

# CITY OF MERCER ISLAND

KING COUNTY, WASHINGTON



MERCER ISLAND PUBLIC WORKS DEPARTMENT

## **Sunset Hwy & 77<sup>th</sup> Ave SE Intersection Improvements**

Project Number:  
22-32

**Contact Specifications**

**September 2022**



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## Advertisement for Bids City of Mercer Island

Project Title: Sunset Hwy & 77<sup>th</sup> Ave SE Intersection Improvements  
Bid Number: 22-32  
Engineers Estimated Cost: \$1,300,000

Sealed bids will be received, not sent, electronically until **2:00 PM on October 13, 2022**. Due to the COVID-19 pandemic and the temporary closure of the City Hall building, bidders shall submit their bids in PDF format to the Public Works email address at: [publicworks@mercerisland.gov](mailto:publicworks@mercerisland.gov). There will be no public bid opening for this project; bid results will be posted on the City's web page at: <https://www.mercerisland.gov/rfps>.

Bidder questions are to be directed to Lia Klein, Transportation Engineer, by email only at [lia.klein@mercerisland.gov](mailto:lia.klein@mercerisland.gov). The City will receive questions until **1:00 PM on October 7, 2022**. Questions received after this date will not be answered.

Work to be performed under this contract includes but is not limited to: temporary traffic control; pavement removals and minor excavation; new concrete curb & gutter; new concrete sidewalk, stamped concrete median islands, ADA ramps, and cement concrete pavement intersection; asphalt road patching and overlay; new Rapid Response Flashing Beacon (RRFB) pedestrian crossing signal system, conduit and wiring installation; new pavement markings; storm drainage improvements;; water main extension; and landscape restoration.

The City reserves the right to reject any and all bids and to waive minor irregularities.

Plans, specifications, addenda, and bidders list are available on-line through Builders Exchange of Washington, Inc. at <http://www.bxwa.com>. Click on "Posted Projects", "Public Works", "City of Mercer Island", "Projects Bidding". Builders Exchange manages the official bidders list. Bidders are encouraged to register in order to receive automatic email notification of future addenda and to be placed on the official bidders list.

Plans and specifications are also available at the City of Mercer Island website <https://www.mercerisland.gov/rfps>. Addenda may not be available or updated on this website.

A bid deposit in the amount of five percent (5%) of the bid total price must accompany each bid.

The City of Mercer Island, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 23 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Andrea Larson, City Clerk

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## **City of Mercer Island Instructions to Bidders**

### **1. ELIGIBILITY TO BID:**

It is the intent of the City to award a contract to the low responsible bidder. Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. To be eligible to bid, each Bidder must:

- A. At the time of bid submittal, have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW; and
- B. Have a current Washington Unified Business Identifier (UBI) number; and
- C. If applicable:
  - i. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW; and
  - ii. Have a Washington Employment Security Department number, as required in Title 50 RCW; and
  - iii. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW; and
- D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3); and
- E. Within the three-year period immediately preceding the date of the bid solicitation, not have been 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 to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48 or 49.52 RCW.

A contract shall only be awarded to a Bidder that demonstrates to the City's satisfaction that the Bidder is qualified to perform the Work and is, therefore, a responsible bidder.

### **2. SUBCONTRACTOR RESPONSIBILITY CRITERIA:**

The Bidder must verify responsibility criteria for each first-tier subcontractor, and each subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Upon request of the City the Bidder shall promptly provide documentation to the City demonstrating that the subcontractor(s) meets the subcontractor responsibility criteria below. The requirements of this section apply to all subcontractors regardless of tier.

At the time of subcontract execution, the Bidder shall verify that each of its first-tier subcontractors meets the following bidder responsibility criteria:

- A. Have a current certificate of registration in compliance with chapter 18.27 RCW; and
- B. Have a current Washington Unified Business Identifier (UBI) number; and
- C. If applicable:
  - i. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW; and
  - ii. Have a Washington Employment Security Department number, as required in Title 50 RCW; and
  - iii. Have a Washington Department of Revenue state excise tax registration number as required in Title 82 RCW; and
  - iv. Have an electrical contractor license, if required by Chapter 19.28 RCW; and
  - v. Have an elevator contractor license, if required by Chapter 70.87 RCW; and
- D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3); and

3. EXAMINATION OF PLANS, SPECIFICATIONS AND SITE:

Each bidder is instructed to examine the Plans, Specifications, Addenda, the site of the proposed improvements, and conduct any other examination and investigation which the bidder may desire to make as to the accuracy of the nature of the work and the difficulties to be encountered. The Bidder shall be responsible for all costs associated with these additional examinations including all restoration work and damages which may be a result of such investigation. Bidders shall consider Federal, State, and local laws and regulations that may affect cost, progress, or performance of the work.

