinet welds shall be continuous for all lap and butt welds. Intermittent welds or silicone adhesive shall not be accepted in place of a weld for weather-tight penetrations. Pop rivets shall not be allowed on any external surface.
6. The cabinet shall be designed for mounting on a concrete pad with anchor bolts and typical flanges inside the cabinet. The cabinet base shall have continuously welded interior mounting reinforcement plates with the same anchor bolt-hole pattern as the footprint dimensions.
7. Unless otherwise approved by the Engineer, there shall be a minimum ten (10) inch vertical clearance above the front half portion of the base area to provide a clearance for conduit and cable entering the cabinet.
8. The cabinet shall be double-flanged where it contacts cabinet doors.
9. The top of the cabinet shall be sloped down 1” towards the rear to facilitate water runoff. The roof shall be sloped at a 90° angle at the front of the cabinet. Lesser slope angles are not allowed.
10. The cabinet shall be equipped with “C” channel rails welded to the interior of the cabinet such that panels may be mounted to the interior of the cabinet without drilling through the outer cabinet. The “C” channel rails shall be sufficient in strength to accommodate planned and reasonably anticipated future equipment needs. At a minimum, the cabinet shall have (2) welded on the back wall, and (4) welded on each side wall with (2) pairs on 8-inch centers. The side and back wall C channel rails shall run the entire usable height of the cabinet walls. Adjustable rails are not allowed.

11. The cabinet shall come with lifting ears affixed to the upper exterior of the cabinet. The lifting ears shall utilize only one bolt such that the ears can be reoriented.

#### **9-29.13(1)A1 Cabinet Enclosures for UPS Systems**

Controller cabinets that are designated in the project plans and specifications as UPS Controller Cabinets shall be 70" high x 44" width x 25.5" depth (nominal dimensions) and meet the footprint dimensions as specified in Section 7.3, table 7-1 of NEMA TS2 standards for a Type P cabinet.

UPS Controller Cabinet enclosures shall meet all applicable requirements of Section 9-29.13(1)A and shall meet the following additional requirements:

1. The controller cabinet shall have (2) separate compartments. A Main compartment and a Battery Backup System (BBS) compartment.
2. The main compartment shall be accessible from the front door and shall house the cabinet load facilities and electronics. The Battery Backup System (BBS) compartment shall be accessible from the side door and shall contain the UPS system batteries.
3. The cabinet shall be designed such that when the UPS system inverter and ATS assembly are mounted in the BBS compartment, they shall be fully accessible when the front door is open.

#### **9-29.13(1)B Cabinet Doors and Locks**

Cabinet Doors and Locks shall conform to the following:

1. A hinged door shall be provided on the front of the cabinet permitting complete access to the cabinet and the equipment to be contained therein.
2. Cabinet doors shall be mounted with single continuous stainless steel piano hinges that run the length of the door. The hinges shall be attached via stainless steel tamper resistant bolts.
3. Closed-cell, neoprene gaskets shall be bonded to the inside of cabinet doors. The gaskets shall cover all areas where the doors contact the double flanged cabinet housing exterior and be thick enough to provide a watertight seal.
4. Bearing rollers shall be applied to ends of door latches to discourage metal-on-metal surfaces from rubbing.
5. All lock assemblies shall be positioned such that the door handle does not cause interference with the key when opening the door.
6. A complete set of keys shall be supplied providing access to all doors, including the front cabinet door, the cabinet side door (where applicable), the police door and the generator receptacle door.

The front cabinet door shall meet the following additional requirements:

1. The front door of the cabinet shall be equipped with a universal lock bracket. The lock core shall be a green construction core as noted in section 9-29.25.
2. A stiffener plate shall be welded to the inside of the front door to prevent flexing.
3. The front door shall have a two-position, three-point door stop that accommodates open-angles at 90°, 125°, and 150°.



4. The front door handle shall be ¾" round stock stainless steel bar. Door handle mechanisms shall be interchangeable and field replaceable.

A side door on UPS Controller Cabinets shall be provided for accessing the BBS compartment. The cabinet side door shall meet the following additional requirements:

1. The side door shall be one piece construction without any recessed compartments.
2. The side door shall have a three-position, two-point door stop that accommodates open-angles at roughly 80°, 100°, and 120°.
3. The side door shall use a recessed hexagonal socket in lieu of a door handle.

#### **9-29.13(1)C Recessed Compartments**

The front door shall contain (2) flush mount locking recessed compartments. The upper compartment shall house a police door and the lower compartment shall house a generator bypass receptacle.

1. The welds for the police compartment and the generator receptacle compartment shall be done on the outside of the front door.
2. The police door compartment shall come with a conventional police lock.
3. The generator bypass receptacle compartment shall have an integrated door slide mechanism that allows the door to be closed and locked after a generator has been connected to the internal receptacle.
4. The generator bypass receptacle compartment shall be equipped with a universal lock bracket. The lock core shall be a Green construction core as noted in section 9-29.25.
5. The locking generator bypass compartment will be used to connect a generator for operating the cabinet during loss of service line power. The generator compartment shall be capable of being closed and locked while a generator is connected. The mechanism for allowing generator cable access, while the compartment is closed, shall be an integral part of the generator bypass door, via a sliding panel that will normally be in the closed position.

#### **9-29.13(1)D Cabinet Ventilation**

Cabinet ventilation shall be provided as follows:

1. A louvered air entrance shall be located at the bottom of the front cabinet door.
2. For UPS Cabinets, a louvered air entrance shall also be provided at the bottom of the side cabinet door.
3. Louvered air entrances shall satisfy NEMA rod entry test requirements for 3R ventilated enclosures. The baffle panel that holds the fan assemblies shall be sealed on the interior of the cabinet.
4. The cabinet shall come with (2) three-stage, multi-ply progressive density polyester, disposable air filter; and the filter performance shall conform to listed UL 900 Class 2 and shall conform to ASHRAE Standard 52.1. The filter shall be secured to entrance on main door by two (2) horizontally-mounted restraints.
5. The cabinet shall be provided with two (2) finger safe fans mounted on the right and left sides of the cabinet plenum, and shall be thermostatically controlled. Fans shall have a rating of 100 CFM and the thermostat setting to allow variable turn-on between 90

degrees and 140 degrees Fahrenheit. The fan motor shall use ball-bearings. This unit shall be fitted with an electrical noise suppressor. The safe touch thermostat and power terminal block(s) shall be din rail mounted on the cabinet plenum.

#### **9-29.13(1)E Cabinet Shelving**

Cabinet Shelving shall be provided as follows:

1. The cabinet shall have two (2) aluminum 0.75-inch shelves that span the width of the cabinet. Shelves shall be double beveled 10" deep and reinforced with welded V channel, fabricated from 5052-H32 0.125-inch thick aluminum with double flanged edges rolled front to back. Slotted holes shall be inserted every 7" for the purpose of tying off wire bundles.
2. A slide-out computer shelf 16" length by 12" width by 2" depth shall be installed underneath the bottom equipment shelf. The shelf shall be mounted just left of center so that controller cables will not interfere with the operation of the shelf when equipment is installed. The computer shelf shall have a hinged cover that opens from the front and shall be powder-coated black. The computer shelf shall be fully retractable under the bottom equipment shelf. When fully extended, the computer shelf shall hold a minimum of 50lbs and shall automatically secure in place, mechanically, with a tool-less release mechanism.
3. For UPS Controller Cabinets, the BBS compartment shall come with (1) 14.25" x 7.75" flanged shelf designed to hold the batteries. In the UPS configuration, the main cabinet shall come with a third shelf that runs the entire width of the cabinet above the BBS compartment.
4. The cabinet shall have one (1) aluminum 0.75 inch shelf measuring 20.90 inches wide by 10.75 inches deep next to the load bay and mounted 9.25 inches from the bottom of the cabinet. Shelf shall be double beveled and reinforced with welded V channel, fabricated from 5052-H32 0.125-thick aluminum with double flanged edges rolled from front to back.

#### **9-29.13(2) Wiring**

All wiring within the cabinet shall be neat and firm. All cabinet wire shall be amply rated for the function intended and shall include the use of terminal and suitable identification labels.

Connectors and harnesses shall be provided as defined in the latest NEMA TS 2 standard. Connector A & B shall be supplied for the monitor unit. In addition, the cabinet shall be wired with a standard 55-pin NEMA TS 1 Connector A.

Wire for harnesses shall conform to MIL-W-16878E Type B, and shall be rated to 600 volt, 105 degree Celsius. Wire shall be 22 gage, 19 strand. Wires shall be connected to the heads in the form of crimp-pinned connections. Solder lugs shall not be allowed. Connectors shall conform to MIL-C-26482 Series 1. Cables shall be covered with nylon expandable sleeving. Spiral wrap shall not be used. Termination points of the harnesses shall be accessible to the technician without requiring the back panel to be dropped. Unused harness wires shall be tied to the furthest location on the front of the back panel and shall be capped off.

Wires other than harnesses for the monitor and controller shall be THHN, rated at 600 volt, 105 degree Celsius, and shall be a minimum of 22 AWG.

1 Non insulated connectors shall be utilized for all connections to the Detector Input Terminal  
2 Strip.

### 3 4 **9-29.13(3) Electrical Design**

#### 5 6 **9-29.13(3)A Load Bay**

7 The design of the load-bay shall conform to NEMA TS2 Section 5, Terminals and Facilities,  
8 unless modified herein. The load bay shall be the termination point for the controller unit (CU)  
9 CU 55-pin TS1 MSA cable, the (MMU) MSA & B cables, bus interface units (BIU) 1 and 2, and  
10 field terminal facilities. The terminal facilities layout shall be arranged in a manner that allows all  
11 equipment in the cabinet and all screw terminals to be readily accessible by maintenance  
12 personnel.

13  
14 The load bay shall be fully wired and meet the following requirements:

- 15 1. The load bay assembly shall be constructed of smooth finished aluminum, with a  
16 minimum nominal thickness of 0.125 inches (1/8 inch). The dimensions shall not  
17 exceed a maximum height of 16 inches and a maximum width of 18 inches including  
18 wiring bundles. The load bay assembly shall be mounted between 7-inches and 9-  
19 inches above the bottom of the cabinet.
- 20 2. The load bay assembly (panel) shall be hinged and capable of folding down to allow  
21 full access to all back-panel wiring. All solder terminals shall be accessible when the  
22 load bay is rolled down. The assembly shall be able to roll down without requiring  
23 other components, cables, or switches to be removed. The panel shall be  
24 constructed, and wiring shall have sufficient slack, such that folding down the back  
25 panel shall not interfere with the operation of the traffic signal while in service.
  - 26 (1) All wire shall enter the lower edge of the panel to facilitate folding down back  
27 panel. The controller (CU) and malfunction management (MMU) cables shall  
28 be routed through the back of the load-bay so that they will not be subject to  
29 damage during load-bay roll down.
  - 30 (2) The load bay shall be designed so that all other cabinet screw terminals are  
31 accessible without removing cabinet electronics.
  - 32 (3) The panel shall be able to be fully secured when in its upright position.
  - 33 (4) The top of the load-bay panel shall attach directly to "C" channel and detach  
34 without the use of tools or hardware for roll down purposes.
  - 35 (5) The load bay shall be balanced such that it will not roll down when the top of  
36 the load bay is detached from the "C" channel, even when fully loaded with  
37 BIU's, load switches, flasher, and flash transfer relays.
- 38 3. The load-bay facility shall be wired for 16 channels.
  - 39 (1) Load switch(s) 1-4 shall be vehicle phases 1-8
  - 40 (2) Load switch(s) 5 & 6 shall be pedestrian phases 2, 4, 6, & 8
  - 41 (3) Load switches 7 & 8 shall be overlaps A, B, C & D
  - 42 (4) Load switches 1-4 & 7-8 shall be routed through a flash transfer relay.
- 43 4. The following sockets will be provided:
  - 44 (1) Minimum eight (8) dual load switch sockets spaced 1.25 inches on center.

- (2) Eight (8) flash transfer relay sockets designed to utilize high density flash transfer relays.
- (3) One (1) dual flasher socket.
5. Load Resistors shall be provided on a back right side panel. See section 9-29.13(3)B for more information.
6. All load switches and flasher shall be supported by a bracket extending at least  $\frac{1}{2}$  the length of the load switch.
7. Controller Unit (CU) Wiring: Wiring the 55-pin TS1 MSA cable shall be soldered to backside of a load bay screw-type terminal strip. All controller pins functions shall be terminated.
8. Wiring for one (1) Type-16 MMU shall be soldered to backside of a screw type terminal strip. Any used MMU functions shall be accessible from a screw terminal.
9. Two (2) bus interface rack slots for BIU's 1 and 2 shall be part of the main panel. The main panel BIU rack shall be located in the top left corner of the load-bay placed horizontally and shall accommodate half width BIU's.
10. BIU wire connections to the PCB shall be via two (2) 34 pin connectors. These connections shall have locking latches. BIU wires shall be soldered to the backside of a screw terminal. The load-bay shall have one (1) 120VAC relay socket.
11. The load bay shall have one (1) relay that drops the +24VDC to load switches when the cabinet is in flash.
12. The load-bay shall be silkscreened on both sides. Silkscreen shall be numbers and functions on the front side, and numbers only on the back side. The back side shall have label oriented so that labels are upright when the load bay is rolled down.
13. The field terminals shall be as follows:  
Red: 1R, 2R, 3R, 4R, 5R, 6R, 7R, 8R, 2DW, 4DW, 6DW, 8DW, AR, BR, CR, DR  
Yellow: 1Y, 2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 8Y, 2CL, 4CL, 6CL, 8CL, AY, BY, CY, DY  
Green: 1G, 2G, 3G, 4G, 5G, 6G, 7G, 8G, 2W, 4W, 6W, 8W, AG, BG, CG, DG
14. Field wiring terminations shall be per channel across the bottom of the load-bay. Each channel shall have 3 terminations corresponding to the appropriate phase Green/walk, Yellow/Ped clearance and Red/Don't Walk. Default wiring shall be left to right vehicle phases 1-8, pedestrian phases 2, 4, 6, 8 and overlap channels A, B, C, and D following the order of the load switches. Field terminals shall be #10 screw terminal and be rated for 600V.
15. The cabinet shall be wired to flash for all channels. Flashing operation shall alternate between the flasher circuits 1 and 3 (channels 1, 3, 5, 7, 9, 11, 13, & 15) and circuits 2 and 4 (channels 2, 4, 6, 8, 10, 12, 14, & 16). Changing a channel from one circuit from one channel to another shall be possible through the front of the load bay without tools.
16. Flash programming shall be either red, yellow, or no flash by changing the programmed connector on the front of the load bay. The cabinet shall be supplied with overlaps phases programmed to red flash and pedestrian phases programmed to no flash.
17. The intersection shall be capable of being placed in flashing operation by the conflict monitor, remote input, internal controller time clock and door switch. Remote and

internal controller time clock flash shall be in accordance with MUTCD flash. Conflict flash shall be all-red.

18. All spare circuits shall be wired and terminated on a terminal strip and shown on the wiring diagram.

19. All cable wires shall be terminated. No tie-off of unused terminals will be allowed.

All wiring shall conform to NEMA TS2 Section 5.2.5 Table 5-1. Conductors shall conform to military specification MIL-W-16878E, electrical insulated high heat wire, type B. Conductors #14 or larger shall be permitted to be UL type THHN. Main Panel wiring shall conform to the following colors and minimum wire sizes:

Vehicle green load switch output	16 gauge brown
Vehicle yellow load switch output	16 gauge yellow
Vehicle red load switch output	16 gauge red
Pedestrian Clearance load switch	16 gauge yellow
Vehicle green load switch input	22 gauge brown
Vehicle yellow load switch input	22 gauge yellow
Vehicle red load switch input	22 gauge red
Pedestrian Clearance input	22 gauge yellow
Logic Ground	18 gauge white with red tracer
+24V DC	18 gauge red with white tracer
+12V DC	18 gauge pink
AC+ Line	14 gauge black
AC- Line	14 gauge white
Earth Ground	16 gauge green
AC line (load bay)	16 gauge black
AC neutral (load bay)	16 gauge white
Controller A Cables – AC+	18 gauge black
Controller A Cables – AC-	18 gauge white
Controller A Cables – Earth Ground	18 gauge green
Controller A Cables – All other cables	22 gauge blue
MMU A & B Cables – AC+	18 gauge black
MMU A & B Cables – AC-	18 gauge white
MMU A & B Cables – Earth Ground	18 gauge green
MMU A & B Cables – Start Delay Relay	
Common	18 gauge black
Normally Open	18 gauge black
Normally Closed	18 gauge black
MMU A & B Cables – All other cables	22 gauge orange

Two (2) conductors will supply alternating current (AC) power to the load switch sockets. The load switch sockets shall be supplied 1-4 and 5-8 by each conductor.

The field terminal blocks shall have a screw Type No. 10 post capable of accepting no less than 3 No. 12 AWG wires fitted with spade connectors. Four (4) 12-position terminal blocks shall be provided in a single row across the bottom of the main panel. Spade lugs from internal cabinet wiring are not allowed on field terminal screws.

1 There shall be a plug-in bridge with (16) 3 position panel mount sockets and (16) two position  
2 plugs with screw terminals located below the flash transfer relays. These connections shall  
3 operate the flash programming between flash circuit 1 & 3 or 2 & 4. It shall be changeable from  
4 the front of the load-bay.

5  
6 All load switches, flasher, and flash transfer relay sockets shall be marked and mounted with  
7 screws. Rivets and clip-mounting is unacceptable.

8  
9 The power terminal blocks shall have a screw Type No. 10 post capable of accepting no less  
10 than 3 No. 12 AWG wires fitted with spade connectors. One (1) 12-position terminal blocks shall  
11 be provided vertically on the right side of the load bay. The placement of the power terminal  
12 block on any other panel shall not be allowed.

13  
14 Wire size 16 AWG or smaller at solder joints shall be hooked or looped around the eyelet or  
15 terminal block post prior to soldering to ensure circuit integrity. All wires shall have lugs or  
16 terminal fittings when not soldered. Lap joint/tack on soldering is not acceptable. All soldered  
17 connections shall be made with 60/40 solder and non-corrosive, non-conductive flux. All wiring  
18 shall be run neatly and shall use mechanical clamps and conductors shall not be spliced  
19 between terminations. Cables shall be sleeved in braided nylon mesh and wires shall not be  
20 exposed.

21  
22 All wires terminated behind the main panel or on the back side of other panels shall be  
23 SOLDERED. No pressure or solder-less connectors shall be used. Printed circuit boards shall  
24 not be allowed.

### 25 26 **9-29.13(3)B Side Panels**

27 Side panels shall be mounted on "C" channels as specified herein. All panels shall be smooth  
28 finished aluminum sufficient in size and thickness for the intended purpose and anticipated  
29 equipment required. Side panels shall be no smaller than 16 gauge and no larger than 12  
30 gauge. Side panels shall be mounted no closer than 13" from the rear of the cabinet and no  
31 closer than 2" from bottom of cabinet.

32  
33 The Back Left (BKLT) side panel(s) shall contain the following:

- 34 1. BKLT/PSIP – Power Supply Interface Panel
  - 35 a. 12-position, double row, high barrier block with #8/32 slotted brass screws
  - 36 b. See Section 9-29.13(3)B1 for additional requirements
- 37 2. BKLT/SDLC – SDLC Interface Panel
  - 38 a. 12-port SDLC terminal
  - 39 b. See Section 9-29.13(3)B2 for additional requirements
- 40 3. Additional blank panels are not required for vacant space in the back left of the  
41 cabinet.

42  
43 The Front Left (FRLT) side panel(s) shall contain the following:

- 44 1. FRLT/VDIP – Video Detection Interface Panel
  - 45 a. See Section 9-29.13(3)B3 for requirements
- 46 2. FRLT/DP – Detection Panel
  - 47 a. Vehicle Detection: 64-position, double row, din mounted, screw type terminal  
48 block.
  - 49 b. Emergency Vehicle Preemption: 12-position, double row, din mounted, screw  
50 type terminal block

- c. Pedestrian Detection: 8-position, double row, high barrier block with #8/32 slotted brass screws
  - d. Pedestrian Returns: Two (2) 8-position, single row, high barrier block, with #8/32 slotted brass screws
  - e. Isolated Neutral Buss: 24-position, standard copper grounding buss bar suitable for #14 through #4 cu.
  - f. Ground Buss: 16-position (minimum), standard copper grounding buss bar suitable for #14 through #4 cu.
  - g. See Section 9-29.13(3)B4 for additional requirements
3. Blank aluminum spare panels shall be installed in the available space on the front left side of the cabinet.

The Back Right (BKRT) side panel(s) shall contain the following:

1. BKRT/PS - Power strip convenience outlets as identified by these specifications. Reference 9-29.13(3)C and 9-29.13(3)B5.
2. BKRT/SLP – Supplemental Load Panel
  - a. Din-Mounted thirty-two (32) position disconnect screw type terminal block.
  - b. Thirty-two (32) 2k-OHM, 12 watt resistors wired to back panel.
  - c. See section 9-29.13(3)B8 for more information.
3. Additional blank panels are not required for vacant space in the back right side of the cabinet.

The Front Right (FRRT) side panel(s) shall contain the following:

1. FRRT/PP - Power Panel
  - a. See Section 9-29.13(3)B5 for additional requirements
2. FRRT/CIP - Communication Interface Panel
  - a. See Section 9-29.13(3)B6 for additional requirements
3. FRRT/Generator Panel
  - a. See section 9-29.13(3)B7
4. Blank aluminum spare panels shall be installed in the available space on the front right side of the cabinet.

### **9-29.13(3)B1 Power Supply Interface Panel**

The power supply interface panel shall be mounted on the upper back left wall of the cabinet above the top shelf. The power supply interface panel shall include terminations for all the cabinet power supply inputs and outputs. It shall have a protective plastic cover.

### **9-29.13(3)B2 SDLC Interface Panel**

All SDLC cables shall be terminated on both ends, securely terminated to the SDLC interface panel with screw type connection and professionally routed in the cabinet interior to easily reach the controller, malfunction management unit, BIUs. All SDLC connectors shall be fully populated with 15 pins each. SDLC cables shall be tie wrapped in a neat and orderly way.

### **9-29.13(3)B3 Video Detection Interface Panel**

The video detection interface panel shall be the single point interface for video power and coax cabling. The panel shall have (6) individual 1 amp circuit breakers so that individual cameras can be replaced in the field without disrupting the entire video detection system, a (10) position terminal block with #8/32 screws to provide termination for 120VAC and camera 120AC line and 8-position copper neutral and ground buss bars with raised slotted & torque style screws. The AC terminal block shall be covered with a Plexiglas cover.