4. ADDITIONAL INFORMATION:

All questions about the meaning or intent of the Contract Documents are to be directed to Lia Klein, Transportation Engineer in writing by email at [lia.klein@mercerisland.gov](mailto:lia.klein@mercerisland.gov).

Interpretations or clarifications considered necessary by the City in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by the Engineer or City as having received the Contract Documents. Questions received less than ten (10) days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5. WAGES:

This Contract is subject to Chapters 39.12 and 49.28 RCW, amendments thereto and regulations issued thereunder, relating to prevailing wages, benefits and other requirements. Bidders shall examine and be familiar with such requirements. No claim for additional compensation will be

allowed which is based upon a lack of knowledge or a misunderstanding of any such requirements by the Bidder or a failure to include in Bidder's price adequate increases in such wages during the performance of this Contract. A copy of the most recent prevailing wage schedule is in the Appendix of the specifications. Current prevailing wage rates for King County can be obtained from the Washington State Department of Labor and Industries at [www.lni.wa.gov/TradesLicensing/PrevWage/](http://www.lni.wa.gov/TradesLicensing/PrevWage/).

6. PROGRESS AND COMPLETION:

Time is of the essence for this Project. Progress and completion of the Work shall comply with all requirements herein, and intermediate and final completion dates as may be set forth in the specifications. The submission of a bid constitutes the Bidder's acknowledgement that such progress and completion requirements have been taken into account in formulating a price for this Work.

7. PREVENTION OF ENVIRONMENTAL POLLUTION AND PRESERVATION OF PUBLIC NATURAL RESOURCES:

If awarded the Contract, the Bidder shall fully comply with all such environmental protection laws, ordinances, and regulations dealing with prevention and environmental pollution and the preservation of public natural resources that may be applicable to this Project. The cost of such compliance shall be included in the bid prices.

8. BID FORM:

The Bid Form is included in the Contract Documents. The Bid Form must be completed in ink. Bids that contain omissions, erasures or irregularities of any kind may be rejected. Any qualification, addition, limitation or provision attached to or contained in a bid may render the bid non-responsive and not eligible for award. No oral, facsimile, telegraphic or telephonic bids or modifications will be considered.

All bids shall be signed by the Bidder, or the Bidder's authorized representative. If the bid is made:

- A. By an individual, the Bidder's name, signature, and address must be shown;
- B. By a partnership or joint venture, it shall contain the names of each partner, the mailing address of the partnership or joint venture and shall be signed in the firm name, followed by the signature of the person signing, indicating that person's position in the partnership or joint venture;
- C. By a corporation or limited liability company ("LLC"), the name of the state under the laws of which the corporation or LLC is chartered, the name and post office address of the corporation or LLC and the title of the person who signs on behalf of the corporation or LLC must be shown.

Upon the City's request, the Bidder shall provide copies of the articles of incorporation, bylaws, resolutions of board of directors, partnership papers, joint venture agreements, and any other

documents evidencing the legal status of the Bidder and the authority of the Bidder's officer or representative who signed the bid on behalf of the Bidder.

The City is not responsible for any cost incurred in responding to this Call for Bids.

9. ACKNOWLEDGEMENT OF ADDENDA:

Each Bidder shall include on the Bid Form specific acknowledgment of receipt of each Addendum issued by the City during the bidding period. If the Bidder does not specifically acknowledge each addendum, the City may reject the bid as non-responsive unless the City determines from delivery records or from inclusion of information in the bid of information contained in the addenda that the Bidder received constructive notice of the addenda.

10. BID SECURITY:

The Bid shall be accompanied by a bid deposit in the amount equal to at least 5% of the Total Bid Price. The bid deposit shall be in one of the following formats and made payable to the City:

- A. A bid guaranty bond, in accordance with and using a form acceptable to the City which contains provisions substantially similar to those in the bid bond form included with the Contract Documents, duly completed by a guaranty company authorized to carry on business in the state of Washington; or
- B. A postal money order, a certified check, or cashier's check drawn upon a banking institution with a branch office in the state of Washington.

The surety signing the bid guaranty bond shall be registered with the Washington State Insurance Commissioner, and the surety's name shall appear in the current Authorized Insurance Company List in the State of Washington published by the Office of the Insurance Commissioner. A Power of Attorney must accompany the bid guaranty bond and must appoint the surety's true and lawful attorney-in-fact to make, execute, seal and deliver the bid guarantee bond. Failure to submit the required bid security with the Bid shall render the bid non-responsive and the Bid shall be rejected.

11. NON-COLLUSION:

Each bid shall be accompanied by a signed Non-Collusion Declaration in accordance with, and using the form provided by the City. Failure to submit a signed Declaration with the Bid shall render the bid non-responsive and the Bid shall be rejected.

More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the City believes that any Bidder is interested in more than one Bid for the work contemplated, all Bids in which such Bidder is interested will be rejected. If the City believes that collusion exists among the Bidders, all Bids will be rejected.

12. DELIVERY OF BID:

Each Bid shall be submitted in PDF format via electronic transmission to the City of Mercer Island's Public Works email address at: [publicworks@mercergov.org](mailto:publicworks@mercergov.org). The City will not consider bids received after the time fixed for opening bids in the Advertisement for Bids.

The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of these instructions, that without exception the Bid is premised upon performing the work required by the Contract Documents and such means, methods, techniques, sequences, or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

13. MODIFICATION OF BID:

A modification of a Bid will be considered only if the modification is received prior to the time announced for the opening of Bids. All modifications shall be made in writing executed and submitted in the same form and manner as the original Bid.

14. RETURN OF BID SECURITY:

After the bid prices have been compared, the City may return the bid security if, in the City's judgment, the Bidder would not be considered for award. All other Proposal Guarantees will be held until the Contract and the Performance Bond of the successful bidder have been executed.

15. EVALUATION OF BIDS AND BID ERRORS:

After opening the Bids, the City 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. The total of extensions, corrected where necessary, will be used by the City for award purposes.

Irregular Bids:

A. A Bid will be considered irregular and will be rejected if:

- i. The authorized Bid Form furnished by the City is not used or is materially altered;
- ii. The completed Bid Form contains any unauthorized additions, deletions, alternate bids, or conditions;
- iii. The bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
- iv. A price per unit cannot be determined from the Bid Form;
- v. The Bid Form is not properly executed;
- vi. An executed non-collusion certificate is not provided; or
- vii. Proper bid security does not accompany the Bid.

B. A Bid may be considered irregular and may be rejected if:

- i. The Bid Form does not include a unit price for every Bid item;
- ii. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the City;
- iii. Receipt of Addenda is not acknowledged;

- iv. A member of a joint venture or partnership and the joint venture or partnership submit Bid Forms for the same project (in such an instance, both Bids may be rejected); or
- v. If Bid Form entries are not made in ink.

Bids will be evaluated by the City to determine which bid is the apparent lowest, responsive bid.

Bid results will be posted on the City's website at <https://www.mercerisland.gov/rfps>.

The City, in its sole discretion, reserves the right to waive minor bid errors, informalities, and immaterial irregularities when it is in the City's best interest to do so.

16. EVALUATION OF BIDDER RESPONSIBILITY:

A Contract shall only be awarded to a Bidder that demonstrates to the City's satisfaction that the Bidder is qualified to perform the Work and is, therefore, a responsible bidder.

- A. Bidder Responsibility Criteria. To be determined responsible, the Bidder must, in addition to satisfying the bidder responsibility criteria listed in Section 1. ELIGIBILITY TO BID above:
  - i. Have adequate financial resources to perform the contract, or the ability to obtain them;
  - ii. Have a satisfactory performance record;
  - iii. Have a satisfactory record of integrity and business ethics;
  - iv. Have the necessary production, construction, and technical equipment and facilities or the ability to obtain them;
  - v. Be otherwise qualified and eligible to receive an award under applicable laws and regulations;
  - vi. Be in compliance with training requirements in RCW 39.04.350(1)(f); and
  - vii. Provide a statement in accordance with RCW 9A.72.085 verifying compliance with responsible bidder criteria requirement of RCW 39.04.350(1)(g).
- B. Reference Checking. To assist the City in the review of the Bidder's qualifications, the Bidder shall, within five (5) days of being requested to do so by the City, provide the following information:
  - i. Past Experience in Similar Projects. Provide a list of all construction contracts (whether completed or in progress) entered into or performed by the Bidder within the past five (5) years for projects similar in scope, time and complexity to the work called for under this Contract. Provide the names of the contracts, the contract price, and the names and phone numbers of the owners.
  - ii. References. Provide a list of five (5) references. References will be asked to rate performance on the following items: overall project performance; acceptable experience and technical knowledge; effective coordination of subcontractors; ability to coordinate and work with utility companies and governmental entities; responsiveness to owner