1 A coax surge arrestor shall be installed for each coax based video detection camera identified in  
2 the project plans and specifications. The coax surge arrestor shall meet or exceed the  
3 manufacturer's recommendations for the cameras installed. Surge arrestors are not required to  
4 be installed in the cabinet when a coax based detection system is not identified in the plans and  
5 specifications.  
6

#### 7 **9-29.13(3)B4 Detection Panel**

8 The detection panel shall be mounted on the left side of the main cabinet compartment below  
9 the bottom shelf. The detection panel shall support (32) channels of vehicle detection, (4)  
10 channels of emergency vehicle preemption, (4) channels or pedestrian detection with (2)  
11 terminal screws per channel and (8) pedestrian returns on a single panel. The pedestrian call  
12 terminal block shall be (2) single row terminals. They shall be connected by removable buss  
13 bars. The loop wires shall be a 22AWG twisted pair. One of the twisted pair wires of all colors  
14 shall have a white tracer and land on the second position terminal of each loop. The emergency  
15 preempt wires shall be color coded as follows. +24VDC orange, preempt inputs yellow and  
16 ground blue. The auxiliary vehicle preemption shall be white with a yellow tracer. All wiring for  
17 the detection panel shall enter the terminal block from the left and provide sufficient room to  
18 close the cabinet door.  
19

20 The panel shall also include a (24) position solid copper neutral buss bar with with raised slotted  
21 & torque style screws and a (16) position minimum solid copper ground buss bar with raised  
22 slotted & torque style screws. They shall be mounted vertically at the bottom of the panel.  
23

#### 24 **9-29.13(3)B5 Power Panel**

25 The power panel shall handle all the power distribution and protection for the cabinet and shall  
26 be mounted in the bottom right side of the cabinet. All equipment shall be mounted on an  
27 appropriately sized silkscreened aluminum panel and include at a minimum the following  
28 equipment:

- 29 1. A 30-amp main breaker shall be supplied. This breaker shall supply power to the  
30 load bay, load switches, controller, MMU, power supply, detector racks, power strip  
31 and auxiliary panels. Breaker shall be din rail mounted.
- 32 2. A 15-amp auxiliary breaker shall supply power to the fan, cabinet lights and GFI.  
33 Breaker shall be din rail mounted.
- 34 3. The surge protection device (SPD) shall consist of a modular surge protector for the  
35 AC line, another modular surge protector for the AC neutral and ground. There shall  
36 also be a radio interference suppressor (RIS). All units shall meet the following  
37 requirements.
  - 38 a. Devices shall be Open Type 1 UL Listed 1449 4<sup>th</sup> Edition.
  - 39 b. The surge components are all Din-Rail mountable.
  - 40 c. If a failure is to occur the components are hot swappable
  - 41 d. An indicator flag will show that the component has failed. No more guessing  
42 or testing.
  - 43 e. The Surge component has a contact closure that can notify you if a failure  
44 occurs on the unit.
  - 45 f. No bolts or wires to remove to replace the unit.
  - 46 g. The unit is Safe Touch. No need for a plastic protective cover.
- 47 4. A normally open, solid state relay rated for 50-amp minimum for the load switch  
48 power. (No Mercury Contactors shall be allowed.)
- 49 5. One see-through Plexiglas cover to protect maintenance personnel from AC line  
50 voltages.



6. One (1) 19-position standard solid copper neutral buss bars with raised slotted & torque style screw heads suitable for #14 through #4 cu.
7. Two (2) 19-position, standard solid copper ground buss bars with raised slotted & torque style screw heads suitable for #14 through #4 cu.
8. Line side AC Power Terminal, 3-position, double row. Power Terminal shall be a dead-front type rated at a minimum of 300V, 50 amp and suitable for #6 cu.
9. The neutral buss bar, the ground buss bars, and the line side power terminal shall be installed at the bottom of the power panel. The buss bars shall be installed horizontally and the terminal shall be installed with the same orientation such that the wires coming into the cabinet can be easily connected from the bottom of the cabinet. The power terminal shall be installed to the right of the ground and neutral bus bars.

All circuit breakers shall be Square D, Siemens, GE, Eaton/Cutler Hammer, or Engineer approved equal.

#### **9-29.13(3)B6 Communication Interface Panel**

There shall be (2) 12-position, double row, high barrier terminal blocks, with #6/32 slotted brass screws on the left bottom side of the spare panel on the right side wall of the cabinet. The Communication Interface Panel height shall be from the top of the Power Panel to the top of the "C" Channel.

#### **9-29.13(3)B7 Generator Panel**

There shall be a Line side AC Power Terminal, 3-position, double row. Power Terminal shall be a dead-front type rated at a minimum of 300V, 50 amp and suitable for #6 cu. The AC power terminal shall be covered with a **see-through Plexiglas** cover to protect maintenance personnel from AC line voltages. The Generator Panel shall be mounted directly below the Power Panel.

#### **9-29.13(3)B8 Supplemental Load Panel**

There shall be a supplemental load panel with din mounted disconnect screw type terminal block and resistors. The disconnect terminal shall be wired to the green and yellow outputs for each phase and allow current through the resistor when the circuit is completed.

#### **9-29.13(3)B9 Fiberoptic Termination Box**

The cabinet shall come with a wall mounted fiber optic termination box as defined by section 9-29.3(1)D of these provisions.

#### **9-29.13(3)C Convenience Outlets**

The cabinet shall be wired with (1) 120 VAC convenience outlet with a ground fault interrupter (GFI) and (1) 120 VAC power strip without ground fault interrupters. The ground fault outlet (GFI) shall be mounted on the right side of the main compartment on or near the power panel. The power strip shall be near the top shelf of the main compartment in the upper left corner of the cabinet and the wiring shall be neatly secured. No outlets shall be mounted on the door. The non-GFI power strip shall be on a separate circuit from the GFI outlet, and provide a minimum of six (6) outlets. The power strip shall be fed through the transient voltage suppressor located on the cabinet power panel.

#### **9-29.13(3)D Cabinet Illumination**

Two LED light strips shall be provided for cabinet illumination. One shall be mounted to the top front of the cabinet interior, and shall be rated at a minimum of 475 lumens. A second LED light to illuminate the load bay area and shall be mounted below the rollout drawer (computer shelf),

1 and shall be rated at a minimum of 240 lumens. The light shall be attached so that it remains  
2 stationary when the drawer is extended. A door switch shall be wired so as to allow both lights  
3 to operate only when the door is open.  
4

#### 5 **9-29.13(3)E Generator Bypass Compartment and Cable**

6 Inside the generator compartment there shall be a silkscreened panel housing:

- 7 1. 30A / 125V flanged inlet receptacle capable of accepting a standard 30 amp  
8 generator plug. The receptacle shall be appropriate for an extra heavy duty  
9 industrial application meeting the following requirements:
  - 10 a. Backwired terminations for ease of installation
  - 11 b. NEMA L5-30P
  - 12 c. Listed to UL 498
  - 13 d. Fed Spec: W-C-596
  - 14 e. Certified to CSA C22.2 No. 42
  - 15 f. Housing/Flange: Nylon
  - 16 g. Terminal Retainer: Clear Polycarbonate
  - 17 h. Blades: Brass
  - 18 i. Terminal Screws: #10-32 Brass (Phillips / Slotted / Robertson)
  - 19 j. Terminal Clamp: Cold Rolled Steel – nickel plated
  - 20 k. Assembly Screws: Steel - nickel plated
  - 21 l. Mounting Screw: Nickel plated brass
  - 22 m. Electrical: Current Interrupting Certified for current interrupting at full rated  
23 current
  - 24 n. Dielectric Voltage: Withstands 2,000V minimum
  - 25 o. Mechanical: Cord Grip Accommodation #16 AWG - #8 AWG solid or  
26 stranded copper wire only.
  - 27 p. Terminal Identification: In accordance with UL 498
  - 28 q. Flammability: HB or better per UL94/CSA 22.2 No.0.17
  - 29 r. Moisture Resistance: IP20 Suitability
  - 30 s. Operating Temperatures: Maximum Continuous 75°C. Minimum -40°C (w/o  
31 impact)
- 32 2. A 50A, 2 pole, 4 contact cam switch with split 120VAC line and neutral feeds. The  
33 switch shall be a break before make type.
- 34 3. (2) LED lamps with sockets. One LED shall be illuminated when the cabinet has  
35 service line power available and the other when the cabinet has generator power  
36 available. All LED's shall be field replaceable without putting the intersection in flash  
37 and shall carry a 5 year manufacturer warranty.  
38

39 All wiring to the generator bypass compartment shall be contained in a single cable bundle. The  
40 cable shall connect to the backside of the electrical components and shall only be accessible  
41 from the inside of the cabinet front door. All electrical components on the inside of the front door  
42 that carry AC voltage shall be covered by a see-through plexi-glass cover. The generator  
43 bypass cable shall terminate at the same power panel location as service line voltage.  
44

#### 45 **9-29.13(3)F Police Panel**

46 Behind the police panel door there shall be switches for use by emergency personnel. The  
47 wiring for these switches shall be accessible when the auxiliary panel is open.  
48  
49  
50  
51

The following switches shall be included:

1. **Flash Switch:** There shall be a switch for the police that puts the cabinet into flashing operations. The switch shall have two positions, "Auto" (up) and "Flash" (down). The "Auto" position shall allow normal signal operation. The "Flash" position shall immediately cause all signal displays to flash as programmed for emergency flash and apply stop time to the controller. When the police flash switch is returned to "Auto", the controller shall restart except when the MMU has commanded flash operation. The effect shall be to disable the police panel switch when the MMU has detected a malfunction and all controller and MMU indications shall be available to the technician regardless of the position of the police flash switch. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.
2. **Signals On/Off Switch:** There shall be a switch that renders the field signal displays electrically dead while maintaining controller operation for purpose of monitoring controller operations. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.

#### 9-29.13(3)G Auxiliary Switch Panel

The cabinet shall include an auxiliary switch panel mounted to the interior side of the police panel compartment on the cabinet front door. The panel shall be secured to the police panel compartment by (2) Philips head screws and shall be hinged at the bottom to allow access to the soldered side of the switches. Both sides of the panel shall be silkscreened. All of the switches shall be protected by a hinged see-through Plexiglas cover.

The following switches shall be included:

1. **Controller ON/OFF Switch:** There shall be a switch that renders the controller and load-switching devices electrically dead while maintaining flashing operations for purpose of changing the controller or load-switching devices. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.
2. **Signals ON/OFF Switch:** There shall be a switch that renders the field signal displays electrically dead while maintaining controller operation for purpose of monitoring controller operations. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.
3. **Stop Time Switch:** There shall be a 3-position switch labeled "Normal" (up), "Off" (center), and "On" (down). With the switch in the "Normal" position, a stop timing command shall be applied to the controller by the police flash switch or the MMU (Malfunction Management Unit). When the switch is in its "Off" position, stop timing commands shall be removed from the controller. The "On" position shall cause the controller to stop time. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.
4. **Technician Flash Switch:** There shall be a switch that places the field signal displays in flashing operation while the controller continues to operate. This flash shall have no effect on the operation of the controller or MMU. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.
5. **Light Switch:** There shall be a switch that turns cabinet lighting off with the main door open. The switch shall be a general-purpose bat style toggle switch with 0.688-inch long bat.

1 **9-29.13(4) Auxiliary Equipment**

2  
3 **9-29.13(4)A Traffic Signal Controller**

4 Traffic Signal Controller shall be a Siemens Controller, EPAC M62 with an ATC  
5 Communications Module. The CPU operating system shall be Linux. The Contractor shall  
6 contact the City of Tacoma Traffic Signal Shop at 253-491-5287 to obtain the current firmware  
7 version to be utilized.

8  
9 Siemens M62 traffic signal controllers operating a Pedestrian Hybrid Beacon (HAWK Signal),  
10 must be configured by the manufacturer for operation of a pedestrian hybrid beacon. The  
11 contractor/vendor shall configure and test the operation of the controller and malfunction  
12 management unit prior to delivery to the City of Tacoma Signal Shop.

13  
14 **9-29.13(4)B Malfunction Management Unit (MMU)**

15 The cabinet shall come with a Malfunction Management Unit (MMU). The cabinet shall come  
16 with a (MMU) that meets all the requirements of NEMA TS2-2003 while remaining downward  
17 compatible with NEMA TS1. It shall have (2) high contrast LCD displays and an internal  
18 diagnostic wizard. It shall come with a 10/100 Ethernet port. It shall come with software to run  
19 flashing yellow arrow operation. The MMU shall be an Eberle Design, Inc. (EDI) model MMU2-  
20 16LEip. Contractor shall provide a compatible TS2 program card onboard memory.

21  
22 MMUs monitoring a Pedestrian Hybrid Beacon (HAWK Signal), must be configured by the  
23 manufacturer specifically for the monitoring and operation of a pedestrian hybrid beacon. The  
24 contractor/vendor shall configure and test the operation of the controller and malfunction  
25 management unit prior to delivery to the City of Tacoma Signal Shop.

26  
27 **9-29.13(4)C Dual Channel Load Switches**

28 The cabinet shall be provided with eight (8) dual channel load switches. All load switches shall  
29 be solid state circuit board type with a 2-piece aluminum case. Separate LED indications shall  
30 be provided for the input and output side of the loads for each channel. The load switches shall  
31 be Western Systems model SSS-216.

32  
33 **9-29.13(4)D Dual Channel Flasher**

34 The Cabinet shall come with one (1) dual channel flasher. The flasher shall be solid state circuit  
35 board type with a two-piece aluminum case. LED indications shall be provided for both  
36 channels. The flasher shall be Western Systems model SSF-216.

37  
38 **9-29.13(4)E High Density Flash Transfer Relay**

39 The High Density Flash Transfer Relay (HDFTR) shall have a hermetically sealed cover and  
40 shall be moisture proof. The HDFTR shall be filled with dry nitrogen to protect contacts from  
41 corrosion and to prevent condensation. The HDFTR shall have a shock/impact resistant metal  
42 can cover with solid and bend proof pins. The HDFTR contacts shall be rated at 120VAC @ 10  
43 Amp. The coil of the HDFTR shall be rated at 120VAC. The HDFTR shall have an LED indicator  
44 to display contact transfer position.

45  
46 **9-29.13(4)F Loop Detector Card Rack**

47 Two (2) fully wired 8-position card racks, shall be installed. Detector racks shall be capable of  
48 using both two channel and four channel detection devices. One of the card racks shall also  
49 have the additional capacity and be fully wired for an Opticom Model 760 Card. Racks shall be  
50 secured to the detector shelf as far to the right as possible within the cabinet in such a manner  
51 as to afford easy access for maintenance, without interfering with access to any of the ports.

1 The racks shall accommodate 4.5 inch high, 6.875 inch long, 1.12 inch wide two channel, two  
2 output per channel detector modules. Connectors shall be 44 contacts (22 each side) spaced on  
3 0.156" centers. Each rack shall be provided with a bus interface unit (BIU). These shall meet all  
4 the requirements of NEMA TS-2 1988 standards. In addition, all BIUs shall provide separate  
5 front panel indicator LED's for DC power status and SDLC Port 1 transmit and receive status.

6  
7 The (BIU)'s shall be Eberle Design, Inc. model BIU-700H, Econolite model BIU-64, Reno A&E  
8 model BIU/2, or Engineer approved equal.

9  
10 The loop cabling shall be connected via a 37 pin DB connector using spring clips. The Opticom  
11 cable shall be connected via a 24 pin connector using locking latches. The power cable shall be  
12 a 6 pin connector. All power wires shall be 18AWG. The addressing of detector racks shall be  
13 accomplished via dipswitches mounted to the PCB. There shall be the capability to turn off the  
14 TS2 status to the BIU for the uses of TS1 detector equipment via dipswitches mounted to the  
15 PCB. There shall be a 34 pin connector using locking latches that breaks the output from the  
16 detector to the input of the BIU, there shall also be +24VDC and logic ground on this connector.  
17 All racks shall have space at the bottom front for labeling. All racks shall be designed for  
18 horizontal stacking. Separate racks for detection and preemption are not allowed.

#### 19 20 **9-29.13(4)G Detector Power Supply**

21 The cabinet shall come with a shelf mounted cabinet power supply meeting at minimum NEMA  
22 TS 2-2003 (R2008) standards. It shall be a heavy duty device that provides +12VDC at 5 Amps  
23 / +24VDC at 3 Amps / 12VAC at 0.25 Amp, and line frequency reference at 50 mA. The power  
24 supply shall provide a separate front panel indicator LED for each of the four outputs. Front  
25 panel banana jack test points for 12VDC, 24VDC, and logic ground shall also be provided. The  
26 power supply shall provide 5A of power and be able to cover the load of four (4) complete  
27 detector racks.

#### 28 29 **9-29.13(4)H Ethernet Switch**

30 Ethernet switch shall be EtherWAN ED3575-622 Hardened Managed Switch with 2 VDSL2  
31 Ethernet Extender ports. 6 10/100TX, + Gigabit SFP Combo + 2 Copper Pair VDSL2 Ports.  
32 (Etherwan P/N ED3575-622). A 30 watt, 24VDC output power supply unit shall be provided by  
33 the same manufacturer as the switch. A DSL-Octal Cable 2xRJ45, and a minimum 6' Ethernet  
34 patch cable shall be provided with each. Two (2) SFP Optics 100Base-FX SM, 1310NM, 15KM,  
35 LC fiber optic units shall be provided with each switch.

#### 36 37 **9-29.13(4)I Uninterruptable Power System (UPS)**

38 The cabinet shall come with a complete uninterruptable power system (UPS), also referred to as  
39 a Batter Backup System (BBS). The UPS shall include at a minimum a UPS module with  
40 SNMP, ATS assembly, batteries, battery heater mats, battery cables and a battery management  
41 system. All other ancillary equipment for a complete functioning UPS system shall be included.

42  
43 The key UPS system components are identified in the subsection below.

#### 44 45 **9-29.13(4)I1 UPS Module**

46 The cabinet shall come with (1) FXM 1100W uninterruptible power supply or approved  
47 equivalent that supplies clean reliable power control and management. It shall have Automatic  
48 Voltage Regulation (AVR), an Ethernet SNMP interface and a control and power connection  
49 panel that is rotatable for viewing in any vertical or horizontal orientation. It shall have nominal  
50 dimensions of 5.22" x 15.5" x 8.75" and come with mounting brackets. The UPS module shall be  
51 an Alpha model 017-201-23 or approved equivalent.

1 **9-29.13(4)I2 UATS/UGTS Assembly**

2 The cabinet shall come with (1) universal automatic transfer switch and universal generator  
3 transfer switch connected between the UPS module and the batteries. It shall have surge  
4 protection, have dimensions of 3.25" x 15.5" x 6.00" and come with mounting brackets. The ATS  
5 module shall be an Alpha model 020-168-25 or approved equivalent.  
6

7 **9-29.13(4)I3 UPS Batteries**

8 The cabinet shall come with (4) high performance Absorbed Glass Mat (AGM) AlphaCell™  
9 batteries with 112Ah runtime. The BBS batteries shall be Alpha model 240XTV or equivalent.  
10

11 **9-29.13(4)I4 UPS Battery Harness**

12 The cabinet shall come with (1) battery cable (10) foot long wired for (4) batteries. The battery  
13 harness shall be Alpha model 740-678-27 or equivalent.  
14

15 **9-29.13(4)I5 Battery Management System**

16 The cabinet shall come with AlphaGuard™ battery charge management system Alpha model  
17 012-306-21 or approved equivalent.  
18

19 **9-29.13(4)J Preemption/Priority Equipment**

20 The cabinet shall come with (1) 4-channel rack mounted Opticom™ phase selector. This device  
21 shall be capable of receiving encoded signals from Opticom series 700 emitters and detectors.  
22 The Opticom™ phase selectors shall be Global Traffic Technologies model 764 or equivalent.  
23

24 **9-29.13(4)K BUS Interface Unit (BIU)**

25 The cabinet shall come with four (4) BIU's. They shall meet all requirements of NEMA TS2-  
26 1998 standards. In addition, all BIU's shall provide separate front panel indicator LED's for DC  
27 power status and SDLC Port 1 transmit and receive status. Each BIU's shall utilize only 1 rack  
28 position.  
29

30 The (BIU)'s shall be Eberle Design, Inc. model BIU-700H, Econolite model BIU-64, Reno A&E  
31 model BIU/2, or Engineer approved equal.  
32

33 **9-29.13(5) Manufacturer Testing and Certification**

34 The complete cabinet assembly with electronics shall undergo complete input/output function  
35 testing by the manufacturer before being released to the City of Tacoma.. Testing shall be done  
36 via service feed to the 120VAC field terminal. Service power shall be routed through the  
37 generator bypass switch, UPS inverter before being connected to the power panel so that all  
38 service load circuits are tested.  
39

40 If the cabinet specified comes with a UPS system (BBS) and batteries; the entire controller  
41 cabinet assembly shall undergo a BBS field test procedure where the cabinet is run off battery  
42 power for a minimum of one hour.  
43

44 **9-29.14 Vacant**

45 *This vacant section is renamed and replaced with the following:*  
46

47 **9-29.14 School Zone Beacon Controls**

48 School zone beacons shall be controlled by an AP22 time switch by RTC Manufacturing, Inc.  
49

For new installations of radio controlled systems RTC Parent Part Number TACOMAR2AC, "AC Cabinet SYS w/ R2 Radio SYS" shall be utilized. TACOMAR2AC includes the following components:

- Cabinet: 14x16x10
- Panel AC Cube FL SPC 500320T
- AP22 Time Switch – No Harness
- Converter TSC-R2
- Antenna YAGI 900MHZ 11dBi
- Ant Lead 25' LMR240 TNC-TNC
- Adapter N Male to TNC Female
- Bracket Ant Radio 20'x40" RIS

For new installations of cellular controlled systems RTC Parent Part Number TACOMAM2MACFB, "AC Flare Cabinet SYS w/M2M SYS" shall be utilized. TACOMAM2MACFB includes the following components:

- Cabinet: 14x16x10
- Panel AC Cube FL SPC 500320T
- AP22 Time Switch – No Harness
- M2M4GA Converter w/Sim Card
- Bracket Modem
- Antenna M2M MT Internal Cab.
- M2M (MT) 4G Adapter Cable

#### **9-29.15 Flashing Beacon Control**

This section is renamed and replaced with the following:

#### **9-29.15 Pedestrian-Activated Crosswalk Beacons**

Pedestrian-activated crosswalk beacons shall be Rectangular Flashing Beacon (RFB) assemblies as shown in the project plans. Unless otherwise specified by the Engineer, all RFB shall be manufactured by Carmanah Technologies Inc.

The RFB shall be available in both an AC powered configuration and a fully self-contained solar powered configuration. Both the AC powered and solar power options shall be fully compatible. The RFB shall be provided with a 5-year limited warranty. For solar applications, the warranty shall include the battery. The RFB shall be manufactured in the United States of America and shall be Buy American compliant. Each RFB shall include from one to four light bars. The RFB shall conform to all provisions of the MUTCD, Interim Approval IA-21 including flash pattern.

All flashing beacon devices will be activated by an accessible pedestrian push button which includes voice messaging. Push buttons shall wirelessly transmit the activation to other beacons that are part of that pedestrian crossing location. The beacon device interoperability will incorporate inter-beacon radio communication via a spread spectrum radio using ISM 2.4 GHZ with a minimum range of 1,000 feet. The inter-beacon radio will include a minimum of 14 unique addresses for multiple units.

The voice messaging pedestrian push button shall be wired to the flashing beacon per Manufacturer's recommendation. The pedestrian push buttons shall have an LED indicator with audible tone with Piezo control and shall be ADA compliant. The pedestrian push button with voice message shall have three LED indicators, locate tone, and voice message with the

MUTCD IA-21 approved message "Yellow lights are flashing". The message shall be spoken twice. The push button shall be ADA compliant with directional arrow.

#### **9-29.15(1) Pedestrian Crossing Beacon Assembly**

Each pedestrian crossing beacon assembly shall consist of a dual-sided rectangular flashing beacon (RFB) unit mounted between the W11-2 signs and the W16-7P plaques at MUTCD-compliant mounting heights on both sides on a plan specified pole. Separate signs and plaques shall be provided on each side of the pole. Signs shall conform to section 9-28.8 for sheet signs and reflective sheeting shall be Type IV micro prismatic per section 9-28.12. The signs and RFB unit shall be installed on a FB pole as noted in WSDOT Standard Drawing IS-22, utilizing a fixed base foundation. The light bar shall be NEMA 3R rated.

The RFB housing shall be constructed of aluminum and have the approximate dimensions of 24" L x 1.5" D x 4.5" H. The RFB unit will have two horizontally-oriented LED modules each approximately 3" by 7" in size. The modules shall consist of 8 amber LEDs and shall be purpose built by the manufacturer of the RFB including the optics. The light bars shall be current-drive LED strings without active electronics. The LEDs shall be driven by pulse-width modulated fixed current. The RFB unit will have a powder coated green housing and shall have a tell-tale amber LED indicator, approximately 1" by 2", on each secondary side to inform those without a direct view of the primary LED modules that the unit is in operation.