requests; attention to safety; quality and timeliness of submittals, change order proposals, project schedule, schedule updates and other applicable paperwork.

If the Bidder is a joint venture, the Bidder shall submit information for the joint venture if the members have worked together in the past and also information about each member of the joint venture. The Joint Venture Agreement shall be included in the submission.

If the Bidder fails to supply information requested concerning responsibility within the time and the manner specified, the City may base its determination of responsibility upon any available information related to the responsibility criteria or may find the Bidder is not responsible.

The City reserves the right to inspect records, reports and other information which may be maintained by or for the Bidder to the extent necessary, as determined by the City to verify, clarify or otherwise consider the information provided by the Bidder.

17. DETERMINATION OF NON-RESPONSIBILITY:

If the City determines a Bidder to be not responsible, the City will provide, in writing, the reasons for the determination. The Bidder may appeal the determination within ten (10) days of its receipt of the City's determination of non-responsibility by presenting additional information to the City. The City shall consider the additional information before issuing its final determination. If the City's final determination affirms that the Bidder is not responsible, the City shall not execute a contract with any other bidder until two (2) business days after the Bidder determined to be not responsible has received the final determination.

18. CONTRACT AWARD:

If a Contract is awarded, the City will award the contract to the responsible bidder that submits the lowest total responsive bid for the schedule(s) selected by City after bid opening and prior to award.

If the Contract is to be awarded, City will give the successful Bidder a Notice of Award within sixty (60) days after the day of the Bid opening. No other act of the City or others will constitute acceptance of a Bid.

The City reserves the right to request bidders to extend the effective period of their bids.

19. REJECTION OF ALL BIDS:

The City reserves the right to reject any or all Bids at any time up to actual execution of the Public Works Contract, even if there has been an award of the Contract.

Any or all Bids will be rejected if the City has reason to believe that collusion exists among the Bidders.

20. EXECUTION OF PUBLIC WORKS CONTRACT:

The Bidder to whom award is made shall execute a written Public Works Contract with the City on the form provided, shall secure all insurance, and shall furnish all certificates, endorsements and bonds required by the Contract Documents within ten (10) calendar days after receipt of the forms from the City. Failure or refusal to execute the Public Works Contract as herein provided or to conform to any of the stipulated requirements in connection therewith shall be just cause for annulment of the award and forfeiture of the Bid security. If the lowest responsive, responsible Bidder refuses or fails to execute the Public Works Contract, the City may award the Contract to the second lowest responsive, responsible Bidder. If the second lowest responsive, responsible Bidder refuses or fails to execute the Public Works Contract, the City may award the contract to the third lowest responsive, responsible Bidder. On the failure or refusal of such second or third lowest Bidder to execute the Agreement, each such Bidder's Bid securities shall be likewise forfeited to the City.

21. BID PROTEST PROCEDURES:

- A. Form of Protest. In order to be considered, a Protest shall be in writing, addressed and delivered to the attention of the project manager at the City of Mercer Island, 9611 SE 36th Street, Mercer Island, Washington 98040. The Protest shall include the following:
  - i. The name, address, and phone number of the Bidder protesting, or the authorized representative of the Bidder;
  - ii. A complete, detailed statement of all grounds for protest, supporting authority, and any supporting documentation. Supplemental information will not be considered unless the supplementation contains information not available at the time of protest;
  - iii. The specific ruling or relief requested; and
  - iv. Evidence that all persons with a financial interest in the procurement have been given notice of the Protest or if such persons are unknown, a statement to that effect.
- B. Who May Protest:
  - i. Protests based on specifications: Any prospective Bidder.
  - ii. Protests following Bid opening: Any Bidder with a substantial financial interest in the award of a Contract.
- C. Time to Protest:
  - i. Protests based on specifications or other terms in the Contract Documents must be received by the City no later than ten (10) calendar days prior to the date established for submittal of Bids.
  - ii. The City must receive protests based on other circumstances within five (5) calendar days after the bids are opened and publicly read.
  - iii. In no event shall a Protest be considered if all bids are rejected or after execution of the Contract.