The RFB unit's look and function (ie flash rate) will comply with FHWA's MUTCD - Interim Approval for Optional Use of Pedestrian-Actuated Rectangular Rapid-Flashing Beacons at Uncontrolled Marked Crosswalks (IA-21) including all FHWA Official Interpretations pertaining to RFBs. The flash duration shall be adjustable in-the-field from 5 to 60 seconds in one second increments, 60 to 1,200 seconds in 60-second steps, and 3,600 seconds. Default flash duration shall be 20 seconds.

The installation of the signs, RFBs, MUTCD-compliant push button, all control circuitry and communications hardware will be installed or mounted as shown on plans within ADA-compliant reach of level pedestrian landing. Contractor is responsible for coordinating the mounting interface between the pole and pedestrian crossing beacon assembly. The MUTCD-compliant push button will include a 9" by 12" "PUSH BUTTON TO TURN ON WARNING LIGHTS" sign (R10-25) mounted on the same side as the face of the push button, which is mounted parallel to the crossing direction.

#### **9-29.15(2) Pedestrian Crossing Beacon Control Cabinet**

The control cabinet shall be constructed from aluminum with a lockable 6 pin green construction core per section 9-29.25 lock and tamper-proof hinged door. No other external control cabinet shall be required. The control cabinet shall be vented to provide air circulation and cooling of the electronic system. The vents shall be screened to prevent ingress by insects and debris.

The overall weight of the control cabinet shall not exceed 90lbs (41 kg) and shall have the approximate dimensions: 24" H x 16" W x 8" D (61cm H x 41cm W x 21 cm D).

Fasteners shall be stainless steel.



### **9-29.15(3) AC Powered Installations**

The cabinet for AC installations shall house the AC/DC power supply, circuit breaker, charge controller, flash controller, on-board user interface, and wireless communications. The RFB shall be pre-wired to the maximum extent possible.

The RRFB shall include a universal AC/DC power supply that accepts conventional AC power input and outputs 15 volts DC. It shall be rated for at least 50 watts. AC wiring input shall terminate on a DIN-rail circuit breaker rated for 4 amps.

### **9-29.15(4) Solar Powered Installations**

The cabinet-based solar engine shall house the charge controller, flash controller, on-board user interface, wireless communications, and battery. The solar panel will be mounted separately from the cabinet and shall be available in top-of-pole and side-of-pole options. Solar installation shall be designed for a minimum of 200 daily activations. The RFB shall be pre-wired to the maximum extent possible.

The RRFB shall be provided with an 18-volt solar panel supplied with mounting hardware and bypass diode. Nominal voltage of the RRFB shall be 12 volts.

Electrical connections on the back of the solar panel shall be contained within an enclosure that prevents accidental contact with either of the power leads. The solar charging system shall use maximum power point tracking (MPPT). The solar panel shall charge a battery system using 12-Volt valve-regulated AGM lead-acid maintenance-free battery. The battery shall meet the following requirements:

- The battery shall be equipped with a fast-acting 7-Amp cartridge fuse on the positive lead.
- The battery charging system shall be 3-stage and incorporate temperature-compensation to prevent battery overcharging in hot weather.
- The battery, in conjunction with recommended RRFB performance, shall be designed for a demonstrable service life of 5 years.
- The operating temperature range of the battery shall be -40 to 161° F (-40 to 72° C)
- Batteries shall have quick connections to facilitate installation and be readily available from multiple suppliers and non-proprietary.
- Batteries shall be supported from the sides by rubber bumpers and shall be secured in place with straps.

The battery shall be contained in the control cabinet. The battery and solar panel shall be sized for a system requiring 200 daily activations.

### **9-29.16 Vehicular Signal Heads, Displays, and Housing**

#### **9-29.16(2)B Signal Housing**

*The second paragraph is supplemented with the following:*

The door shall open a minimum of 160 degrees.

*The third paragraph is supplemented with the following:*

The sections shall be held firmly together by corrosion-resistant hardware in such a manner that additional sections may be added easily.

*The fourth paragraph is supplemented with the following:*

The terminal strip for a standard three-section head shall be a minimum five-position, ten-terminal, barrier-type strip with No. 8 screw-type fasteners. To one side of each terminal shall be attached the white, red, yellow and green signal section leads, leaving the opposite terminal for field wires. Multi-section heads shall be provided with a terminal strip located in the yellow (center) section. Lead shall be No. 18 AWG type with 1/32-inch wall, 105-1/4 centigrade thermoplastic insulation.

#### **9-29.16(3) Polycarbonate Traffic Signal Heads**

*This section is deleted.*

#### **9-29.17 Signal Head Mounting Brackets and Fittings**

*This section is revised to read:*

Vehicle and pedestrian signal heads shall be as detailed in the standard plans.

Span wire vehicle signal hanger hardware shall consist of span wire clamp, balance adjuster, wire entrance fitting and vehicle head locking device.

##### **A. Construction**

1. Bronze hangers are required.
2. The minimum size of pins shall be 5/8-inch diameter. Pins shall be stainless steel.
3. The minimum size of the 'J' or 'U' cable clamps is 1/2-inch diameter. Cable clamp bolts shall be stainless steel. Clamping insert shall be used.
4. The cable saddle shall be at least 9 inches long.
5. All cotter pins shall be brass and washers shall be stainless steel.
6. All hardware shall be of stainless steel, bronze or brass materials.
7. Signal stem shall be locked with a square headed set screw 1/4-inch minimum in diameter.
8. Wire entrance shall be a minimum of 1-1/4-inch diameter and shall have a female threaded base for nipple.
9. The balance adjuster shall not be used.
10. All stems shall be secured to signal head with proper lock fitting.

Vehicle signal heads attached to a mast arm shall use a type M mounting bracket as detailed in the standard plans and in accordance with Section 8-20.3(14)B and Section 9-29.17.

#### **9-29.18 Vehicle Detector**

*This section is supplemented with the following:*

Unless otherwise specified in the contract plans, the vehicle detection system provided shall be a Gridsmart detection system with the performance plus module.

##### **9-29.18(3) Gridsmart Detection System**

The Gridsmart system provided shall provide all necessary components required in order to fully install, setup, test, operate and maintain a fully functional detection system, including, but not limited to, the following components:

1. Gridsmart Power over Ethernet Bell Camera(s)
2. GS2 Gridsmart Processor with the Performance Plus Module

3. Mounting Hardware

4. Composite Fiber Connection Cable for power and communications.

5. PoE Media Converters.

Unless otherwise identified in the project plans, one Bell Camera is required for each intersection. Additional cameras may be required, and will be identified in the project plans when two or more major arterials intersect, or where sight lines require additional cameras. Changes to the intersection layout, or camera locations may require additional cameras for proper functionality. Field adjustments to the camera location shall not be permitted without approval from the Engineer. The Composite Fiber cable shall connect the Fisheye Sensor and/or other Option sensors using PoE media converters.

All mounting hardware and cabling shall meet the manufacturer's recommendations, unless otherwise specified herein.

#### **9-29.19 Pedestrian Push Buttons**

*This section is supplemented with the following:*

Pushbutton systems shall be fully compliant with Accessible Pedestrian System requirements as defined by the American with Disabilities Act. Pushbutton systems shall be two wire systems (four wire systems shall not be permitted).

Unless otherwise specified, the pedestrian push button central control unit shall be Polara shelf mount control unit capable of communication through a SDLC cable (Polara Model iCCU-S).

Push buttons stations shall be Polara - iN2 series with the following options:

1. 9x12 Front Plate Adapter
2. 9x12 Faceplate compliant with MUTCD R10-3b
3. No braille on Face Plate
4. Custom Messages
5. Black Button Cover

Extenders may be required for locations where the APS buttons are not within an acceptable reach. Extenders or adapters may be required to accommodate the size of the faceplates for locations where two pushbuttons are mounted to the same pole.

#### **9-29.20 Pedestrian Signals**

*This section is supplemented with the following:*

All pedestrian signals housings shall be die-cast aluminum.

*The Vacant Section 9-29.22 is replaced with the following:*

#### **9-29.22 Preemption Hardware**

Preemption Hardware shall be Opticom TM Model 721 unless otherwise specified.

#### **9-29.24 Service Cabinets**

*This section is supplemented with the following:*

1 Service cabinets shall be pole mounted, exterior NEMA 3R Rated with a bolt on HUB for top  
2 entry. Cabinet shall be a maximum 10 inches wide, 14 inches high, and 5 inches deep.

3  
4 Load Center shall have between 100 and 150 Amps, with capacity for 6 spaces and 12 circuits,  
5 or 8 spaces and 16 circuits as required by Code.

6  
7 Service panels shall be Square D – QO Series

#### 8 9 **9-29.24(2) Electrical Circuit Breakers and Contactors**

10 *The first paragraph is supplemented with the following:*

11  
12 Mercury relays shall not be accepted. Contactors shall be one of the following brands:

- 13 1. Square D
- 14 2. Siemens
- 15 3. Eaton/Cutler Hammer
- 16 4. Engineer Approved Equal

17  
18 *The second paragraph is deleted.*

19  
20 *The third sentence of the third paragraph is deleted.*

21  
22 *The third paragraph is supplemented with the following:*

23  
24 All service panel breakers shall be one of the following brands/series

- 25 1. Square D – QO Series
- 26 2. Siemens – Type BL
- 27 3. Eaton/Cutler Hammer – Quick Lag Type BA
- 28 4. Engineer approved Equal

29  
30 All surface mount breakers shall be one of the following Brands/Series:

- 31 1. Square D (Type QOU)
- 32 2. Siemens
- 33 3. Eaton/Cutler Hammer
- 34 4. General Electric
- 35 5. Engineer approved Equal

#### 36 37 **9-29.25 Amplifier, Transformer, and Terminal Cabinets**

38 *This section is supplemented with the following:*

39  
40 Terminal compartments may be incorporated into the signal standard as an alternative to  
41 providing a separate terminal cabinet attached to the pole. Terminal compartment should offer  
42 similar physical and electrical capacity as specified. Contractor shall provide submittals in  
43 accordance with the contract documents and obtain approval from the engineer for the alternate  
44 design prior to proceeding. Signal standards and terminal compartments shall meet all other  
45 structural, mechanical, electrical, and finish requirements as specified, and be suitable for the  
46 intended purpose.

47  
48  
49  
50 **END OF SECTION**

51

**APPENDIX A**

**CITY OF TACOMA**

**and**

**WSDOT STANDARD PLANS**

**\*\*\* Note Standard plans and websites provided below are for contractor convenience. Additional standard plans may be required to construct the project. \*\*\***

**COT Standard Plans Website:**

**[https://www.cityoftacoma.org/government/city\\_departments/public\\_works/engineering/standard\\_plans\\_and\\_q\\_i\\_s\\_typical\\_details](https://www.cityoftacoma.org/government/city_departments/public_works/engineering/standard_plans_and_q_i_s_typical_details)**

**WSDOT Standard Plans Website:**

**<https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/standard-plans>**

## **APPENDIX B**

**City of Tacoma**

**Traffic Control Plan Examples**

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# TRAFFIC CONTROL HANDBOOK

**MUST MAINTAIN  
PEDESTRIAN AND  
DISABILITY ACCESS AT  
ALL TIMES**





City of Tacoma  
Public Works Department

## INTRODUCTION

This manual is intended for use by any person, firm or corporation, public or private, when involved in construction, maintenance or any activity that alters the normal flow of traffic, vehicular or pedestrian, on any City right-of-way.

This manual shall be used in conjunction with Part VI of The Manual on Uniform Traffic Control Devices (MUTCD) for the installation of temporary traffic control and the Access Board's Guidelines for Accessible Public Rights -of-Way (2002), ([www.access-board.gov/](http://www.access-board.gov/)).

Authority to establish local rules regarding channelization and traffic control is permitted by Washington Administrative Code (WAC) 308.330.265.

Unless specifically addressed in this manual, when the term "should" is used in the MUTCD to describe a condition or method for traffic control, it means that if that suggestion is not used an equally effective method will be used. It does not eliminate the responsibility to address the situation.

This manual does not prohibit the use of additional traffic control or warning devices as long as the minimum conditions are met.

## PERMITS

A permit must first be obtained from the Public Works Department by any person, firm or corporation working in City right-of-way that alters the normal flow of traffic or makes any public place dangerous.

Provisions for obtaining a permit are outlined in Tacoma Municipal Code Chapter 10.22.

All applications for permits must have a comprehensive traffic control plan attached for review by the Traffic Engineer. Permits will not be issued unless the Traffic Engineer has approved the traffic control plan.

## MUNICIPAL AGENCIES

Municipal agencies and Utilities are not required to obtain a permit for routine maintenance and repairs, but must notify the Traffic Engineer a minimum of 72 hours in advance if the following conditions apply:

1. Closing any street (see attached street closure requirements).
2. Altering or detouring traffic during commute hours on arterial streets (7 a.m. – 9 a.m. and 4 p.m. – 6 p.m.).
3. The activity or obstruction will be in place for more than 8 hours.
4. The activity or obstruction is during the hours of darkness.
5. The activity reduces traffic on arterial streets to less than one lane in each direction.

## GENERAL RULES

The following list of rules must be followed while involved in construction, maintenance or other activity in City right of way unless specifically addressed by the Traffic Engineer.

1. All traffic control devices must meet the requirements established by the Manual on Uniform Traffic Control Devices.



2. No activity will be placed in such a way as to detour, slow or alter traffic flow during peak commute hours. These times are generally from 7 a.m.– 9 a.m. and 3:30 p.m. – 6 p.m. The Traffic Engineer may allow an exception with prior approval.
3. An approved traffic control plan must be on-site and accessible for inspection at all times by law enforcement or inspectors.
4. Traffic control plans and activities must include the following components:
  - a. Advanced Warning Area: Signs and other devices inform drivers of what to expect.
  - b. Transition Area: Channelization devices move traffic from the normal flow to the desired path.
  - c. Activity Area: Area where the work takes place.
  - d. Buffer Space: Area used to separate traffic from the work activity area and provides recovery space for an errant vehicle.
  - e. Termination Area: Area used to return traffic to the normal path.
5. Pedestrian and disability access must be maintained throughout the period of time construction is underway. This does not just apply to the final product, but accessibility must be maintained during the actual construction. Safe, clearly marked routes must be maintained through or around the construction activity at all times. The use of temporary walkways with width, slope, and cross-slope compliant to the maximum extent feasible shall be incorporated on the job site. Surfaces must be firm, stable, and slip resistant. Channeling and barricading must be used to separate pedestrians from traffic. Adequate barricading must be addressed to prevent visually impaired pedestrians from entering work zones. Alternate pedestrian circulation routes with appropriate signage that can be accessed by people who use mobility aids (wheelchairs, walkers, scooters, etc.) The alternate circulation path shall have a minimum width of 5 feet and parallel the disrupted pedestrian access route when practicable. Barricades and channelizing devices shall be continuous, stable, non-flexible, and shall consist of a wall, fence, or enclosure specified in section 6F of the MUTCD. A solid toe rail should be attached such that the bottom edge is 6 inches maximum above the walkway surface. The top rail shall be parallel to the toe and shall be located 36 inches minimum and 42 inches maximum above the walkway surface. If drums, cones, or tubular markers are used to channelize pedestrians, they shall be located such that there are no gaps between the bases of the devices in order to create a continuous bottom, and the height of each individual device shall be no less than 36 inches.
6. Persons in charge of maintaining or establishing traffic control and channelization must have a certified flagger control card in their possession and must be on the site at all times or be represented by another knowledgeable, certified person.
7. A flagger cannot be used to direct traffic through a signalized intersection against the signal indications. When flaggers are used near signalized intersections, care will be used to clear the intersection of traffic before the signal change.
8. In some situations, Signal modifications may be used to support the traffic control plan. The traffic Signal Shop shall make all modifications, and all modifications must be approved by the Traffic Engineer.
9. A uniformed police officer is required to direct traffic through a signalized intersection against the signal indications.
10. Police officers may also be required during activities for traffic calming if speeds are high, pedestrian or vehicular traffic volume is extremely high, or during emergencies.
11. To minimize the disruption to access to adjacent properties, and to Pierce Transit operations, the lane closure area shall be limited to that area of active work and necessary for appropriate lane closure tapers. The Contractor shall stage work to maintain access to and egress from all properties at all times. An approved traffic control plan and permit shall be posted on the job site for review by City officials. Construction Inspectors shall ensure the approved traffic

control plan is on site at all times. Any approved Traffic control plans the Contractor doesn't follow are in violation of the Standard Specifications which are included in the contract. It is the inspector's job to have them comply or Stop work. Jobs having permits only and not following the approved Traffic Control plan is a violation of Tacoma Municipal Code 10.22.080. The work can be stopped or a violation infraction can be imposed.

12. When parking lanes are closed due to construction, "no parking" portables will be installed at least 72 hours in advance of the closure in unrestricted areas and 48 hours in advance in time restricted areas. The message on the portables shall establish the date and hours for no parking.
13. During emergencies where life, property or public safety is in danger, conditions listed may be changed. Traffic control will be addressed along with the initial response. (See attached page for emergency contact numbers.)
14. The Traffic Engineer may allow reduced speed limits in construction area zones. Request for speed reduction must be included in the traffic control plan.
15. All signs and cones shall be removed from the right-of-way when traffic control is not in effect.
16. The contractor may be required to discontinue work if possible conflict exists with special events such as parades, sporting events, miscellaneous rallies, and large public meetings. Information concerning such events can usually be obtained from the City Clerks Office, tel. (253) 591-5171.
17. Maintenance of 2-way traffic on arterial streets at all times except on one-way streets. Additional width for facilitating traffic flow may be obtained by prohibiting on-street parking adjacent to the work zone.
18. No work shall be scheduled on streets or sidewalks within the City of Tacoma Business Districts from Thanksgiving Day through New Year's Day.
19. All traffic control devices used at night, particularly signs, barricades and channelizing devices, must have Type C steady burn lights. Requests to reduce the number of lights used on channelizing devices must be specifically detailed on the approved traffic control plan.
20. Any use of steel plates by contractor shall be for overnight purposes only and shall be used over weekends with prior approval by City or its inspector. They may not be used on steep grades, 8 percent or greater, they must have asphalt ramps/wedges around the plates and a non-skid surface at all times. All plates must be pinned down and the City of Tacoma may require combinations of plates to be welded together. Warning signs must be appropriately placed to caution motorists of upcoming steel plates. Steel plates are not allowed if snow is expected or if there is a potential for snow. The Inspector must review and approve all steel plate placements prior to leaving the job site. If located in the pedestrian path, they shall comply with ADA standards.

Failure to comply with the provisions of this manual is a traffic infraction and, notwithstanding any fines or penalties levied against the person, firm or corporation involved, if a safety hazard exists, the work may be ordered stopped and the obstruction cleared by the person, firm or corporation responsible or by the City at that responsible party's expense.

<http://www.cityoftacoma.org/>

<http://wspwit01.ci.tacoma.wa.us/govME/Admin/Inter/StartPage/default.aspx>

[http://wspwit01.ci.tacoma.wa.us/download/PDF/Traffic\\_Control\\_Handbook.pdf](http://wspwit01.ci.tacoma.wa.us/download/PDF/Traffic_Control_Handbook.pdf)

## **Special Traffic Requirements**

The contractor shall notify the following departments three (3) working days prior to any street closure.  
Pierce Transit requires five (5) working days prior to any route detours.

<b>Department</b>	<b>Phone</b>	<b>Fax</b>	<b>Email</b>
<b>Traffic Engineering</b>	<b>591-5305</b>	<b>591-5533</b>	trafficcontrolplans@cityoftacoma.org
<b>Tacoma Fire Department</b>	<b>591-5775</b>	<b>591-5034</b>	dutyofficer@cityoftacoma.org tacomafiredepartment@cityoftacoma.org
<b>Tacoma Police –Ops</b>	<b>591-5932</b>	<b>594-7842</b>	TacomaPoliceEvents@cityoftacoma.org
<b>LESA</b>	<b>798-4721 Opt #3</b>	<b>798-2708</b>	commsupsb@southsound911.org
<b>Sound Transit Link</b>	<b>206-370-5674</b>		Denise.Ahuna@soundtransit.org
<b>Pierce Transit Service Impacts</b>	<b>377-5027</b>	<b>589-6364 or 589-6367</b>	serviceimpacts@piercetransit.org mdavilla@piercetransit.org
<b>Pierce Transit Events Coordinator</b>	<b>581-8001</b>	<b>984-8161</b>	bnelson@piercetransit.org
<b>Public Works/Signal and Streetlighting</b>	<b>591-5287</b>	<b>593-7745</b>	gyotter@cityoftacoma.org
<b>Public Works/Street Ops</b>	<b>591-5495</b>	<b>591-5302</b>	streetoperations@cityoftacoma.org
<b>School Trans Office</b>	<b>571-1853</b>	<b>571-1932</b>	transportation@tacoma.k12.wa.us
<b>First Students</b>		<b>272-7799</b>	Elizabeth.Anderson@firstgroup.com
<b>Chief Leschi Schools</b>	<b>445-4000</b>		Cindy.Hanson@leschischools.org
<b>UWT Facilities Services</b>	<b>692-5700</b>	<b>692-5705</b>	facility@uw.edu
<b>Off-Duty Police Officer</b>	<b>591-5932</b>		TacomaPoliceEvents@cityoftacoma.org
<b>Tacoma Refuse</b>	<b>591-5544</b>	<b>591-5547</b>	rcollections@cityoftacoma.org
<b>Tacoma First</b>	<b>311 (city limits)</b>		csc@cityoftacoma.org

### **Include the following information when notifying the above departments.**

Name of street to be closed & the extent of the closure (between which two roads).  
Stipulate whether or not the area is to be open to local traffic & emergency vehicles.  
State the date(s) & hour(s) the closure will be in effect.  
Give the reason for the closure.  
Provide detour information.  
State who/which firm is performing the work.  
Provide the name and telephone number of a contact person.

### **Recommended Publications**

As a contractor you will have many opportunities for setting up traffic control. To comply with national standards, we recommend having the MUTCD (Manual on Uniform Traffic Control Devices) for future reference.

To order hard copies or CD versions of the MUTCD please go to one of the links below:

American Association of State Highway Organizations at: <https://bookstore.transportation.org/>

Institute of Traffic Engineers at: <http://www.ite.org/bookstore/index.asp>

American Traffic Safety Services Association at: <http://www.atssa.com/>

### **Things to Think About**

Before the traffic control plan is drawn visit the site and look for special circumstances that may be unique to the area. For example work being done on the sidewalk may be a hazard if someone walks out a door into your wet cement or a tool may fall on someone's head if someone is in a lift washing windows. Call Pierce Transit if you need to do work at a bus stop. Transit requires five (5) days notice for route detours. Transit will inform citizens and move or temporarily close the stop. Keep in mind that pedestrians need 5' of unobstructed walking area. If roadwork needs to be done on an arterial street, traffic control devices shall be removed during peak hour traffic (7am to 9am and 4pm to 6pm). For further information see our TRAFFIC CONTROL HANDBOOK.

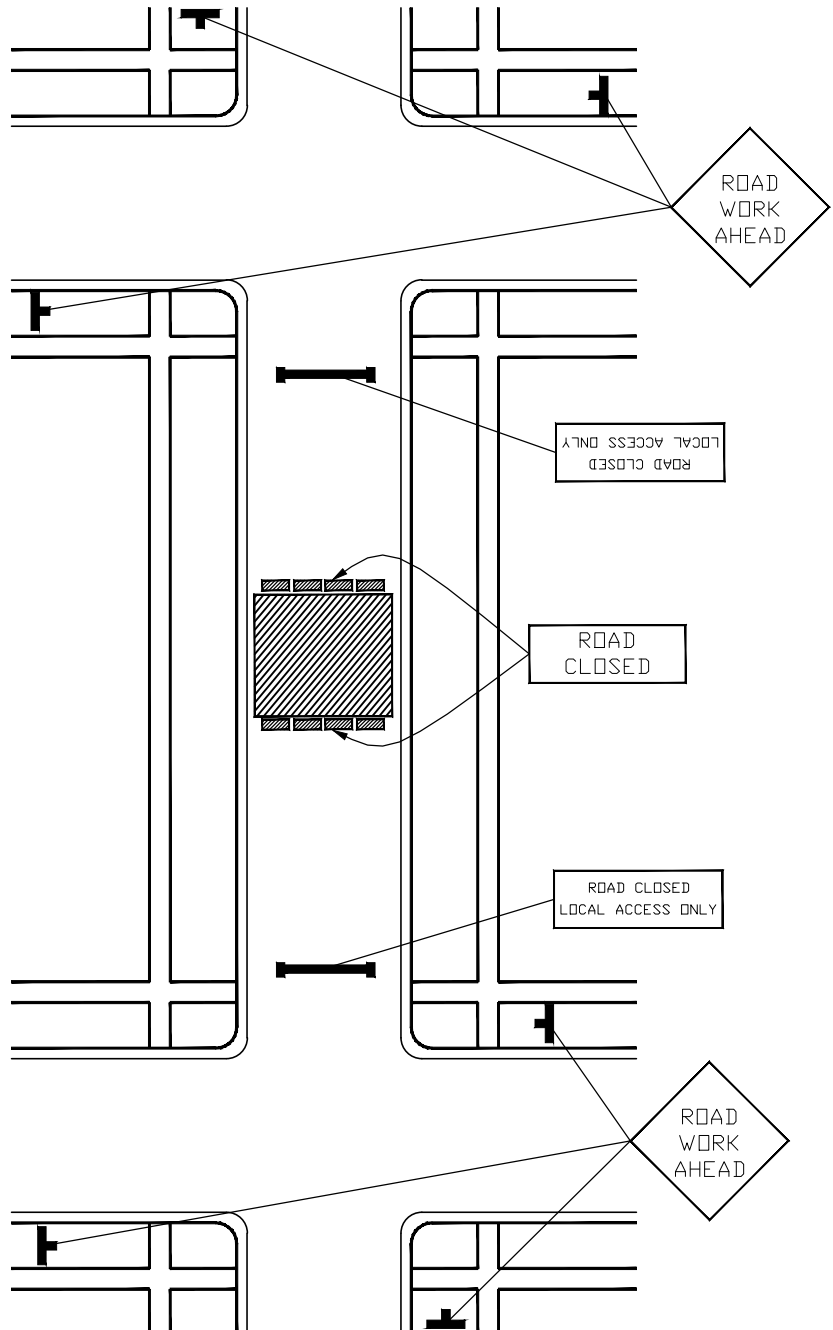
<http://www.cityoftacoma.org/>

<http://wspwit01.ci.tacoma.wa.us/govME/Admin/Inter/StartPage/default.aspx>

[http://wspwit01.ci.tacoma.wa.us/download/PDF/Traffic\\_Control\\_Handbook.pdf](http://wspwit01.ci.tacoma.wa.us/download/PDF/Traffic_Control_Handbook.pdf)

# SAMPLE SETUP

Note: At night, signage and barricades must be Type C steady burn lights. A contractor may close a nonarterial street to through traffic, provided that local access is maintained at all times with a minimum of a 20' wide access lane. Road Work Ahead signs may be eliminated on non-arterial streets.



Applicable to any non-arterial roadway within project limits per Special Provisions.

## NON-ARTERIAL ROAD CLOSURES

☐ APPROVED BY: \_\_\_\_\_  
☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: \_\_\_\_\_ OFF PEAK 3:30 PM WEEKDAYS

### EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: \_\_\_\_\_

MUST BE OUT OF THE ROAD BY DATE & TIME: \_\_\_\_\_

## MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

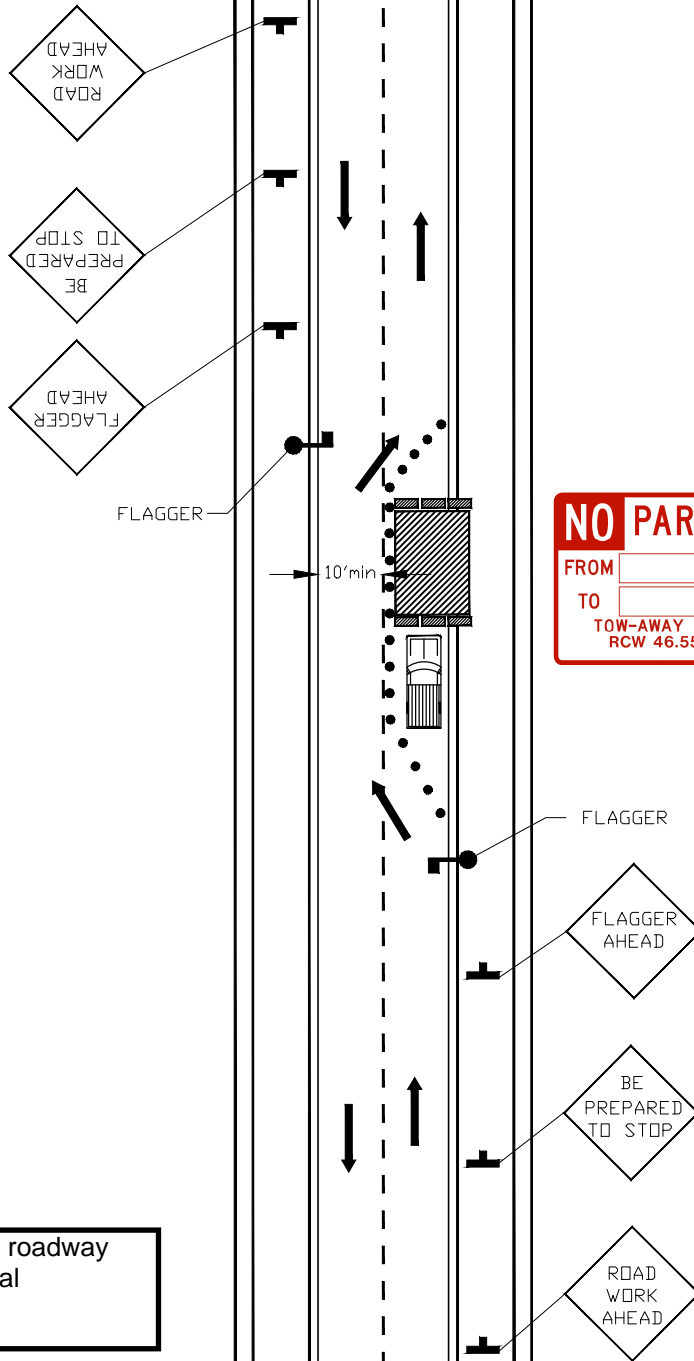
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

# SAMPLE SETUP



To be deployed at least 48 hours in advance for any locations where on-street parking would be impacted by traffic control and/or work zone extent.

Applicable to any non-arterial roadway within project limits per Special Provisions.

## SINGLE LANE NON-ARTERIAL WITH FLAGGER

- ☐ APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS  
 MUST BE OUT OF THE ROAD BY DATE: \_\_\_\_\_ OFF PEAK 3:30 PM WEEKDAYS

### EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: \_\_\_\_\_  
 MUST BE OUT OF THE ROAD BY DATE & TIME: \_\_\_\_\_

## Taper / Channelizing Device Table

Merging, Shifting, and Shoulder Taper Lengths and Number of Channelization Devices Used  
 (Washington State Department of Transportation)  
 (All minimums)

Lane Width	10 Feet				11 Feet				12 Feet				Shoulder Tapers (Assumes 10' Shoulders)		
	L	1/2 L	L	1/2 L	L	1/2 L	L	1/2 L	L	1/2 L	L	1/2 L	MPH(R)	Length	Devices
20	70	6	35	3	75	6	40	3	80	6	40	3	20	25	3
25	105	6	55	4	115	7	60	4	125	7	65	4	25	35	3
30	150	8	75	5	165	9	85	5	180	10	90	5	30	50	3
35	205	8	105	5	225	9	115	5	245	9	125	5	35	70	4
40	270	10	135	6	295	11	150	6	320	12	160	6	40	90	4
45	450	16	225	9	495	18	250	9	540	19	270	10	45	150	6
50	500	14	250	8	550	15	275	8	600	16	300	9	50	170	6
55	550	15	275	8	605	16	305	9	660	18	330	9	55	185	6
60	600	16	300	9	660	18	330	9	720	19	360	10	60	200	6
65	650	17	325	9	715	19	370	10	780	21	390	11	65	220	7
70	700	19	350	10	770	20	385	11	840	22	420	12	70	235	7

(Extracted from Appendix 1-1, of the Work Zone Traffic Control Guidelines - M54-44, 2012)

shoulder taper equals  
Shoulder Width x Speed / 3

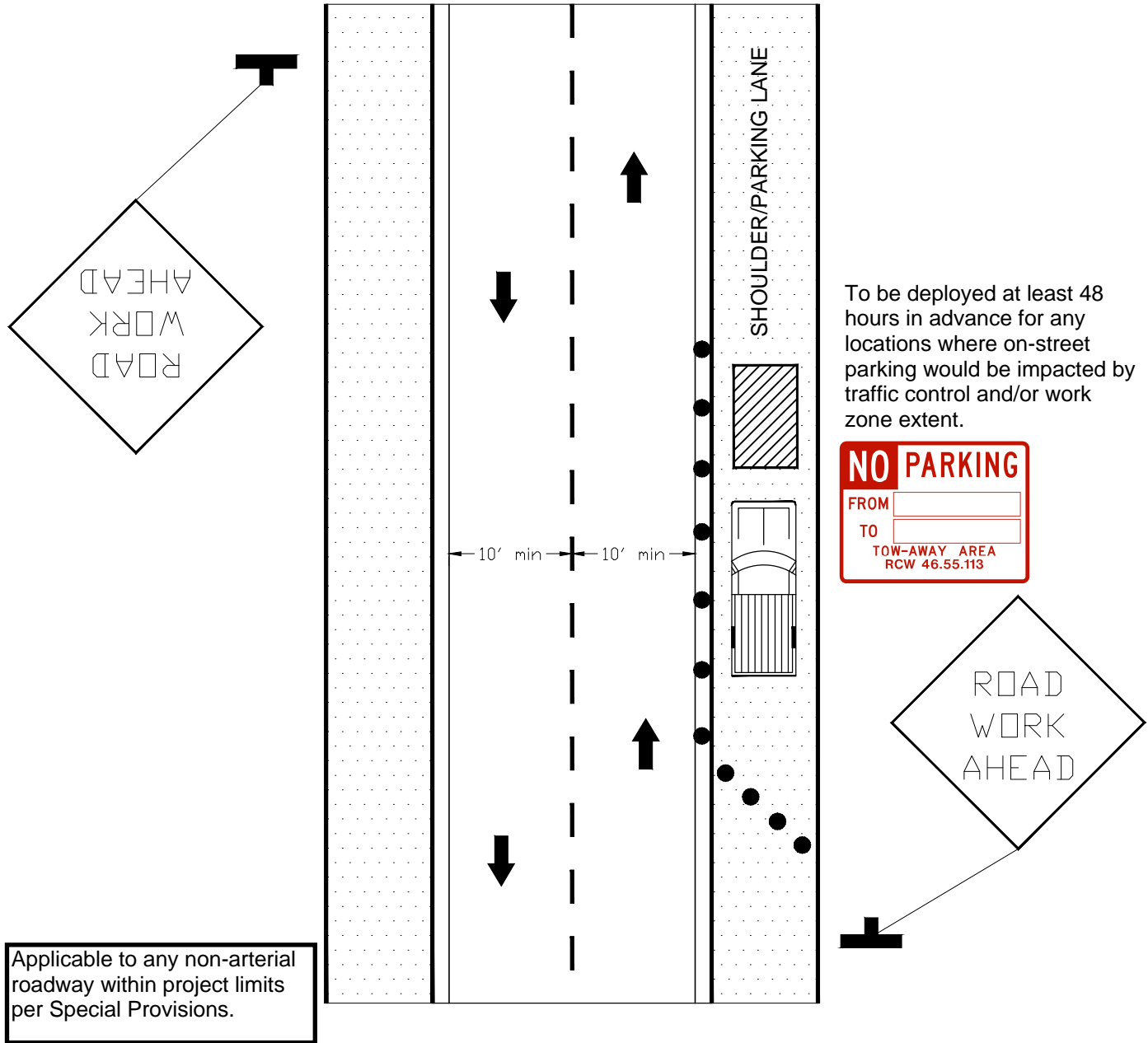
Lateral Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

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# SAMPLE SETUP



## SHOULDER WORK WITH MINOR ENCROACHMENT

☐ APPROVED BY: \_\_\_\_\_  
☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: \_\_\_\_\_ OFF PEAK 3:30 PM WEEKDAYS

### EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: \_\_\_\_\_

MUST BE OUT OF THE ROAD BY DATE & TIME: \_\_\_\_\_

## Taper / Channelizing Device Table

Merging, Shifting, and Shoulder Taper Lengths and Number of Channelizing Devices Used  
(Washington State Department of Transportation)

(All minimums)

Lane Width	10 Feet				11 Feet				12 Feet				Shoulder Tapers (Assumes 10' Shoulders)		
	Merging	Shifting	Devices	1/2 L	Merging	Shifting	Devices	1/2 L	Merging	Shifting	Devices	1/2 L	MPH(8)	Length	Devices
20	70	6	35	3	75	6	40	3	80	6	40	3	20	25	3
25	105	6	55	4	115	7	60	4	125	7	65	4	25	35	3
30	150	8	75	5	165	9	85	5	180	10	90	5	30	50	3
35	205	8	105	5	225	9	115	5	245	9	125	5	35	70	4
40	270	10	135	6	295	11	150	6	320	12	160	6	40	90	4
45	450	16	225	9	495	18	250	9	540	19	270	10	45	150	6
50	500	14	250	8	550	15	275	8	600	16	300	9	50	170	6
55	550	15	275	8	605	16	305	9	660	18	330	9	55	185	6
60	600	16	300	9	660	18	330	9	720	19	360	10	60	200	6
65	650	17	335	9	715	19	370	10	780	21	390	11	65	220	7
70	700	19	350	10	770	20	385	11	840	22	420	12	70	235	7

(Extracted from Appendix 1-1, of the Work Zone Traffic Control Guidelines - M54-44, (2012))

Shoulder taper equals  
Shoulder Width x Speed / 3

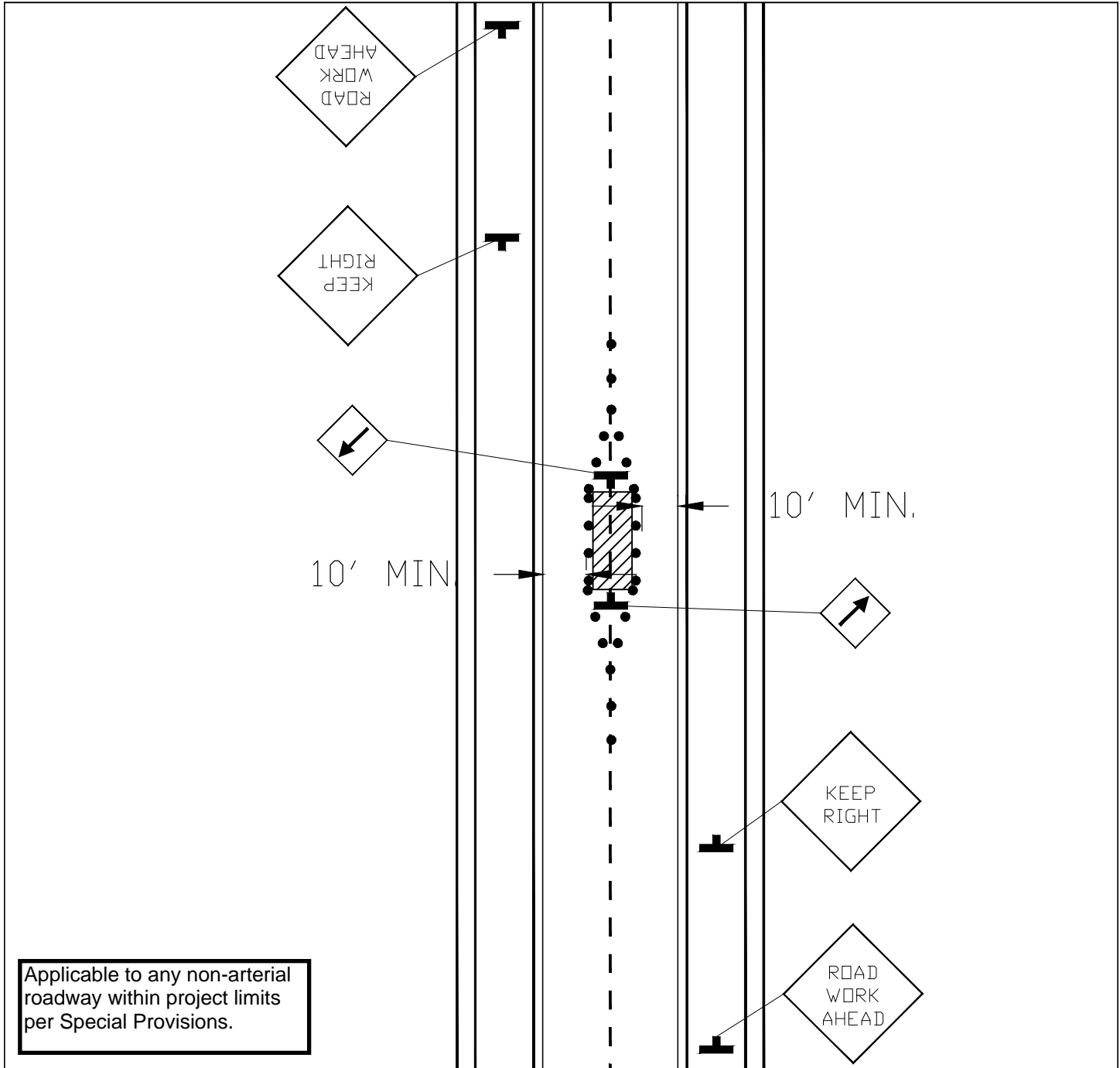
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# SAMPLE SETUP



## TWO LANE CENTER CLOSURE

- ☐ APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_
- ☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: \_\_\_\_\_ OFF PEAK 3:30 PM WEEKDAYS

### EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: \_\_\_\_\_

MUST BE OUT OF THE ROAD BY DATE & TIME: \_\_\_\_\_

## Taper / Channelizing Device Table

Merging, Shifting, and Shoulder Taper Lengths and Number of Channelizing Devices Used  
(Washington State Department of Transportation)

(All minimums)

Lane Width	10 Feet				11 Feet				12 Feet				Shoulder Tapers (Assumes 10' Shoulders)		
	Merging	Shifting	Devices	Devices	Merging	Shifting	Devices	Devices	Merging	Shifting	Devices	Devices	MPH(R)	Length	Devices
20	70	6	35	3	75	6	40	3	80	6	40	3	20	25	3
25	105	6	55	4	115	7	60	4	125	7	65	4	25	35	3
30	150	8	75	5	165	9	85	5	180	10	90	5	30	50	3
35	205	8	105	5	225	9	115	5	245	9	125	5	35	70	4
40	270	10	135	6	295	11	150	6	320	12	160	6	40	90	4
45	450	16	225	9	495	18	250	9	540	19	270	10	45	150	6
50	500	14	250	8	550	15	275	8	600	16	300	9	50	170	6
55	550	15	275	8	605	16	305	9	660	18	330	9	55	185	6
60	600	16	300	9	660	18	330	9	720	19	360	10	60	200	6
65	650	17	335	9	715	19	370	10	780	21	390	11	65	220	7
70	700	19	350	10	770	20	385	11	840	22	420	12	70	235	7

(Extracted from Appendix 1-1, of the Work Zone Traffic Control Guidelines - M54-44, 2012)

shoulder taper equals  
Shoulder Width x Speed / 3

Lateral Offset cones 1 foot maximum.

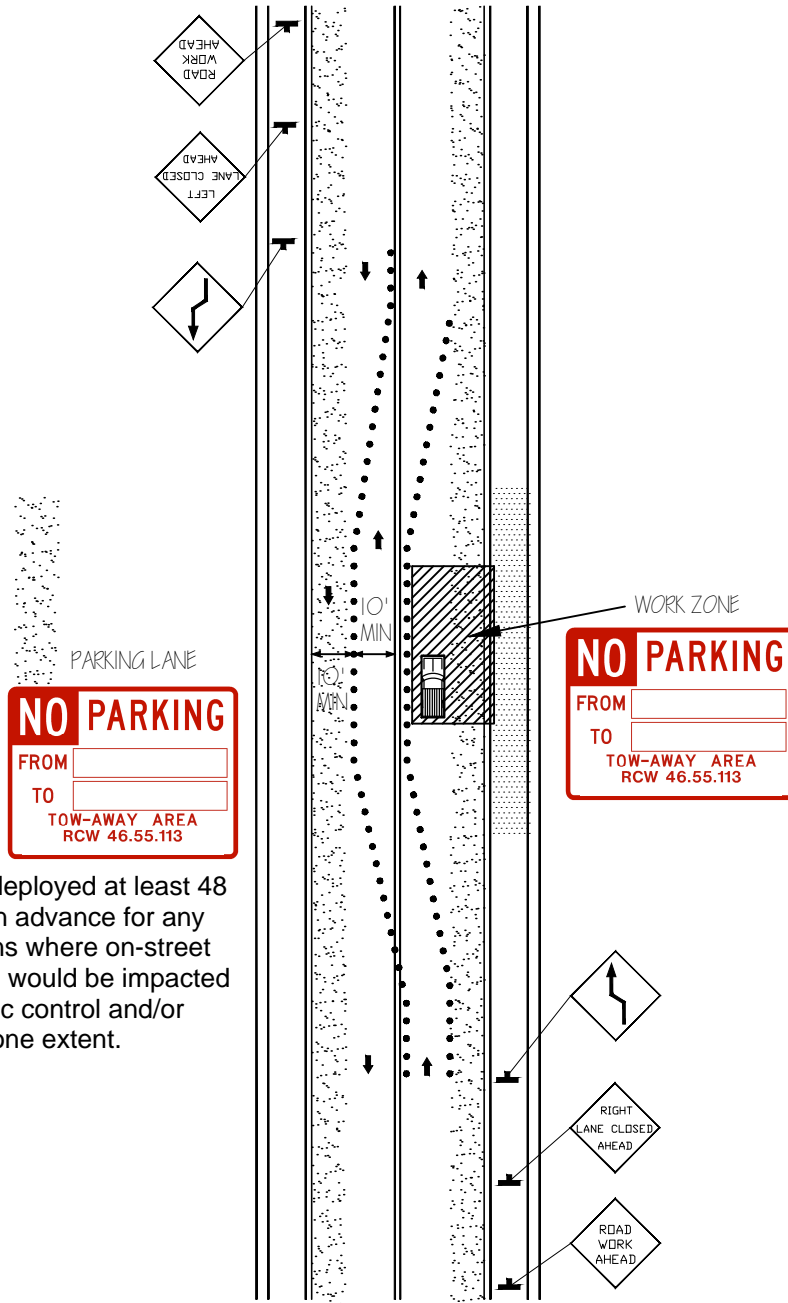
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# SAMPLE SETUP



To be deployed at least 48 hours in advance for any locations where on-street parking would be impacted by traffic control and/or work zone extent.