- D. Determination of Protest. Upon receipt of a timely written Protest, the City shall investigate the Protest and shall respond in writing to the Protest prior to the award of Contract. If protest is submitted in accordance with the procedures set forth above, the City will not execute a contract any sooner than two (2) business days after the City's decision on the Protest.
- E. Failure to Comply. Failure to comply with the procedures set forth herein may render a Protest untimely or inadequate and may result in rejection thereof by the City.
- F. Exhaustion of Administrative Remedies. By submitting a bid, the Bidder agrees the Bidder's compliance with the protest procedures set forth herein are a mandatory condition precedent to the Bidder initiating a lawsuit against the City.
- G. Venue. By submitting a bid, the Bidder acknowledges and agrees that a lawsuit or action related to or arising out of this procurement shall be brought in the Superior Court of King County, Washington.

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## Bidder's Checklist

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**ALL BIDDERS** must properly complete, execute and submit the following with their bids:

1. NON-COLLUSION DECLARATION: Failure to submit the certificate shall make the bid non-responsive and not eligible for award.
2. BID FORM: Bidders must bid on all items contained in the Bid Form and the Form must be signed. The omission or deletion of any bid item may render the bid non-responsive and result in the rejection of the bid. Bidders are reminded to comply with RCW 39.30.060.
3. CONTRACTOR DECLARATION PURSUANT TO RCW 39.04.350(2): Failure to submit the declaration shall make the bid non-responsive and not eligible for award.
4. BID GUARANTY BOND: Failure to furnish a bid deposit of a minimum of five percent (5%) shall make the bid non-responsive and not eligible for award.
5. BIDDERS QUALIFICATION CERTIFICATE: To be completed and signed. The City reserves the right to check all statements and to judge the adequacy of the bidder's qualifications.

To assist the City in the review of the responsible Bidder's qualifications, the Bidder(s) shall, within five (5) days of being requested to do so by the City, provide the information required in Evaluation of Bidder Responsibility of the Instructions to Bidders, including a statement in accordance with RCW 9A.72.085 verifying compliance with responsible bidder criteria requirement of RCW 39.04.350(1)(g).

The **SUCCESSFUL BIDDER** shall properly complete, execute (as required) and submit the following after receiving notice of the award of the Project.

1. Public Works Contract,
2. Performance Bond,
3. Payment Bond,
4. Certificate of Insurance,
5. Retainage Agreement,
6. Statement of Intent to Pay Prevailing Wages,
7. Other documents requested by City.

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## *BIDDING REQUIREMENTS*

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## Non-Collusion Declaration

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**Project Name:** Sunset Hwy & 77th Ave SE Intersection Improvements, 22-32

**Bidder/Contractor:** \_\_\_\_\_

I, \_\_\_\_\_, declare under penalty of perjury under the laws of the State of Washington that the following statements are true and correct:

1. I am the representative for the above-named bidder/contractor, and as its \_\_\_\_\_, I am authorized to make the declaration herein on its behalf.
  
2. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.

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Date and Place

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Signature

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## BID FORM

(NOTE TO BIDDER: This BID FORM shall be completed in ink or typewritten)

**TO:** City of Mercer Island

**ADDRESS:** 9611 SE 36<sup>th</sup> Street  
Mercer Island, Washington 98040

**PROJECT TITLE:** Sunset Hwy & 77th Ave SE Intersection Improvements; 22-32

### Bidder Declaration and Understanding

The undersigned Bidder hereby declares that they have carefully examined the Contract Documents for the construction of the project, that they have personally inspected the site, that they have satisfied themselves as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal. The Bidder further declares that they have exercised their own judgment regarding the interpretation of subsurface information and has utilized all data, which they believe pertinent from the Engineer, Owner, and other sources and have made such independent investigations as the Bidder deems necessary in arriving at their conclusions.

The Bidder is hereby notified that no goal for disadvantaged business enterprise utilization has been established for this project. As part of the City's affirmative action effort, however, the City encourages participation of certified disadvantaged businesses and women business enterprises to act as prime contractors as well as subcontractors on this project.