To be deployed at least 48 hours in advance for any locations where on-street parking would be impacted by traffic control and/or work zone extent.

TWO WAY  
LANE SHIFT  
WITH PARKING

☐ APPROVED BY: \_\_\_\_\_  
☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS  
 MUST BE OUT OF THE ROAD BY DATE: \_\_\_\_\_ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: \_\_\_\_\_  
 MUST BE OUT OF THE ROAD BY DATE & TIME: \_\_\_\_\_

**Taper / Channelizing Device Table**  
 Merging, Shifting, and Shoulder Taper Lengths and Number of Channelizing Devices Used  
 (Washington State Department of Transportation)

(All minimums)

Lane Width	10 Feet				11 Feet				12 Feet				Shoulder Tapers (Assumes 10' Shoulders)		
	L	1/2 L	Merging Devices	Shifting Devices	L	1/2 L	Merging Devices	Shifting Devices	L	1/2 L	Merging Devices	Shifting Devices	MPH(8)	Length	Devices
20	70	6	35	3	75	6	40	3	80	6	40	3	20	25	3
25	105	6	55	4	115	7	60	4	125	7	65	4	25	35	3
30	150	8	75	5	165	9	85	5	180	10	90	5	30	50	3
35	205	8	105	5	225	9	115	5	245	9	125	5	35	70	4
40	270	10	135	6	295	11	150	6	320	12	160	6	40	90	4
45	450	16	225	9	495	18	250	9	540	19	270	10	45	150	6
50	500	14	250	8	550	15	275	8	600	16	300	9	50	170	6
55	550	15	275	8	605	16	305	9	660	18	330	9	55	185	6
60	600	16	300	9	660	18	330	9	720	19	360	10	60	200	6
65	650	17	325	9	715	19	370	10	780	21	390	11	65	220	7
70	700	19	350	10	770	20	385	11	840	22	420	12	70	235	7

(Extracted from Appendix 1-1, of the Work Zone Traffic Control Guidelines - M54-44, 2012)

shoulder taper equals  
Shoulder Width x Speed / 3

Lateral Offset cones 1 foot maximum.

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NO PARKING

FROM

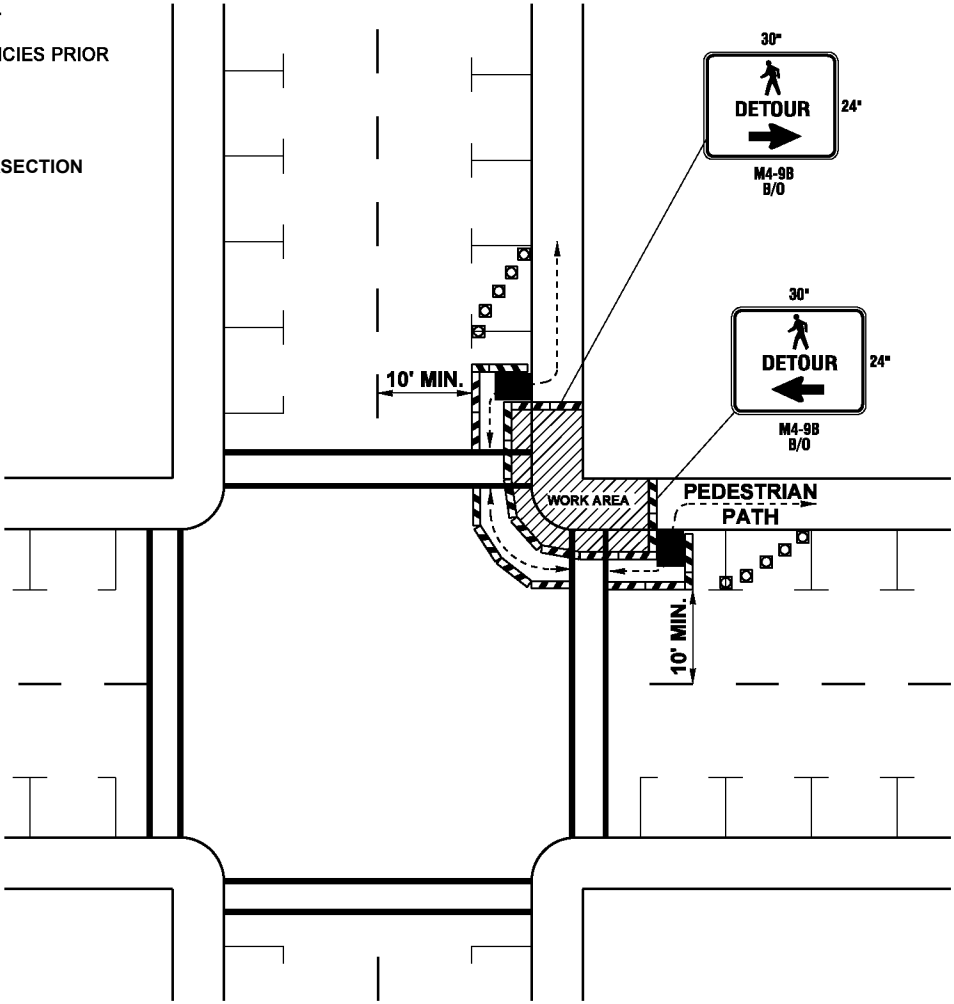
TO

TOW-AWAY AREA

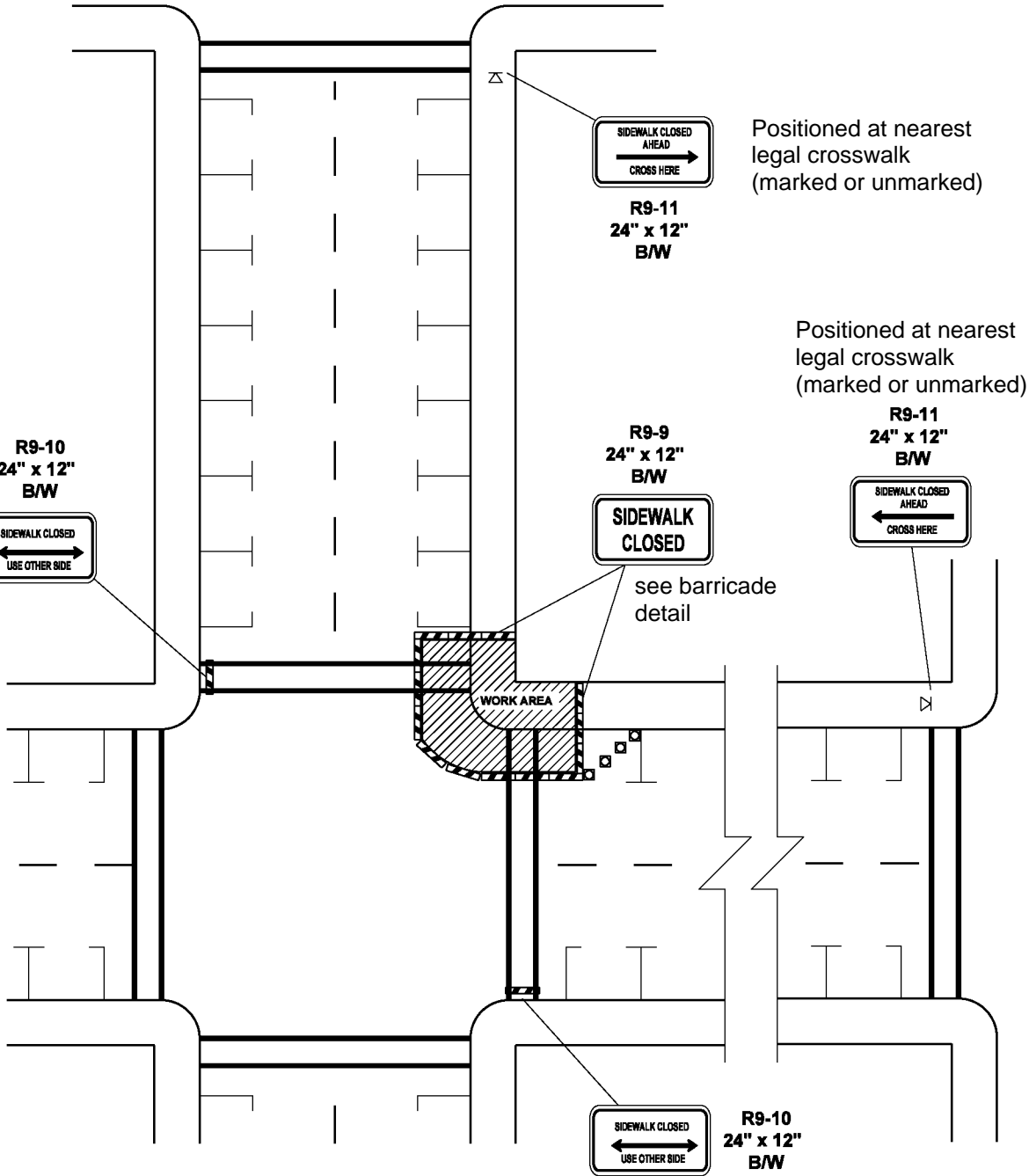
RCW 46.55.113

INSTALL ON TYPE 2 BARRICADES THROUGHOUT THE WORK AREA  
24 HOURS PRIOR TO IMPLEMENTING TRAFFIC CONTROL.  
PRIOR NOTIFICATION OF LOCAL LAW ENFORCEMENT REQUIRED.

- NOTES:
- 1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
  - 2. MAINTAIN A MINIMUM OF 60" FOR A PEDESTRIAN PATH.
  - 3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING ANY CLOSURES.
  - 4. ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED.
  - 5. NO MORE THAN ONE CORNER AT A TIME AT AN INTERSECTION MAY BE CLOSED TO PEDESTRIAN ACCESS.

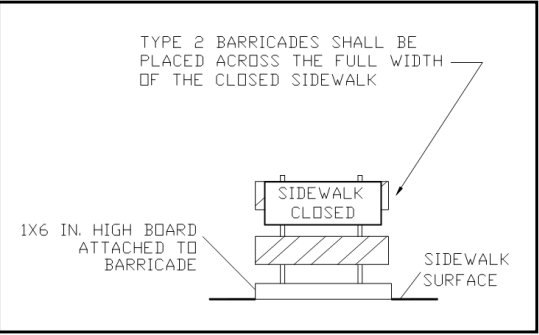


SIDEWALK DIVERSION







SIDEWALK DETOUR

Sidewalk Barricade Detail



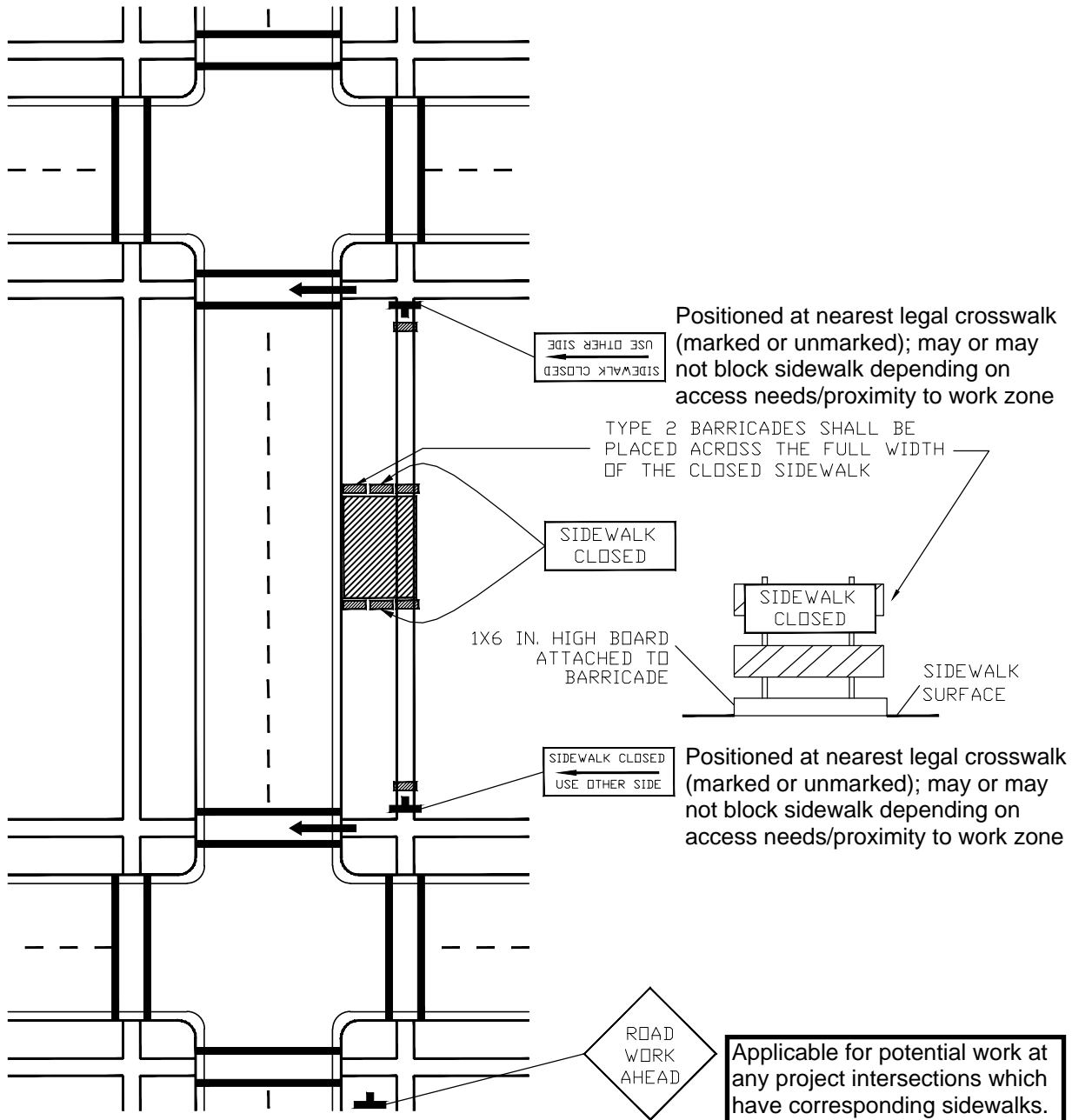
Applicable for potential work at any project intersections which have corresponding sidewalks.

LEGEND

-  TEMPORARY SIGN LOCATION
-  CHANNELIZING DEVICES
-  PEDESTRIAN CHANNELIZING DEVICES (WATER-FILLED BARRIERS OR EQUIVALENT)
-  TEMPORARY PEDESTRIAN RAMP FOR SIDEWALKS  
(SEE CITY OF TACOMA TRAFFIC CONTROL HANDBOOK FOR DETAILS)

INTERSECTION PEDESTRIAN TRAFFIC CONTROL

# SAMPLE SETUP



SIDEWALK  
CLOSURE

☐ APPROVED BY: \_\_\_\_\_  
☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS

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EVENING AND WEEKENDS ONLY

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Merging, Shifting, and Shoulder Taper Lengths and Number of Channelizing Devices Used  
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(All minimums)

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	L		1/2 L		L		1/2 L		L		1/2 L		MPH(R)		Devices
20	70	6	35	3	75	6	40	3	80	6	40	3	20	25	3
25	105	6	55	4	115	7	60	4	125	7	65	4	25	35	3
30	150	8	75	5	165	9	85	5	180	10	90	5	30	50	3
35	205	8	105	5	225	9	115	5	245	9	125	5	35	70	4
40	270	10	135	6	295	11	150	6	320	12	160	6	40	90	4
45	450	16	225	9	495	18	250	9	540	19	270	10	45	150	6
50	500	14	250	8	550	15	275	8	600	16	300	9	50	170	6
55	550	15	275	8	605	16	305	9	660	18	330	9	55	185	6
60	600	16	300	9	660	18	330	9	720	19	360	10	60	200	6
65	650	17	325	9	715	19	370	10	780	21	390	11	65	220	7
70	700	19	350	10	770	20	385	11	840	22	420	12	70	235	7

(Extracted from Appendix 1-1, of the Work Zone Traffic Control Guidelines - M54-44, 2012)

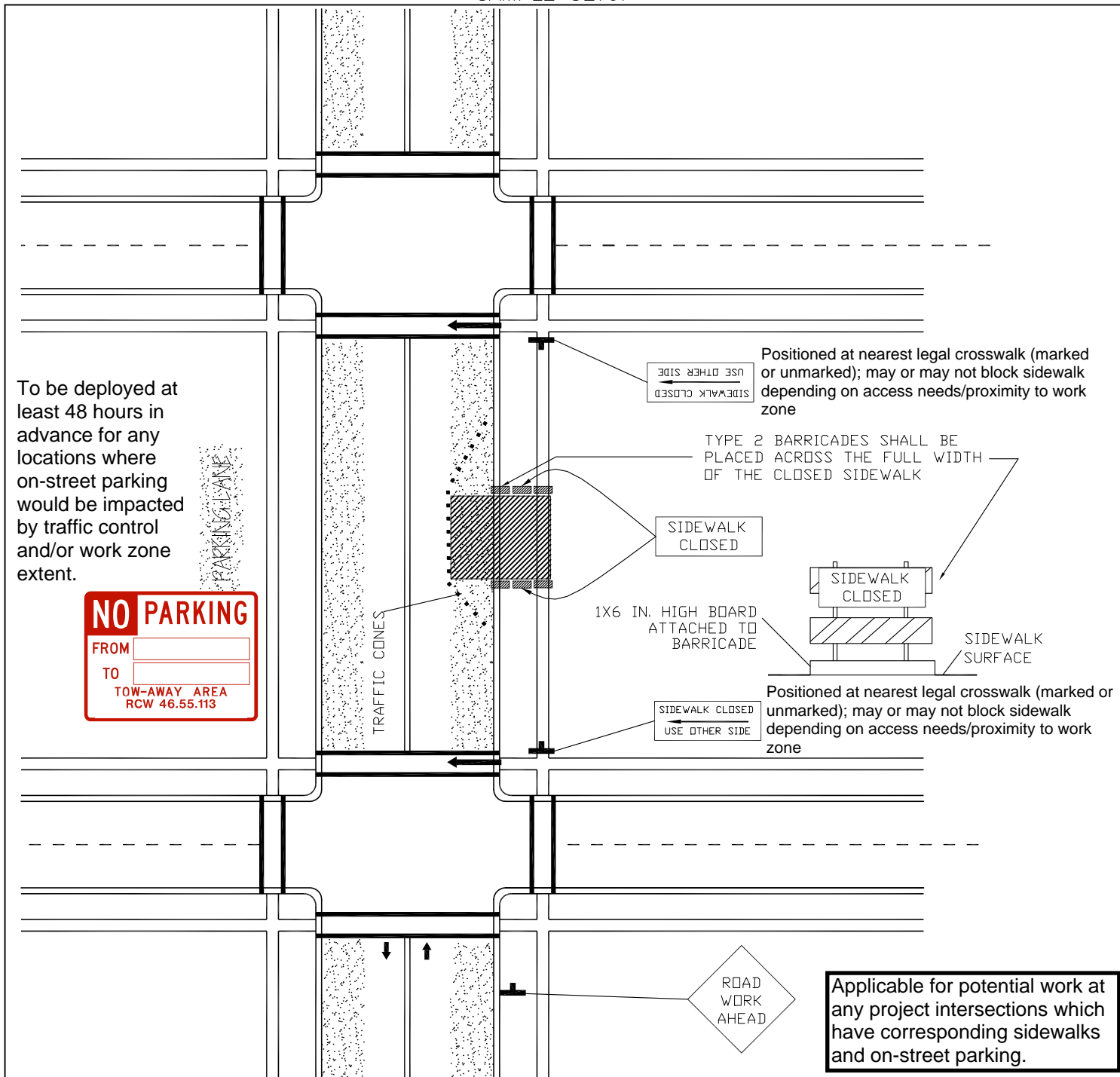
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# SAMPLE SETUP



## SIDEWALK / PARKING CLOSURE

☐ APPROVED BY: \_\_\_\_\_  
☐ APPROVED WITH CONDITIONS BY: \_\_\_\_\_ DATE: \_\_\_\_\_

START TRAFFIC CONTROL SET UP DATE: \_\_\_\_\_ OFF PEAK 9:00 AM WEEKDAYS

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### EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: \_\_\_\_\_

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Taper / Channelizing Device Table													
Merging, Shifting, and Shoulder Taper Lengths and Number of Channelizing Devices Used (Washington State Department of Transportation)													
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Lane Width	10 Feet				11 Feet				12 Feet				Shoulder Tapers (Assumes 10' Shoulders)
	L	1/2 L	Merging Devices	Shifting Devices	L	1/2 L	Merging Devices	Shifting Devices	L	1/2 L	Merging Devices	Shifting Devices	MPH(1)
20	70	6	35	3	75	6	40	3	80	6	40	3	20
25	105	6	55	4	115	7	60	4	125	7	65	4	25
30	150	8	75	5	165	9	85	5	180	10	90	5	30
35	205	8	105	5	225	9	115	5	245	9	125	5	35
40	270	10	135	6	295	11	150	6	320	12	160	6	40
45	450	16	225	9	495	18	250	9	540	19	270	10	45
50	500	14	250	8	550	15	275	8	600	16	300	9	50
55	550	15	275	8	605	16	305	9	660	18	330	9	55
60	600	16	300	9	660	18	330	9	720	19	360	10	60
65	650	17	335	9	715	19	370	10	780	21	390	11	65
70	700	19	350	10	770	20	385	11	840	22	420	12	70

(Extracted from Appendix 1-1, of the Work Zone Traffic Control Guidelines - M54-44, 2012)

shoulder taper equals  
Shoulder Width x Speed / 3

Lateral Offset cones 1 foot maximum.

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**PART III**

**CITY OF TACOMA**

**EQUITY IN CONTRACTING PROGRAM**

# EIC REQUIREMENT FORM

## EQUITY IN CONTRACTING REQUIREMENTS & PROCEDURES:

All bidders must complete and submit with their bid the following solicitation form contained in the bid submittal package:

City of Tacoma – EIC Utilization Form

### **IMPORTANT NOTE:**

It is the bidder's responsibility to ensure that the subcontractor(s) listed on the EIC Utilization Form are currently certified by the State of Washington's Office of Minority and Women Business Enterprises (OMWBE) at the time of bid opening. This may be verified by contacting the EIC Office at 253-591-5075 between 8 AM and 5 PM, Monday through Friday or the [OMWBE](http://www.omwbe.diversitycompliance.com) Office at (866) 208-1064. Please refer to the City of Tacoma EIC code.

### **EQUITY IN CONTRACTING REQUIREMENTS**

Minority Business  
Enterprise Requirement

**11%**

Women Business  
Enterprise Requirement

**7%**

Small Business Enterprise  
Requirement

**8%**

A list of EIC-eligible companies is available on the following web site addresses:

[www.omwbe.diversitycompliance.com](http://www.omwbe.diversitycompliance.com)\*

**MATERIAL MISSTATEMENTS CONCERNING COMPLETED ACTIONS BY THE BIDDER IN ANY SWORN STATEMENT OR FAILURE TO MEET COMMITMENTS AS INDICATED ON THE EIC UTILIZATION FORM MAY RENDER THE BIDDER IN DEFAULT OF CITY ORDINANCE 1.07**

CCD/SBE: PWK-01034-01-01

Date of Record: 01/17/2023

Project Spec#: PW23-0019F

Project Title: SRTS - Edison, Whitman, & Lincoln

\*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office if you have any questions.



City of Tacoma  
Community & Economic Development  
747 Market Street, Rm 900  
Tacoma WA 98402

## CITY OF TACOMA EQUITY IN CONTRACTING (EIC) AND LEAP PROGRAMS

### Bidders Special Instructions

As part of the City of Tacoma's ongoing work to address past disparities and to increase the City's contracting with and utilization of historically underutilized businesses, the Equity in Contracting (EIC) Program places requirements on City contracts for utilization of businesses certified by the Washington State Office of Minority and Women's Business Enterprise (OMWBE) and approved by the Equity in Contracting Program ("Certified Businesses"). The EIC Program also provides guidance and technical assistance to Certified Businesses who are interested in providing supplies, services and public works to the City of Tacoma.

The EIC Program requirements are contained in [Tacoma Municipal Code Chapter 1.07](#).

Contractors bidding on City of Tacoma projects are required to meet the stated EIC requirements. Bids will be evaluated on an individual basis to determine EIC compliance. **A contractor who fails to meet the stated EIC requirements will be considered non-responsible.** Bidders are also subject to the City's Equal Employment Opportunity policies prohibiting discrimination.

The stated EIC requirements may be met by the contractor or by identified subcontractors. All EIC Requirements may be met by using MBEs, WBEs, DBEs or SBEs from the OMWBE certified list ([OMWBE website](#)). It is the bidder's responsibility to ensure that their firm or identified subcontractors are certified by OMWBE and approved by the City of Tacoma EIC Program **at the time of bid submittal**. Business certification may be verified by contacting the EIC Office\*.

*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office\* if you have any questions.*

**The Equity in Contracting (EIC) forms included in these bid documents must be fully completed (including attachments) and included with bid submittals. Failure to include the required forms will result in the submittal being rejected as nonresponsive.**

#### **Post-Award Important Information**

**For all contracts that have requirements related to the EIC and LEAP policies, the City of Tacoma is utilizing two cloud-based software systems:**

- **B2Gnow** - Contractors and subcontractors must report payment information in the B2Gnow System on a monthly basis. The EIC Staff will monitor/audit that retainage is paid by the prime contractor to the subcontractor(s) within 10 [working] days after the subcontractors' work is satisfactorily completed. This will be monitored/audited using the B2Gnow System.
- **LCP Tracker** - This system must be used for submitting certified payroll(s) for both EIC and LEAP compliance.



City of Tacoma  
Community & Economic Development  
747 Market Street, Rm 900  
Tacoma WA 98402

Both systems are monitored/audited by EIC and LEAP staff to ensure contract compliance, proactively identify potential issues and track contract progress.

**\*EIC & LEAP STAFF Contact Information**

- **For questions regarding Certifications, EIC Compliance and B2GNow support, contact EIC Staff:**  
**Malika Godo** at (253) 591-5630, or via email at [mgodo@cityoftacoma.org](mailto:mgodo@cityoftacoma.org)  
**Gary Lizama** at (253) 591-5826, or via email at [glizama@cityoftacoma.org](mailto:glizama@cityoftacoma.org)
- **For questions in regards to LEAP compliance and LCP Tracker support, contact LEAP Staff:**  
**Deborah Trevorrow** at (253) 591-5590, or via email at [dtrevorrow@cityoftacoma.org](mailto:dtrevorrow@cityoftacoma.org)





City of Tacoma  
Community & Economic Development  
Office of Equity in Contracting  
747 Market Street, Rm 900  
Tacoma WA 98402  
253-591-5826  
Email: EICOffice@cityoftacoma.org

## EQUITY IN CONTRACTING UTILIZATION FORM

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are **required** to solicit bids from Businesses that are "Certified" by the Office of Minority and Women's Business Enterprises (OMWBE) [www.omwbe.wa.gov](http://www.omwbe.wa.gov) as a MBE, WBE, and SBE to be known as "Certified Business".
- It is the Prime contractor's responsibility to verify the certification status of the business(s) intended to be utilized prior to the submittal deadline.

Bidder's Name: \_\_\_\_\_

Address: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_

Spec. No. \_\_\_\_\_ Base Bid \* \$ \_\_\_\_\_ Complete business names and phone numbers are required to verify your usage of Certified Businesses

a. Business Name and Certification Number(s)	b. MBE, WBE, or SBE (Write all that apply)	c. NAICS code(s)	d. Contractor Bid Amount (100%)	e. Material Supplier Bid Amount (20%)	f. Estimated MBE Usage Dollar Amount	g. Estimated WBE Usage Dollar Amount	h. Estimated SBE Usage Dollar Amount
i. MBE Utilization %	j. WBE Utilization %	k. SBE Utilization %					

By signing and submitting this form the bidder certifies that the OMWBE Certified Business(s) listed will be used on this project including all applicable change orders.

\_\_\_\_\_  
Type or Print Name of Responsible Officer / Title

\_\_\_\_\_  
Signature of Responsible Officer

\_\_\_\_\_  
Date

# INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

**The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.**

This form when submitted with your bid, provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. \* Base Bid is the prime contractor's bid, plus any alternates, additives and deductibles selected by the City of Tacoma. Also, please refer to Items #10-12 below.
2. Column "a" – List all **Certified Business(s)** that you will be awarding a contract to if you are the successful bidder.
3. Column "b" – Identify if the **Certified Business(s)** is being utilized as an MBE, WBE, or SBE. (Businesses may count towards multiple requirements).
4. Column "c" – List the appropriate NAICS code(s) for the scope of work, services, or materials/supplies for each **Certified Business**.
5. Column "d" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the **Certified Businesses** have negotiated prior to bid opening.
6. Column "e" – The bid amount must be indicated for **all** listed **Certified Businesses** that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.
7. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
8. Column "g" – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
9. Column "h" – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
10. Block "i" – The percentage of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column "f") by your Base Bid (\*) then multiply by 100 to get a percentage: \$ amounts from column "f" divided by Base Bid (\*) x 100 = MBE usage as a percentage of the Base Bid.)
11. Block "j" – The percentage of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column "g") by your Base Bid (\*) then multiply by 100 to get a percentage: \$ amounts from column "g" divided by Base Bid (\*) x 100 = WBE usage as a percentage of the Base Bid.)

12. Block “k” – The percentage of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column “h”) by your Base Bid (\*) then multiply by 100 to get a percentage: \$ amounts from column “h” divided by Base Bid (\*) x 100 = SBE usage as a percentage of the Base Bid.)

It is the prime contractor’s responsibility to check the status of **Certified Businesses** prior to bid opening. Call the EIC Office at 253-591-5826 or email at [EICOffice@cityoftacoma.org](mailto:EICOffice@cityoftacoma.org) for additional information.

## CHAPTER 1.07

### EQUITY IN CONTRACTING

#### Sections:

- 1.07.010 Policy and purpose.
- 1.07.020 Definitions.
- 1.07.030 Discrimination prohibited.
- 1.07.040 Program administration.
- 1.07.050 Approval as a Certified Business.
- 1.07.060 Program requirements.
- 1.07.070 Evaluation of submittals.
- 1.07.080 Contract compliance.
- 1.07.090 Program monitoring.
- 1.07.100 Enforcement.
- 1.07.110 Remedies.
- 1.07.120 Unlawful acts.
- 1.07.130 Severability.
- 1.07.140 Review of program.

#### **1.07.010 Policy and purpose.**

It is the policy of the City of Tacoma that citizens be afforded an opportunity for full participation in our free enterprise system and that historically underutilized business enterprises shall have an equitable opportunity to participate in the performance of City contracts. The City finds that in its contracting for supplies, services and public works, there has been historical underutilization of small and minority-owned businesses located in certain geographically and economically disfavored locations and that this underutilization has had a deleterious impact on the economic well-being of the City. The purpose of this chapter is to remedy the effects of such underutilization through use of narrowly tailored contracting requirements to increase opportunities for historically underutilized businesses to participate in City contracts. It is the goal of this chapter to facilitate a substantial procurement, education, and mentorship program designed to promote equitable participation by historically underutilized businesses in the provision of supplies, services, and public works to the City. It is not the purpose of this chapter to provide any person or entity with any right, privilege, or claim, not shared by the public, generally, and this chapter shall not be construed to do so. This chapter is adopted in accordance with Chapter 35.22 RCW and RCW 49.60.400.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.020 Definitions.**

Terms used in this chapter shall have the following meanings unless defined elsewhere in the Tacoma Municipal Code (“TMC”), or unless the context in which they are used clearly indicates a different meaning.

##### 1.07.020.B

A. “Bid” means an offer submitted by a Respondent to furnish Supplies, Services, and/or Public Works in conformity with the Specifications and any other written terms and conditions included in a City request for such offer.

B. “Bidder” means an entity or individual who submits a Bid, Proposal or Quote. See also “Respondent.”

##### 1.07.020.C

“Certified Business” means an entity that has been certified as a Disadvantaged Business Enterprise (“DBE”), Small Business Enterprise (“SBE”), Minority Business Enterprise (“MBE”), Women Business Enterprise (“WBE”), or Minority and Women’s Business Enterprise (“MWBE”) by the Washington State Office of Minority and Women’s Business Enterprise and meets the criteria set forth in Section 1.07.050 (2) of this chapter and has been approved as meeting that criteria by the Community and Economic Development Department Program Manager.

“City” means all Departments, Divisions and agencies of the City of Tacoma.

“Contract” means any type of legally binding agreement regardless of form or title that governs the terms and conditions for procurement of Public Works and Improvements and/or Non-Public Works and Improvements Supplies and Services. Contracts include the terms and conditions found in Specifications, Bidder or Respondent Submittals, and purchase orders issued by the City. A “Contract” as used in this chapter shall include an agreement between the City and a non-profit entity to perform construction-related services for Public Works. A “Contract” does not include: (1) awards made by the City with

federal/state grant or City general funds monies to a non-profit entity where the City offers assistance, guidance, or supervision on a project or program, and the recipient of the grant awards uses the grant moneys to provide services to the community; (2) sales transactions where the City sells its personal or real property; (3) a loan transaction where the City is acting as a debtor or a creditor; (4) lease, franchise; (5) agreements to use City real property (such as Licenses, Permits and Easements) and, (6) banking and other financial or investment services.

“Contractor” means any Person that presents a Submittal to the City, enters into a Contract with the City, and/or performs all or any part of a Contract awarded by the City, for the provision of Public Works, or Non-Public Works and Improvements, Supplies or Services.

**1.07.020.G**

“Goals” means the annual level of participation by Certified Businesses in City Contracts as established in this chapter, the Program Regulations, or as necessary to comply with applicable federal and state nondiscrimination laws and regulations. Goals for individual Contracts may be adjusted as provided for in this chapter and shall not be construed as a minimum for any particular Contract or for any particular geographical area.

**1.07.020.N**

“Non-Public Works and Improvements” means all competitively solicited procurement of Supplies and/or Services by the City not solicited as Public Works.

**1.07.020.P**

“Person” means individuals, companies, corporations, partnerships, associations, cooperatives, any other legally recognized business entity, legal representative, trustee, or receivers.

“Program Manager” means the individual appointed, from time to time, by the City’s Community and Economic Development Director to administer the Program Regulations.

“Program Regulations” means the written regulations and procedures adopted pursuant to this chapter for procurement of Supplies, Services and Public Works.

“Proposal” means a written offer to furnish Supplies or Services in response to a Request for Proposals. This term may be further defined in the Purchasing Policy Manual and/or in competitive solicitations issued by the City.

“Public Works (or “Public Works and Improvements)” means all work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the City, or that is by law a lien or charge on any property therein. This term includes all Supplies, materials, tools, and equipment to be furnished in accordance with the Contract for such work, construction, alteration, repair, or improvement.

**1.07.020.Q**

“Quote” means a competitively solicited written offer to furnish Supplies or Services by a method of procurement that is less formalized than a Bid or a Proposal. This term may be further defined in the Purchasing Policy Manual.

**1.07.020.R**

“Respondent” means any entity or Person, other than a City employee, that provides a Submittal in response to a request for Bids, Request for Proposals, Request for Qualifications, request for quotes or other request for information, as such terms are defined in Section 1.06.251 TMC. This term includes any such entity or Person whether designated as a supplier, seller, vendor, proposer, Bidder, Contractor, consultant, merchant, or service provider that; (1) assumes a contractual responsibility to the City for provision of Supplies, Services, and/or Public Works; (2) is recognized by its industry as a provider of such Supplies, Services, and/or Public works; (3) has facilities similar to those commonly used by Persons engaged in the same or similar business; and/or (4) distributes, delivers, sells, or services a product or performs a Commercially Useful Function.

**1.07.020.S**

“Services” means non-Public Works and Improvements services and includes professional services, personal services, and purchased services, as such terms are defined in Section 1.06.251 TMC and/or the City’s Purchasing Policy Manual.

“Submittal” means Bids, Proposals, Quotes, qualifications or other information submitted in response to requests for Bids, Requests for Proposals, Requests for Qualifications, requests for Quotations, or other City requests for information, as such terms are defined in Section 1.06.251 TMC.

“Supplies” means materials, Supplies, and other products that are procured by the City through a competitive process for either Public Works procurement or Non-Public Works and Improvements procurement unless an approved waiver has been granted by the appropriate authority.

1.07.020.T

“Tacoma Public Utilities Service Area” means any ZIP code in which Tacoma Public Utilities maintains infrastructure or provides retail services.

1.07.020.W

“Waiver” means a discretionary decision by the City that the one or more requirements of this chapter will not be applied to a Contract or Contracts.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28274 Ex. A; passed Dec. 16, 2014: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

**1.07.030 Discrimination prohibited.**

A. No person that is engaged in the construction of public works for the City, engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services to the City, shall discriminate against any other person on the basis of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental or physical disability in employment. Such discrimination includes the unfair treatment or denial of normal privileges to a person as manifested in employment upgrades, demotions, transfers, layoffs, termination, rates of pay, recruitment of employees, or advertisement for employment.

B. The violation of the terms of RCW 49.60 or Chapter 1.29 TMC by any person that is engaged in the construction of public works for the City, is engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services shall result in the rebuttable presumption that the terms of this chapter have also been violated. Such violation may result in termination of any City contract the violator may have with the City and/or the violator’s ineligibility for further City Contracts.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

**1.07.040 Program administration.**

A. The Community and Economic Development Director, or their designated Program Manager, shall be responsible for administering this chapter and obtaining compliance with respect to contracts entered into by the City and/or its contractors. It shall be the duty of the Director to pursue the objectives of this chapter by conference, conciliation, persuasion, investigation, or enforcement action, as may be necessary under the circumstances. The Director is authorized to implement an administrative and compliance program to meet these responsibilities and objectives.

B. The Director is hereby authorized to adopt and to amend administrative regulations known as the Program Regulations, to properly implement and administer the provisions of this chapter. The Program Regulations shall be in conformance with City of Tacoma policies and state and federal laws and be designed to encourage achievement of the Goals set forth herein.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

**1.07.050 Approval as a Certified Business.**

A. The Program Manager shall approve an entity as a Certified Business if all of the following criteria are satisfied:

1. The entity is certified as a DBE, SBE, MBE, WBE, or MWBE through the state of Washington’s Office of Minority & Women Business Enterprises; and
2. The entity can demonstrate that it also meets at least one of the following additional requirements:
  - a. The personal residence of the owner is located within the City of Tacoma or Tacoma Public Utilities Service Area, or
  - b. The entity’s business offices are located in any county of the Tacoma Public Utilities Service Area or any county adjacent to Pierce County, or
  - c. When the work is performed outside of Pierce County, the entity’s business offices may be located in an adjacent county in which the work is performed, or
  - d. Such additional information as the Program Manager or designee may require.
3. When another governmental entity has an equivalent business classification process, the City may enter into an interlocal cooperative agreement for mutual recognition of certifications.

## B. Appeals.

The applicant may appeal any approval determination by the Program Manager under this chapter to the Director. The appeal must be made in writing and must set forth the specific reasons for the appeal. The Director shall make a decision on the appeal request within a reasonable time, which decision shall be final unless further appeal is made to the Hearing Examiner. In that event, the Hearing Examiner Rules of Procedure for Hearings, Chapter 1.23 TMC, shall be applicable to that appeal proceeding.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28274 Ex. A; passed Dec. 16, 2014: Ord. 28147 Ex. A; passed May 7, 2013: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

### **1.07.060 Program requirements.**

#### A. The program shall meet the following requirements:

##### 1. Establishment of Annual Goals.

The Program Regulations adopted pursuant to this chapter shall state reasonably achievable cumulative annual goals for utilization of Certified Businesses in the provision of supplies, services, and public works procured by the City. Cumulative annual goals for the participation of Certified Businesses in City contracts shall be based on the number of qualified Certified Businesses operating within the Tacoma Public Utilities Service Area. The dollar value of all contracts awarded by the City to Certified Businesses in the procurement of supplies, services, and public works shall be counted toward the accomplishment of the applicable goal.

##### 2. Application of Annual Goals to Contracts.

The Program Manager shall consult with City departments/divisions to establish department/division specific goals for competitively solicited contracts in accordance with this chapter and the Program Regulations.

#### B. Exceptions:

City departments/divisions or the Program Manager may request an exception to one or more of the requirements of this chapter as they apply to a particular Contract or Contracts. Exceptions may be granted in any one or more of the following circumstances:

##### 1. Emergency:

The supplies, services and/or public works must be provided with such immediacy that neither the City nor the contractor can comply with the requirements herein. Such emergency will be deemed documented whenever a waiver of competitive solicitation for emergency situations is authorized under Tacoma Municipal Code Chapter 1.06.257 or as may be hereinafter amended.

##### 2. Not Practicable:

The Contract involves special facilities or market conditions or specially tailored or performance criteria-based products, such that compliance with the requirements of this chapter would cause financial loss to the City or an interruption of vital services to the public. Such circumstances must be documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over \$500,000 (excluding sales tax), approved by the Board of Contracts and Awards ("C&A Board").

##### 3. Sole source:

The supplies, services, and/or public works are available from only one feasible source, and subcontracting possibilities do not reasonably exist as documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over \$500,000 (excluding sales tax), approved by the C&A Board.

##### 4. Government purchasing.

The Contract or Contracts are the result of a federal, state or inter-local government purchasing agreement and the use of such agreement in lieu of a bid solicitation conducted by the City is approved by the senior financial manager.

##### 5. Lack of certified contractors:

An insufficient number of qualified contractors exist to create any utilization opportunities as documented by the Program Manager.

#### C. Waiver:

If, after receipt of Submittals but prior to Contract award, it is determined that due to unforeseen circumstances, waiver of goals is in the best interests of the City, the Director or Superintendent of the department/division awarding the Contract may request in writing that the City Manager or designee, on behalf of General Government, or the Director of Utilities or designee, on behalf of the Department of Public Utilities, approve such waiver..

Waivers may be granted only after determination by the City Manager or Director of Utilities that compliance with the requirements of this chapter would impose unwarranted economic burden on, or risk to, the City of Tacoma as compared with the degree to which the purposes and policies of this chapter would be furthered by requiring compliance.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.070 Evaluation of submittals.**

A. All submittals for a supplies, services, or public works and improvements contracts shall be evaluated for attainment of the Certified Business requirements established for that contract in accordance with this chapter and the Program Regulations.

B. The determination of Certified Business usage and the calculation of Certified Business requirements per this section shall include the following considerations:

1. General.

The dollar value of the contract awarded by the City to a Certified Business in the procurement of supplies, services, or public works shall be counted toward achievement of the respective goal.

2. Supplies.

A public works and improvements contractor may receive credit toward attainment of the Certified Business requirement(s) for expenditures for supplies obtained from a Certified Business; provided such Certified Business assumes the actual and contractual responsibility for delivering the supplies with its resources. The contractor may also receive credit toward attainment of the Certified Business goal for the amount of the commission paid to a Certified Business resulting from a supplies contract with the City; provided the Certified Business performs a commercially useful function in the process.

3. Services and Public Works subcontracts.

Any bid by a Certified Business or a bidder that utilizes a Certified Business shall receive credit toward requirement attainment based on the percentage of Certified Business usage demonstrated in the bid. A contractor that utilizes a Certified Business as a subcontractor to provide services or public works shall receive a credit toward the contractor's attainment of the respective requirement based on the value of the subcontract with that firm.

4. Brokers, Fronts, or Similar Pass-Through Arrangements.

Certified Business acting as brokers, fronts, or similar pass-through arrangements (as such terms are defined in the Program Regulations) shall not count toward the requirement attainment unless the activity reflects normal industry practices and the broker performs a commercially useful function.

C. Evaluation of competitively solicited submittals for public works and improvements and for services when a requirement has been established for the contract to be awarded shall be as follows:

1. When contract award is based on price.

The lowest priced bid submitted by a responsive and responsible bidder will be reviewed to determine if it meets the requirement. Certified Businesses may self-count utilization on such bids if they will perform the work for the scope the requirement is based upon.

a. If the low bidder meets the requirements, the bid shall be presumed the lowest and best responsible bid for contract award.

b. Any bidder that does not meet the stated Certified Business requirements shall be considered a non-responsible bidder unless a waiver of one or more of the requirements of this chapter is granted, in the City's sole discretion, pursuant to the criteria and processes in Tacoma Municipal Code 1.07.060.C.

2. When contract award is based on qualifications or other performance criteria in addition to price, solicitations shall utilize a scoring system that promotes participation by certified contractors. The Program Regulations may establish further requirements and procedures for final selection and contract award, including:

a. Evaluation of solicitations for Architectural and Engineering (A&E) services;

b. Evaluation and selection of submittals in response to requests for proposals; and



c. Selection of contractors from pre-qualified roster(s).

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.080 Contract compliance.**

A. The contractor awarded a contract based on Certified Business participation shall, during the term of the contract, comply with the requirements established in said contract. To ensure compliance with this requirement following contract award, the following provisions apply:

1. Any substitutions for or failure to utilize Certified Business projected to be used must be approved in advance by the Program Manager. Substitution of one Certified Business with another shall be allowed where there has been a refusal to execute necessary agreements by the original Certified Business, a default on agreements previously made or other reasonable excuse; provided that the substitution does not increase the dollar amount of the bid.
2. Where it is shown that no other Certified Business is available as a substitute and that failure to secure participation by the Certified Business identified in the solicitation is not the fault of the respondent, substitution with a non-Certified Business shall be allowed; provided, that, the substitution does not increase the dollar amount of the bid.
3. If the Program Manager determines that the contractor has not reasonably and actively pursued the use of replacement Certified Business, such contractor shall be deemed to be in non-compliance.

#### **B. Record Keeping.**

All contracts shall require contractors to maintain relevant records and information necessary to document compliance with this chapter and the contractor's utilization of Certified Businesses, and shall include the right of the City to inspect such records.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.090 Program monitoring.**

A. An Advisory Committee shall monitor compliance with all provisions of this chapter and the related Regulations. The Program Manager shall establish procedures to collect data and monitor the effect of the provisions of this chapter to assure, insofar as is practical, that the remedies set forth herein do not disproportionately favor one or more racial, gender, ethnic, or other protected groups, and that the remedies do not remain in effect beyond the point that they are required to eliminate the effects of under utilization in City contracting, unless such provisions are supported by a Disparity Study. The Program Manager shall have the authority to obtain from City departments/divisions, respondents, and contractors such relevant records, documents, and other information as is reasonably necessary to determine compliance.

B. The Program Manager shall submit an annual report to the Community and Economic Development Director, Director of Utilities, and the City Manager detailing performance of the program. The report shall document Certified Business utilization levels, waivers, proposed modifications to the program, and such other matters as may be specified in the Program Regulations.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.100 Enforcement.**

The Director, or designee, may investigate the employment practices of contractors to determine whether or not the requirements of this chapter have been violated. Such investigation shall be conducted in accordance with the procedures established in the Program Regulations.

(Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.110 Remedies.**

A. Upon receipt of a determination of contractor violation by the Program Manager, the City Manager or Director of Utilities, as appropriate, may take the following actions, singly or together, as appropriate:

1. Forfeit the contractor's bid bond and/or performance bond;

2. Publish notice of the contractor's noncompliance;
3. Cancel, terminate, or suspend the contractor's contract, or portion thereof;
4. Withhold funds due contractor until compliance is achieved; and/or
5. Recommend appropriate action including, but not limited to, disqualification of eligibility for future contract awards by the City (debarment) per Section 1.06.279 TMC;

B. Prior to exercise of any of the foregoing remedies, the City shall provide written notice to the contractor specifying the violation and the City's intent to exercise such remedy or remedies. The notice shall provide that each specified remedy becomes effective within ten business days of receipt unless the contractor appeals said action to the Hearing Examiner pursuant to Chapter 1.23 TMC.

C. When non-compliance with this chapter or the Program Regulations has occurred, the Program Manager and the department/division responsible for enforcement of the contract may allow continuation of the contract upon the contractor's development of a plan for compliance acceptable to the Director.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 28110 Ex. B; passed Dec. 4, 2012; Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.120 Unlawful acts.**

It shall be unlawful for any Person to willfully prevent or attempt to prevent, by intimidation, threats, coercion, or otherwise, any Person from complying with the provisions of this chapter.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.130 Severability.**

If any section of this chapter or its application to any Person or circumstance is held invalid by a court of competent jurisdiction, then the remaining sections of this chapter, or the application of the provisions to other Persons or circumstances, shall not be affected.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

#### **1.07.140 Review of program.**

This chapter shall be in effect through and until December 31, 2024, unless the City Council shall determine at an earlier date that the requirements of this chapter are no longer necessary. If this chapter has not been repealed by July 1, 2024, the City Council shall determine by the end of that year whether substantial effects or lack of opportunity of MWBEs and/or SBEs remain true in the relevant market and whether, and for how long, some or all of the requirements of this chapter should remain in effect.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28274 Ex. A; passed Dec. 16, 2014; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 27867 Ex. A; passed Dec. 15, 2009)

**PART IV**

**CITY OF TACOMA**

**LOCAL EMPLOYMENT AND APPRENTICESHIP  
TRAINING PROGRAM (LEAP) REGULATIONS FOR  
PUBLIC WORKS CONTRACTS**



City of Tacoma  
Community and Economic Development Department  
LEAP Office  
747 Market Street, Room 900  
Tacoma, WA 98402  
(253) 591-5590  
[leap@cityoftacoma.org](mailto:leap@cityoftacoma.org)

## **LEAP LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM ABBREVIATED PROGRAM REQUIREMENTS**

LEAP is a mandatory City of Tacoma program adopted to provide employment opportunities for City of Tacoma residents and residents of Economically Distressed Areas of the Tacoma Public Utilities Service Area. Based on the dollar amounts of projects, it requires Prime Contractors performing qualifying public works projects or service contracts ensure that a percentage of the total labor hours worked on the project are performed by LEAP-Qualified local employees and/or LEAP-Qualified apprentices approved by the Washington State Apprenticeship Council (SAC), youth, veterans, residents of Tacoma, residents of surrounding Economically Distressed Areas, and/or TPU Service Areas (as outlined below). Compliance may be met through any combination LEAP-Qualified employees.

Prime Contractors may obtain further information by contacting the City of Tacoma's LEAP Coordinator, Deborah Trevorow, at (253) 591-5590, or e-mail [leap@cityoftacoma.org](mailto:leap@cityoftacoma.org). The LEAP Coordinator can assist contractors in the recruitment of qualified entry-level workers to work on City of Tacoma Public Works projects. The LEAP Office is in the Tacoma Municipal Building, 747 Market Street, Rm 900.

### **LEAP PROGRAM REQUIREMENTS:**

1. **LOCAL EMPLOYMENT GOAL:** The Prime Contractor is required to ensure that 15 percent of the total Labor Hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed ZIP Codes for the following projects:
  - a) Civil Projects over \$250,000
  - b) Building Projects over \$750,000
2. **APPRENTICE GOAL:** The Contractor is required to ensure that an additional 15 percent of the total Labor Hours worked on any project over \$1,000,000 are performed by Apprentices who are residents of the Tacoma Public Utilities Service Area. This is in addition to the Local Employment Goal.
3. **SUBCONTRACTOR NOTIFICATION:** Prime Contractors shall notify all Subcontractors of the LEAP Program requirement. Subcontractor labor hours may be utilized towards achievement of the LUG. Owner/Operator hours may be used for the Local Employment Goal.
4. **FAILURE TO MEET LEAP UTILIZATION GOAL:** Contractors shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor met its goal. The amount per hour that shall be assessed shall be as follows:

• 100% achievement	\$0.00 penalty	
• 99% to 90% achievement	\$2.00 penalty	
• 89% to 75% achievement	\$3.50 penalty	
• 74% to 50% achievement	\$5.00 penalty	
• 49% to 1% achievement	\$7.50 penalty	
• 0% achievement	\$10.00 penalty	

\*Penalty may be waived in the best interests of the City of Tacoma.

**LEAP DOCUMENT SUBMITTALS\*\*:**

1. *LEAP EMPLOYEE VERIFICATION FORM*: The Contractor must provide the LEAP Office with a form for every person whom the contractor thinks will assist with attaining credit towards meeting the LEAP Utilization requirements with at least one piece of verifying documentation. The LEAP Office staff will respond regarding whether or not the employee is LEAP-Qualified.
2. *WEEKLY CERTIFIED PAYROLL*: In LCP Tracker: the Prime and Subcontractors must submit weekly Certified Payrolls that include, employee name, address, social security number, craft/trade, class, hours worked on this job, rate of pay, and gross wages paid including benefits for this job.
3. *DEPARTMENT OF LABOR & INDUSTRIES (L&I)*: The Prime must enter the project in the L&I project site under the 'Tacoma, City of' account and notify the LEAP Office when this has been completed.

**\*\*WITHHOLDING PROGRESS PAYMENTS**: The LEAP Coordinator may withhold progress payments for failure to follow the above-outlined procedures



City of Tacoma  
LEAP Office  
747 Market Street, Room 900  
Tacoma, WA 98402  
(253) 591-5590 or [leap@cityoftacoma.org](mailto:leap@cityoftacoma.org)

## LEAP

### Documents and Submittal Schedule

In the attached packet, you will find the LEAP forms that are required to be submitted by the Prime and Sub Contractors.

- ❑ **LEAP Abbreviated Program Requirements:** brief overview of LEAP Program requirements
- ❑ **LEAP Employee Verification Form:** to be submitted on an ongoing basis for each employee who may be a LEAP-qualified employee
- ❑ **LEAP Weekly Payroll Report:** must be attached and filled out to the front of each certified payroll
- ❑ **Tacoma Public Utilities Service Area Map and List, Economically Distressed ZIP Codes Map and List:** for your reference on LEAP-qualified zoning areas

In addition, the City of Tacoma will also require from the Prime Contractor and all its Subcontractors:

- ❑ **Weekly Certified Payrolls:** to be submitted via LCP Tracker weekly, biweekly or monthly with the LEAP Payroll Report attached as scheduled by the Prime
- ❑ **Statement of Intent to Pay Prevailing Wages:** to be submitted prior to commencing work
- ❑ **Affidavit of Wages Paid:** to be submitted upon completion of each contractor's work
- ❑ **Document Verification:** provide required information when requested from LEAP Office

Please submit above documents as instructed by the LEAP Coordinator.

If you have any questions or request further information, please feel free to contact the City of Tacoma's LEAP Program at (253) 591-5590 or email [dtrevorrow@cityoftacoma.org](mailto:dtrevorrow@cityoftacoma.org)

**CHAPTER 1.90**  
**LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM**

## Sections:

1.90.010	Purpose.
1.90.020	Scope.
1.90.030	Definitions.
1.90.040	LEAP goals.
1.90.050	<i>Repealed.</i>
1.90.060	Effect of program on prime contractor/subcontractor relationship.
1.90.070	Apprentice utilization requirements – Bidding and contractual documents.
1.90.080	Enforcement.
1.90.090	Compliance with applicable law.
1.90.100	Review and reporting.
1.90.105	Authority
1.90.110	Interpretation.

**1.90.010 Purpose.**

The purpose of this Chapter is to establish a means of providing for the development of a trained and capable workforce possessing the skills necessary to fully participate in the construction trades.

(Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.020 Scope.**

The provisions of this Chapter shall apply to all Public Works or Improvements funded in whole or in part with City funds or funds which the City expends or administers in accordance with the terms of a grant.

(Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.030 Definitions.**

As used in this chapter, the following terms shall have the following meanings:

- A. “Apprentice” shall mean a person enrolled in a course of training specific to a particular construction trade or craft, which training shall be approved by the Washington State Apprenticeship and Training Council established pursuant to RCW 49.04.010.
- B. “Building Projects” shall mean all Public Works or Improvements having an Estimated Cost greater than \$750,000.00, and for which a building permit must be issued pursuant to Chapter 1 of the current edition of the state building code (Uniform Building Code).
- C. “City” shall mean all divisions and departments of the City of Tacoma, and all affiliated agencies, provided, however, that the Tacoma Community Redevelopment Authority shall not be included within this definition.
- D. “Civil Projects” shall mean all Public Works or Improvements that are not defined as a “Building Project,” provided that those projects having an Estimated Cost of less than \$250,000.00 shall not be included in this definition.
- E. “Contractor or Service Provider” means a person, corporation, partnership, or joint venture entering into a contract with the City to construct a Public Work or Improvement.
- F. “Director” shall mean the Director of Community and Economic Development, or the Director’s Designee.
- G. “Economically Distressed ZIP Codes” shall mean ZIP codes in the Tacoma Public Utilities Service Area that meet two out of three (2/3) of the thresholds of:
  1. High concentrations of residents living under 200% of the federal poverty line in terms of persons per acre (69th percentile)
  2. High concentrations of unemployed people in terms of persons per acre (45th percentile)
  3. High concentrations of people 25 years or older without a college degree in terms of persons per acre (75th percentile)

Said thresholds shall be updated within 30 days following any Prevailing Wage updates issued by the Washington State Labor and Industry. All updates are to be published on the first business day in August and in February of each calendar year.

H. “Electrical Utility” and “Water Utility” shall mean, respectively, the Light Division of the Department of Public Utilities of the City of Tacoma, and shall include the electrical and telecommunications services of that Division, and the Water Division of the Department of Public Utilities of the City of Tacoma.

I. “Estimated Cost” shall mean the anticipated cost of a Public Work or Improvement, as determined by the City, based upon the expected costs of materials, supplies, equipment, and labor, but excluding taxes and contingency funds.

J. “Estimated Labor Hours” shall mean the anticipated number of Labor Hours determined by the City to be necessary to construct a Public Work or Improvement and set forth in the specifications for the project, or as may be subsequently revised due to contract or project adjustment, or pursuant to an agreed upon change order.

K. “Existing Employee” shall mean an employee whom the Contractor or Service Provider can demonstrate was actively employed by the Contractor or Service Provider for at least 1000 hours in the calendar year prior to bid opening plus one month following bid opening, and who was performing work in the construction trades.

L. “Labor Hours” shall mean the actual number of hours worked by workers receiving an hourly wage who are employed on the site of a Public Work or Improvement, and who are subject to state or federal prevailing wage requirements. The term “Labor Hours” shall include hours performed by workers employed by the Contractor or Service Provider and all Subcontractors, and shall include additional hours worked as a result of a contract or project adjustment or pursuant to an agreed upon change order. The term “Labor Hours” shall not include hours worked by workers who are not subject to the prevailing wage requirements set forth in either RCW 39.12 or the Davis-Bacon Act - 40 U.S.C. 276 (a).

M. “LEAP Coordinator” shall mean the City of Tacoma staff member who administers LEAP.

N. “LEAP Program” or “Program” shall mean the City of Tacoma’s Local Employment and Apprenticeship Training Program, as described in this chapter.

O. “LEAP Regulations” or “Regulations” shall mean the rules and practices established in this document.

P. “LEAP Utilization Plan” shall mean the document submitted by the Contractor to the LEAP Coordinator which outlines how the associated goals will be met on the project.

Q. “Priority Hire Resident” shall mean any resident within the Economically Distressed ZIP Codes.

R. “Project Engineer” shall mean the City employee who directly supervises the engineering or administration of a particular construction project subject to this chapter.

S. “Public Work or Improvement” shall have the same meaning as provided in Section 39.04.010 RCW, as that Section may now exist or hereafter be amended.

T. “Resident of Tacoma” shall mean any person, not defined as a Resident of the Community Empowerment Zone, who continues to occupy a dwelling within the boundaries of the City of Tacoma, has a present intent to continue residency within the boundaries of the City, and who demonstrates the genuineness of that intent by producing evidence that the person’s presence is more than merely transitory in nature.

U. “Service Area - Electrical” or “Electrical Service Area” shall mean that area served with retail sales by the Electrical Utility of the City of Tacoma at the time a bid is published by the Electrical Utility for a Public Work or Improvement to be performed primarily for the Electrical Utility.

V. “Service Area - Water” or “Water Service Area” shall mean that area served with retail sales by the water utility of the City of Tacoma at the time a bid is published by the water utility for a Public Work or Improvement to be performed primarily for the water utility.

W. “Service Contract” shall mean all City contracts relating to a Public Work or Improvement which utilize labor at a City site and which are not within the exceptions to nor defined as “Building Projects” or “Civil Projects.”

X. “Subcontractor” means a person, corporation, partnership, or joint venture that has contracted with the Contractor or Service Provider to perform all or part of the work to construct a Public Work or Improvement by a Contractor.

Y. “Tacoma Public Utilities” means the City of Tacoma, Department of Public Utilities.

Z. “Tacoma Public Utilities Service Area” shall mean every ZIP code listed by Tacoma Public Utilities as an area that either receives services or maintains infrastructure to provide services.

AA. Washington State Labor and Industry Prevailing Wage shall mean the hourly wage, usual benefits and overtime, paid in the largest city in each county, to the majority of workers, laborers, and mechanics. Prevailing wages are established, by the Department of Labor & Industries, for each trade and occupation employed in the performance of public work. They are established separately for each county, and are reflective of local wage conditions.



(Ord. 28520 Ex. A; passed Jul. 17, 2018; Ord. 28147 Ex. B; passed May 7, 2013; Ord. 28110 Ex. C; passed Dec. 4, 2012; Ord. 27815 Ex. A; passed Jun. 30, 2009; Ord. 27368 § 1; passed Jun. 21, 2005; Ord. 26698 § 1; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

### **1.90.040 LEAP goals.**

#### **A. Utilization Goals.**

1. All Contractors constructing Civil Projects or Building Projects, and all Service Providers involved with the construction of a Public Work or Improvement, shall ensure that at least 15 percent of the total Labor Hours actually worked on the Project are performed by persons having their residence within the boundaries of the City of Tacoma or Economically Distressed ZIP Codes, whether or not any such person is an Apprentice.

a. The thresholds for this section shall be \$250,000.00 for Civil Projects and \$750,000.00 for Building Projects.

2. Fifteen percent (15%) of the Total Labor Hours on contracts above one-million dollars (\$1,000,000.00) shall have work performed by Apprentices who are residents of the Tacoma Public Utilities Service Area consistent with RCW 39.04.320(1)(a), subject to waiver based on exceptions as specified in RCW 39.04.320(2)(a), (b), and (c).

3. Labor Hours performed by non-residents of the State of Washington will be deducted from a project's total Labor Hours for purposes of determining compliance with the requirements of this chapter.

4. All Contractors and Service Providers shall submit a LEAP Utilization Plan as provided for in the regulations adopted under this chapter, and shall meet with the LEAP Coordinator to review said Plan prior to being issued a Notice to Proceed. Failure to submit a LEAP Utilization Plan may be grounds for the City to withhold remittance of a progress payment until such Plan is received from the responsible Contractor or Provider. A meeting with the LEAP Coordinator prior to issuance of a Notice to Proceed shall be excused only when the LEAP Coordinator is unavailable to meet prior to the scheduled date for issuance of the Notice to Proceed and the Contractor and the LEAP Coordinator have otherwise scheduled a meeting for the coordinator to review the Contractor's or Provider's plan.

The Contractor or Service Provider shall be responsible for meeting the LEAP utilization goal requirements of the contract, including all amendments and change orders thereto, and shall be responsible for overall compliance for all hours worked by Subcontractors. To the extent possible, the Contractor or Service Provider shall recruit Apprentices from multiple trades or crafts.

#### **B. Failure to Meet Utilization Goal.**

1. Contracts for the construction of Building projects or Civil projects and Service Contracts shall provide that Contractors or Service Providers failing to meet the LEAP utilization goals shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor or Service Provider met its goal. The amount per hour that shall be assessed shall be as follows:

<b>Percent of Goal Met</b>	<b>Assessment per unmet hour</b>
100%	\$ 0.00
90% - 99%	\$ 2.00
75% to 89%	\$ 3.50
50% to 74%	\$ 5.00
1% to 49%	\$ 7.50
0%	\$10.00

When determining the percent of goal that is met, all rounding shall be down to the nearest whole percent. No penalty shall be waived by the City unless it is determined by the Director to be in the best interests of the City, which determination shall be made after consultation with the LEAP Coordinator.

2. Deposit of Assessments. All assessments imposed pursuant to this section shall be deposited into a separate account and utilized to support the City's pre-apprenticeship and training program. The policies and regulations adopted by the City Manager and Director of Utilities pursuant to this chapter shall address issues pertaining to a Contractor's existing workforce. Contributions need not be made for Labor Hours that have been adjusted in accordance with Section 1.90.040(E).

#### **C. LEAP Reports.**

Notwithstanding the provisions of TMC 1.90.100, the Director shall, not less than annually, publish a LEAP report setting forth Contractor compliance with this chapter. Said report shall include information on all contracts and all Contractors to which this chapter applies, and shall detail the level and nature of LEAP participation by contract and by Contractor, The

Director's LEAP report may include such other information as may be helpful to assuring fair and accurate representation of the contracts, Contractors or projects covered in the report. The Director's LEAP reports may be considered by the Board of Contracts and Awards in its determinations as to bidder responsibility.

**D. LEAP Goal Adjustments.**

1. LEAP utilization goals may be adjusted prior to bid opening and/or as a result of a contract amendment or change order on a Building Project, Civil Project, or Service Contract.

a. If LEAP utilization goals are adjusted prior to bid opening, they shall be set forth in the bid or Request For Proposal advertisement and specification documents or in an addendum timely provided to prospective bidders, provided that such adjustment shall be based upon a finding by the Project Engineer that the reasonable and necessary requirements of the contract render LEAP utilization unfeasible at the required levels. The Director shall concur with the Project Engineer's finding, provided that should the Project Engineer and the Director fail to reach agreement on the Project Engineer's finding, then in that circumstance the matter shall be referred to the City Manager or the Director of Utilities, as appropriate, for ultimate resolution. Notwithstanding any other provision of this chapter to the contrary, the decision of the City Manager or the Director of Utilities with regard to LEAP goal adjustment may not be appealed.

b. If LEAP utilization goals are adjusted due to contract amendment or change order, the amount of adjustment shall be consistent with the utilization goals set forth in this chapter and shall be determined pursuant to regulations adopted pursuant to this chapter for administration of LEAP utilization goal adjustments.

2. The methodology of determining the appropriate adjustments to LEAP utilization goals shall be determined in consultation with the LEAP Advisory Committee, established pursuant to this ordinance for so long as the LEAP Advisory Committee remains in existence.

3. LEAP utilization goals shall not apply to those portions of a project that are funded by sources other than (a) City funds, or (b) funds which the City expends or administers in accordance with the terms of a grant to the City, provided that the Project Engineer shall notify the Director of such non-application prior to bid advertisement. For the purposes of this paragraph, credits extended by another entity for the purpose of providing project funding shall not be considered to be City funds.

**E. Utilization - Electrical Projects Outside Electrical Service Area.**

Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City's Electrical Utility, which are wholly situated outside the Electrical Service Area, and for which the estimated cost is less than \$1,000,000.00, are exempt from the requirements of this chapter.

**F. Utilization - Water Projects Outside Water Service Area.**

Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City's water utility, which are wholly situated outside the Water Service Area, and for which the estimated cost is less than \$1,000,000.00 are exempt from the requirements of this chapter.

**G. Utilization - Projects Outside Tacoma Public Utilities Service Area.**

Civil Projects or Building Projects that are constructed primarily for the benefit or use by Tacoma Public Utilities, which are wholly situated outside the retail service area of the Tacoma Public Utilities Service Area, and for which the estimated cost is less than \$1,000,000.00 are exempt from the requirements of this chapter. Projects wholly situated outside the Tacoma Public Utilities Service Area, and for which the estimated cost is more than \$1,000,000.00, shall be exempt from 15% utilization goal specified in subsection A1. of this section. The 15% utilization goal specified in subsection A2. of this section may be met if project work is performed by Apprentices who are enrolled in a course of training specific to a particular construction trade or craft, provided such training has been approved by the Washington State Apprenticeship and Training Council in accordance with Chapter 49.04, RCW.

**H. Emergency.**

This chapter shall not apply in the event of an Emergency. For the purposes of this section, an "Emergency" means unforeseen circumstances beyond the control of the City that either: (a) present a real, immediate threat to the proper performance of essential functions; or (b) will likely result in material loss or damage to property, bodily injury, or loss of life if immediate action is not taken.

**I. Conflict with State or Federal Requirements.**

If any part of this chapter is found to be in conflict with federal or state requirements which are a prescribed condition to the allocation of federal or state funds to the City, then the conflicting part of this chapter is inoperative solely to the extent of the conflict and with respect to the City departments directly affected. This provision does not affect the operation of the

remainder of this chapter. Administrative rules or regulations adopted under this chapter shall meet federal and state requirements which are a necessary condition to the receipt of federal or state funds by the City.

(Ord. 28520 Ex. A; passed Jul. 17, 2018; Ord. 28147 Ex. B; passed May 7, 2013; Ord. 27815 Ex. A; passed Jun. 30, 2009; Ord. 27368 § 2; passed Jun. 21, 2005; Ord. 26992 § 1; passed Oct. 15, 2002; Ord. 26698 § 2; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.050 Repealed by Ord. 27368. Good faith efforts.**

(Ord. 27368 § 3; passed Jun. 21, 2005; Ord. 26698 § 3; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.060 Effect of program on prime contractor/service provider - subcontractor relationship.**

The LEAP Program shall not be construed so as to modify or interfere with any relationship between any Contractor or Service Provider and Subcontractor. The LEAP Program shall not grant the City any authority to control the manner or method of accomplishing any construction work that is additional to any authority retained by the City in a Public Works contract.

(Ord. 26698 § 4; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.070 Apprentice utilization requirements – Bidding and contractual documents.**

All packages of bid documents for every Building Project and every Civil Project shall incorporate provisions satisfactory to the City Attorney so as to allow enforcement of the provisions contained in this Chapter. Such contractual provisions may include liquidated damages, calculated to reimburse the City for the Contractor's breach of these performance requirements, which shall be published with the City's call for bids.

(Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.080 Enforcement.**

A. The Director shall review the Contractor's or Service Provider's and all Subcontractor's employment practices during the performance of the work for compliance with LEAP Program requirements. On-site visits may be conducted as necessary to verify compliance with the requirements of the LEAP Program. The Contractor, Service Provider, or Subcontractors shall not deny to the City the right to interview its employees, provided that the Director shall make reasonable efforts to coordinate employee interviews with employers.

B. Any knowing failure or refusal to cooperate in compliance monitoring may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

C. The making of any material misrepresentation may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

D. Any action by the City, its officers and employees, under the provisions of this Chapter may be reviewed by the Board of Contracts and Awards, upon written application of the party so affected. Application shall be made within twenty (20) days of the date of the action upon which the appeal is based, and provided to the City by certified mail or by personal service. Any action taken by the Board of Contracts and Awards may be appealed to the City Council or Public Utility Board, as appropriate, and thereafter if desired, to the Superior Court of Pierce County, Washington, within fifteen (15) days of the previous decision.

(Ord. 26698 § 5; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.090 Compliance with applicable law.**

Nothing in this Chapter shall excuse a Prime Contractor, Service Provider, or Subcontractor from complying with all relevant federal, state, and local laws.

(Ord. 26698 § 6; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.100 Review and reporting.**

The City Manager and Director of Utilities shall review the Program on or before January 1, 2000, and every two (2) years thereafter, and shall report to the City Council and Public Utility Board the Manager's and Director's findings, conclusions, and recommendations as to the continued need for the Program, and any revisions thereto that should be considered by the Council and Board.

(Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.105 Authority.**

The City Manager and the Director of Utilities shall have authority to jointly adopt policies and regulations consistent with this chapter to implement the LEAP program.

(Ord. 26698 § 7; passed Sept. 12, 2000: Ord. 26301 § 1; passed Oct. 6, 1998)

**1.90.110 Interpretation.**

This Chapter shall not be interpreted or construed so as to conflict with any state or federal law, nor shall this Chapter be enforced such that enforcement results in the violation of any applicable judicial order.

(Ord. 26301 § 1; passed Oct. 6, 1998)

# LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP)

## **LEAP REQUIREMENTS & PROCEDURES:**

The LEAP office enforces post-award mandatory requirements. Bidders do not have to submit any information in the bid submittal package to be in compliance with LEAP.

### **Post-award Submittals:**

- **LEAP Employee Verification Form.** This form is to be completed for employees who may be LEAP-Qualified and may be able to help meet the LEAP Goals.
- **LEAP Weekly Payroll.** These must be submitted via LCP Tracker. By submitting payrolls in LCP Tracker before the Labor & Industry's website, you can reduce data entry.

The City of Tacoma's LEAP office enforces two mandatory requirements on City projects based on certain monetary thresholds.

**Local Employment Utilization Goal** - the Prime Contractor performing a qualifying public works project must ensure that 15 percent of the total labor hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed Zip Codes, whether or not any such person is an apprentice.

**Apprenticeship Utilization Goal** – for contracts above one-million dollars, the Prime Contractor performing a qualifying public works project must ensure that 15 percent of the total labor hours worked on the project are performed by Apprentices who are residents of the City of Tacoma or Tacoma Public Utilities Service Area. The accompanying LEAP Regulations, forms, and maps are included in these specifications.

**\*Exceptions:** If the project is located outside of the retail service area of the Tacoma Public Utilities Service Area, then Apprentices may come from the county in which the work is performed.

This project is above \$1 million and is thusly subject to the:

1. 15% Local Employment Utilization Goal
2. 15% Apprentice Utilization Goal

LEAP staff can assist contractors in the recruitment, screening and selection of qualified City of Tacoma residents, Economically Distressed Area residents, and Apprentices. Contractors may obtain further information by contacting the City's LEAP Office at (253) 316-3057 or (253) 591-5590. The LEAP Office is located in the Tacoma Municipal Building, 747 Market Street, Room 900, Tacoma, WA 98402. [www.cityoftacoma.org/leap](http://www.cityoftacoma.org/leap)



City of Tacoma LEAP Office  
747 Market Street, Room 900  
Tacoma, WA 98402  
(253) 591-5590 or leap@cityoftacoma.org  
www.cityoftacoma.org/leap

## **LEAP EMPLOYEE VERIFICATION FORM**

Contractor/Sub: \_\_\_\_\_ Specification Number: \_\_\_\_\_

Project Description: \_\_\_\_\_

Employee Name: \_\_\_\_\_ Craft: \_\_\_\_\_

Ethnic Group (*optional*): ☐ Asian/Pac Isl. ☐ Black ☐ Hispanic ☐ Native American ☐ White ☐ Other

Gender (*optional*): ☐ MALE ☐ FEMALE

Complete Physical Address (No PO Boxes): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_ Date of Hire: \_\_\_\_\_

Apprenticeship County: \_\_\_\_\_ Apprentice Registration I.D. (*if applicable*): \_\_\_\_\_

Age: \_\_\_\_\_ Copy of DD-214: \_\_\_\_\_

**\*\*\*\*\*Please fill out entire form for tracking LEAP performance\*\*\*\*\***

LEAP qualified employee categories: (check all that apply and provide evidence for each check)

\_\_\_\_\_ a. Resident (journey level or certified apprentice) within the geographic boundaries of the City of Tacoma

\_\_\_\_\_ b. Resident (journey level or certified apprentice) within Economically Distressed ZIP Codes of the Tacoma Public Utilities Service Area

\_\_\_\_\_ c. WA State Approved Apprentice living in the Tacoma Public Utilities Service Area (Only valid for projects over \$1,000,000)

\_\_\_\_\_ d. WA State Approved Apprentice \*(Only valid for contracts where 100% of work is performed outside of Pierce County)

Signature of Employee: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor Representative: \_\_\_\_\_ Date: \_\_\_\_\_

## LEAP EMPLOYEE VERIFICATION FORM

*To be Completed by Contractor or Subcontractor*

Please attach a legible copy of one or more of the following document(s) showing the address of residence as proof of local (Tacoma) and/or Economically Distressed Area and/or TPU Service Areas residency. For youth, see first line and for veteran status, see second line.

.....

\_\_\_\_\_ For Youth - Copy of Birth Certificate or WA State ID or  
\_\_\_\_\_ WA Driver's License (projects advertised after 05-20-13)

\_\_\_\_\_ For Veterans – Copy of DD-214(Projects advertised after  
\_\_\_\_\_ 05-20-13)

\_\_\_\_\_ Driver's License with current address

\_\_\_\_\_ Utility Bill/Phone Bill/Cell Bill/Cable Bill with current  
\_\_\_\_\_ address

\_\_\_\_\_ Copy of current tax form W-4

\_\_\_\_\_ Rental Agreement/Lease (residential)

\_\_\_\_\_ Computer Printout From Other Government Agencies

\_\_\_\_\_ Property Tax Records

\_\_\_\_\_ Apprentice Registration I.D.

\_\_\_\_\_ Food Stamp Award Letter

\_\_\_\_\_ Housing Authority Verification

\_\_\_\_\_ Insurance Policy (Residence/Auto)

\*Any of the above must have a complete physical address verified by the [www.govme.org](http://www.govme.org) website.

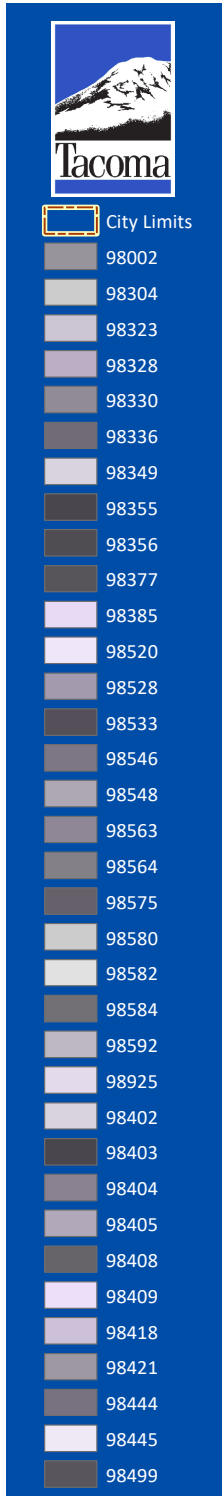
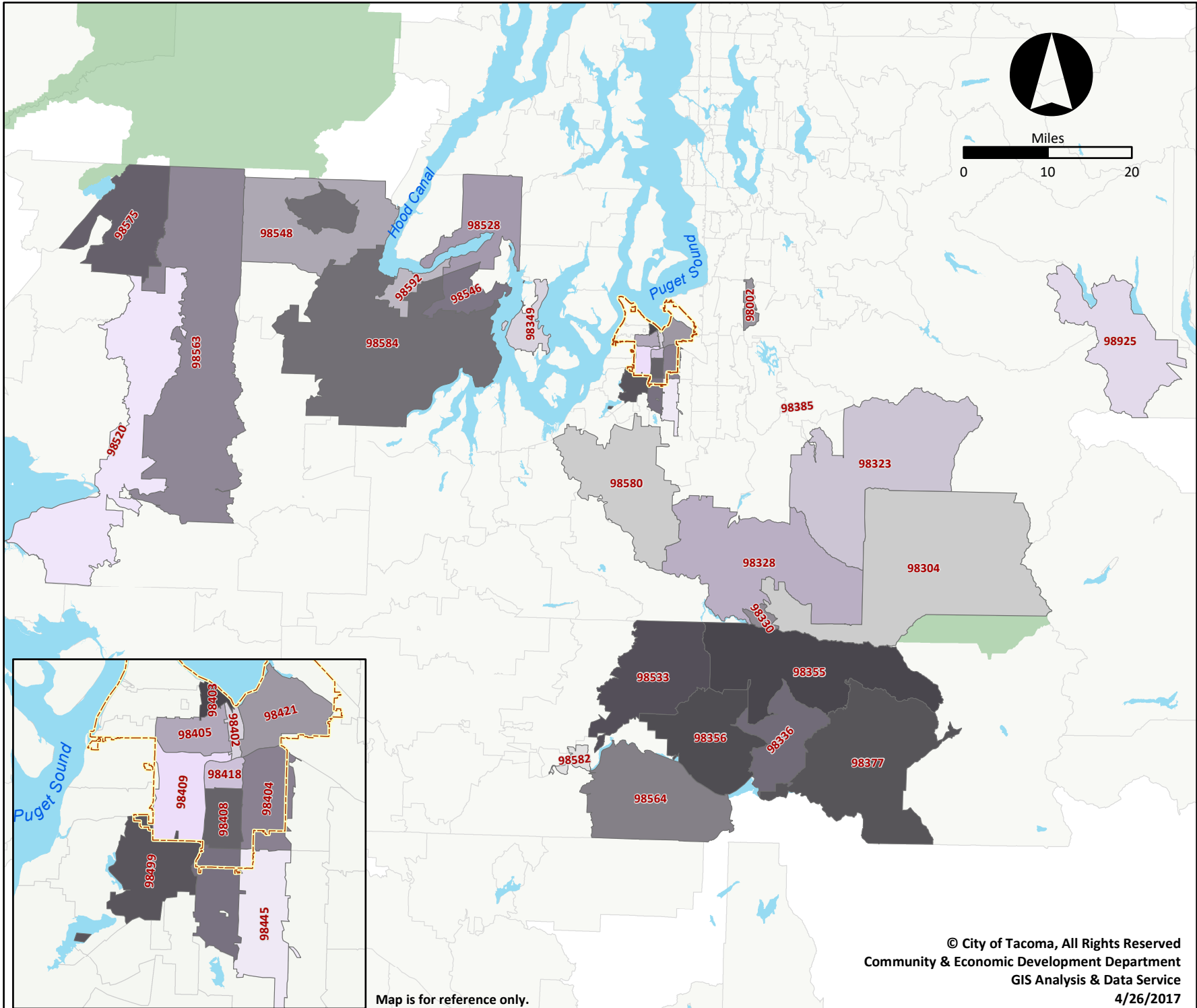
No PO Boxes

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

Date:\_\_\_\_\_

Title:\_\_\_\_\_

# Appendix C: Economically Distressed ZIP Codes Map





# Tacoma Public Utilities Infrastructure and Service Area (Apprentice Utilization)

98001	Auburn	0.00%
98002	Auburn	0.00%
98003	Federal Way	0.00%
98010	Black Diamond	0.00%
98022	Enumclaw	0.00%
98023	Federal Way	0.00%
98030	Kent	0.00%
98032	Kent	0.00%
98038	Maple Valley	0.00%
98042	Kent	0.00%
98045	North Bend	0.00%
98051	Ravensdale	0.00%
98070	Vashon	0.00%
98092	Auburn	0.00%
98198	Seattle	0.00%
98304	Ashford	0.00%
98321	Buckley	0.27%
98323	Carbonado	0.05%
98327	DuPont	0.00%
98328	Eatonville	2.92%
98329	Gig Harbor	0.24%
98330	Elbe	0.00%
98332	Gig Harbor	0.00%
98333	Fox Island	0.00%
98335	Gig Harbor	0.05%
98336	Glenoma	0.00%
98338	Graham	0.79%
98349	Lakebay	0.06%
98354	Milton	0.01%
98355	Mineral	0.00%

98356	Morton	0.17%
98360	Orting	0.54%
98371	Puyallup	0.12%
98372	Puyallup	1.33%
98373	Puyallup	1.42%
98374	Puyallup	0.15%
98375	Puyallup	0.29%
98377	Randle	0.00%
98385	South Prairie	0.00%
98387	Spanaway	0.68%
98388	Spanaway	0.00%
98390	Sumner	0.12%
98391	Bonney	1.83%
98402	Tacoma	0.46%
98403	Tacoma	3.31%
98404	Tacoma	10.15%
98405	Tacoma	4.97%
98406	Tacoma	3.51%
98407	Tacoma	4.38%
98408	Tacoma	12.58%
98409	Tacoma	8.88%
98416	UPS	0.00%
98418	Tacoma	1.98%
98421	Tacoma	0.00%
98422	Tacoma	0.67%
98424	Tacoma	0.98%
98430	Camp Murray	0.00%
98433	Tacoma	0.00%
98438	McChord	0.00%
98439	Lakewood	0.00%

98443	Tacoma	0.00%
98444	Tacoma	7.20%
98445	Tacoma	2.09%
98446	Tacoma	0.17%
98447	PLU	0.00%
98465	Tacoma	0.44%
98466	Tacoma	0.06%
98467	University Place	0.09%
98498	Lakewood	0.05%
98499	Lakewood	0.26%
98520	Aberdeen	0.00%
98524	Allyn	0.97%
98528	Belfair	0.31%
98533	Cinebar	0.00%
98546	Grapeview	0.00%
98548	Hoodspport	0.00%
98555	Lilliwaup	0.00%
98563	Montesano	0.21%
98564	Mossyrock	0.00%
98575	Quinalt	0.20%
98580	Roy	2.02%
98582	Salkum	0.00%
98584	Shelton	10.31%
98585	Silver Creek	0.00%
98591	Toledo	1.93%
98592	Union	0.00%
98597	Yelm	0.00%
98925	Easton	0.00%

## Economically Distressed ZIP Codes (Journeyman AND Apprentice)

Zip Code	200% Pov	Unemployed	25+ College	Area
98002	Y		Y	Auburn
98304	Y		Y	Ashford/Rainier
98323	Y	Y	Y	Carbonado
98328	Y		Y	Eatonville
98330	Y		Y	Elbe
98336	Y		Y	Glenoma
98349	Y	Y		Lakebay
98355		Y	Y	Mineral
98356	Y	Y	Y	Morton
98377	Y	Y	Y	Randle
98385		Y	Y	South Prairie
98402	Y	Y		Downton
98403	Y	Y		Stadium/St. Helens
98404	Y	Y		Eastside
98405	Y	Y		Hilltop/Central
98408	Y		Y	South End
98409	Y	Y		South Tacoma
98418	Y		Y	Lincoln/South End
98421	Y	Y	Y	Port
98439	Y	Y		McChord AFB
98444	Y	Y		Parkland
98445	Y		Y	Midland
98499	Y	Y		Lakewood
98520	Y	Y	Y	Aberdeen
98528	Y		Y	Belfair
98533		Y	Y	Cinebar
98546	Y	Y	Y	Grapeview
98548	Y	Y	Y	Hoodsport
98563	Y	Y	Y	Montesano
98564	Y	Y	Y	Mossyrock
98575	Y		Y	Quinault
98580	Y		Y	Roy
98582	Y		Y	Salkum
98584	Y		Y	Shelton
98591	Y		Y	Toledo
98592		Y	Y	Union
98925	Y		Y	Easton

**PART V**

**STATE PREVAILING WAGE RATES**

**AND**

**GENERAL REQUIREMENTS**

## PREVAILING WAGE RATES

This project requires prevailing wages under [39.12 RCW](#). Any worker, laborer, or mechanic employed in the performance of any part of the work shall be paid not less than the applicable prevailing rate of wage.

The project site is located in Pierce County.

The effective date for prevailing wages on this project will be the **submittal deadline** with these exceptions:

- a. If the project is not awarded within six months of the submittal deadline, the award date is the effective date.
- b. If the project is not awarded pursuant to a competitive solicitation, the date the contract is executed is the effective date.
- c. Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, these rates shall apply for the duration of the contract unless otherwise noted in the solicitation.

Look up prevailing rates of pay, benefits, and overtime codes from this link:

<https://secure.lni.wa.gov/wagelookup/>

## REQUIRED FILINGS

The contractor and all subcontractors covered under [39.12 RCW](#) shall submit to the Department of Labor and Industries (L&I) for work provided under this contract:

1. A Statement of Intent to Pay Prevailing Wages must be filed with and approved by L&I upon award of contract.
2. An Affidavit of Wages Paid must be filed with and approved by L&I upon job completion.

Payments cannot be released by the City until verification of these filings are received by the engineer. Additional information regarding these filings can be obtained by calling the Department of Labor & Industries, Prevailing Wage at 360-902-5335, <https://www.lni.wa.gov/> or by visiting their MY L&I account.



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

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The Contractor (Contractor) shall maintain at least the minimum insurance set forth below. By requiring such minimum insurance, the City of Tacoma shall not be deemed or construed to have assessed the risk that may be applicable to Contractor under this Contract. Contractor shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

### 1. GENERAL REQUIREMENTS

The following General Requirements apply to Contractor and to Subcontractor(s) of every tier performing services and/or activities pursuant to the terms of this Contract. Contractor acknowledges and agrees to the following insurance requirements applicable to Contractor and Contractor's Subcontractor(s):

- 1.1. City of Tacoma reserves the right to approve or reject the insurance provided based upon the insurer, terms and coverage, the Certificate of Insurance, and/or endorsements.
- 1.2. Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by City of Tacoma.
- 1.3. Contractor shall keep this insurance in force during the entire term of the Contract and for Thirty (30) calendar days after completion of all work required by the Contract, unless otherwise provided herein.
- 1.4. Insurance policies required under this Contract that name "City of Tacoma" as Additional Insured shall:
  - 1.4.1. Be considered primary and non-contributory for all claims.
  - 1.4.2. Contain a "Separation of Insured provision and a "Waiver of Subrogation" clause in favor of City of Tacoma.
- 1.5. Section 1.4 above does not apply to contracts for purchasing supplies only.
- 1.6. Verification of coverage shall include:
  - 1.6.1. An ACORD certificate or equivalent.
  - 1.6.2. Copies of all endorsements naming the City of Tacoma as additional insured and showing the policy number.
  - 1.6.3. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.
- 1.7. Liability insurance policies, with the exception of Professional Liability and Workers' Compensation, shall name the City of Tacoma and its officers, elected officials, employees, agents, and authorized volunteers as additional insured.
  - 1.7.1. No specific person or department should be identified as the additional insured.
  - 1.7.2. All references on certificates of insurance and endorsements shall be listed as "City of Tacoma".
  - 1.7.3. The City of Tacoma shall be additional insured for both ongoing and completed operations using Insurance Services Office (ISO) form CG 20 10 04 13 and CG 20



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

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37 04 13 or the equivalent 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 describes limits lower than those maintained by the Contractor.

- 1.8. Contractor shall provide a Certificate of Insurance for each policy of insurance meeting the requirements set forth herein when Contractor provides the signed Contract for the work to City of Tacoma. Contractor shall provide copies of any applicable Additional Insured, Waiver of Subrogation, and Primary and Non-contributory endorsements. Contract or Permit number and the City Department must be shown on the Certificate of Insurance.
- 1.9. Insurance limits shown below may be written with an excess policy that follows the form of an underlying primary liability policy or an excess policy providing the required limit.
- 1.10. Liability insurance policies shall be written on an "occurrence" form, except for Professional Liability/Errors and Omissions, Pollution Liability, and Cyber/Privacy and Security
- 1.11. If coverage is approved and purchased on a "Claims-Made" basis, Contractor warrants continuation of coverage, either through policy renewals or by the purchase of an extended reporting period endorsement as set forth below.
- 1.12. The insurance must be written by companies licensed or authorized in the State of Washington pursuant to RCW 48 with an (A-) VII or higher in the A.M. Best's Key Rating Guide [www.ambest.com](http://www.ambest.com).
- 1.13. Contractor shall provide City of Tacoma notice of any cancellation or non-renewal of this required insurance within Thirty (30) calendar days.
- 1.14. Contractor shall not allow any insurance to be cancelled or lapse during any term of this Contract, otherwise it shall constitute a material breach of the Contract, upon which City of Tacoma may, after giving Five (5) business day notice to 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 City of Tacoma by Contractor upon demand, or at the sole discretion of City of Tacoma, offset against funds due Contractor from City of Tacoma.
- 1.15. Contractor shall be responsible for the payment of all premiums, deductibles and self-insured retentions, and shall indemnify and hold the City of Tacoma harmless to the extent such a deductible or self-insured retained limit may apply to the City of Tacoma as an additional insured. Any deductible or self-insured retained limits in excess of Twenty Five Thousand Dollars (\$25,000) must be disclosed and approved by City of Tacoma Risk Manager and shown on the Certificate of Insurance.
- 1.16. City of Tacoma reserves the right to review insurance requirements during any term of the Contract and to require that Contractor make reasonable adjustments when the scope of services has changed.



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

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- 1.17. 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 by City of Tacoma to Contractor.
- 1.18. Insurance coverages specified in this Contract are not intended and will not be interpreted to limit the responsibility or liability of Contractor or Subcontractor(s).
- 1.19. Failure by City of Tacoma to identify a deficiency in the insurance documentation provided by Contractor or failure of City of Tacoma to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 1.20. If Contractor is a State of Washington or local government and is self-insured for any of the above insurance requirements, a certification of self-insurance shall be attached hereto and be incorporated by reference and shall constitute compliance with this Section.

## 2. CONTRACTOR

As used herein, "Contractor" shall be the Supplier(s) entering a Contract with City of Tacoma, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise.

## 3. SUBCONTRACTORS

It is Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage. Contractor shall provide evidence of such insurance upon City of Tacoma's request.

## 4. REQUIRED INSURANCE AND LIMITS

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

### 4.1 Commercial General Liability Insurance

Contractor shall maintain Commercial General Liability Insurance policy with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) annual aggregate. The Commercial General Liability Insurance policy shall be written on an Insurance Services Office form CG 00 01 04 13 or its equivalent. Products and Completed Operations shall be maintained for a period of three years following Substantial Completion of the Work related to performing construction services.

This policy shall include product liability especially when a Contract solely is for purchasing supplies. The Commercial General Liability policy shall be endorsed to include: A per project aggregate policy limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

### 4.2 Workers' Compensation

Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington, as well as any other similar coverage required for this work by applicable federal laws of other states. The Contractor must comply with their domicile State Industrial Insurance laws if it is outside the State of Washington.



# CITY OF TACOMA

## INSURANCE REQUIREMENTS FOR CONTRACTS

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### 4.3 Employers' Liability Insurance

Contractor shall maintain Employers' Liability coverage with limits not less than One Million Dollars (\$1,000,000) each employee, One Million Dollars (\$1,000,000) each accident, and One Million Dollars (\$1,000,000) policy limit.

### 4.4 Excess or Umbrella Liability Insurance

Contractor shall provide Excess or Umbrella Liability Insurance with limits not less than Three Million Dollars (\$3,000,000) per occurrence and in the aggregate. This coverage shall apply, at a minimum, in excess of primary underlying Commercial General Liability, Employer's Liability, Pollution Liability, Marine General Liability, Protection and Indemnity, and Automobile Liability if required herein.

### 4.5 Other Insurance

Other insurance may be deemed appropriate to cover risks and exposures related to the scope of work or changes to the scope of work required by City of Tacoma. The costs of such necessary and appropriate Insurance coverage shall be borne by Contractor.