The undersigned Bidder hereby declares that Bidder has carefully examined the Contract Documents including the following addenda, receipt of all is hereby acknowledged:

Addendum Number	_____	Date	_____
	_____		_____
	_____		_____
	_____		_____

### Start of Construction and Contract Completion Time

The Bidder agrees that he/she will begin work within 10 calendar days of the Notice to Proceed, and Final Completion of the entire project will be achieved by the Final Completion Date (except for extensions of time granted in accordance with the General Terms and Conditions). The Bidder further agrees he/she will, if necessary, accelerate his work, provide additional workers and equipment, and expedite materials delivery to meet these dates, all at no additional expense to the OWNER.

By submitting this bid, the bidder agrees that, if award this contract, they will achieve Substantial Completion within 85 working days from the Notice to Proceed.

Project timeline and work limitations for this contract are:

1. A contract is scheduled for award by the City Council on November 1, 2022.
2. Notice to Proceed with construction is anticipated by the week of January 16, 2023.
3. Substantial Completion of the entire project shall be achieved by July 1, 2023. Substantial Completion for this project shall include: all cement concrete work is installed; all final asphalt pavement lifts are installed; all storm drainage and water system improvements are installed, tested, and operational; the RRFB system is installed, tested, and operational; and traffic lanes have been returned to their normal configuration.
4. The project shall be Physically completed no later than August 31, 2023.

#### Lump Sum or Unit Price Work

The Bidder proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following lump sum or unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Contractor shall be compensated for the actual unit quantities performed in accordance with the General Terms and Conditions set forth in these Contract Documents. The Bidder agrees that the lump sum prices and the unit prices represent a true measure of the labor, services, and materials required to perform the work, including all allowances for Contractor-paid taxes, overhead, and profit for each type and unit of work, as well as any auxiliary costs associated with completing a unit of work called for in these Contract Documents. The City does not guarantee the quantities estimated for unit price items, nor does the City limit itself to the estimated number.

If any material, item, or service required by the Contract Documents has not been mentioned specifically, the same shall be furnished and placed with the understanding that the full cost to the Owner has been merged with the prices named in the Proposal.

To the extent possible, standard bid items have been utilized for the work listed in the Proposal. The Bidder is directed to review the Standard Specifications and the City of Mercer Island's Amendments (Special Provisions herein) for descriptions of bid item work, measurement, and payment.

#### Certification of Non-Segregated Facilities

The Bidder certifies that the Bidder does not maintain or provide for the Bidder's Employees any segregated facilities at any of the Bidder's establishments, and that the Bidder does not permit the Bidder's employees to perform their services at any location, under the Bidder's control, where segregated facilities are maintained.

#### Prevailing Wages

The Bidder agrees to pay to labor not less than the hourly minimum rates of wages and fringe benefits determined by the State of Washington Department of Labor and Industries as included in the Appendix.

BID SCHEDULE

SUNSET HWY & 77 <sup>TH</sup> AVE SE INTERSECTION IMPROVEMENTS						
ITEM NO.	SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1	1-04	Minor Changes	1	EST	\$25,000	\$25,000
2	1-05	Construction Surveying	1	LS		
3	1-09	Mobilization	1	LS		
4	1-10	Project Temporary Traffic Control	1	LS		
5	2-01	Clearing and Grubbing	1	LS		
6	2-02	Removal of Structures and Obstructions	1	LS		
7	2-02	Asphalt Removal Incl Haul	1840	SY		
8	2-02	Cement Concrete Sidewalk Removal Incl Haul	220	SY		
9	2-02	Cement Concrete Curb and Gutter Removal Incl Haul	670	LF		
10	2-03	Roadway Excavation Incl. Haul	1	LS		
11	2-09	Shoring or Extra Excavation Cl. B	1	LS		
12	4-04	Crushed Surfacing Top Course	1210	TN		
13	5-04	Planing Bituminous Pavement	600	SY		
14	5-04	HMA Cl. 1/2 In. PG 58H-22	200	TN		
15	5-04	Temporary HMA	120	TN		
16	5-05	Cement Concrete Roadway	260	CY		
17	5-05	Scored Cement Concrete Crosswalk	70	SY		
18	7-04	Storm Sewer Pipe 8 In. Diam.	20	LF		
19	7-04	Storm Sewer Pipe 12 In. Diam.	90	LF		
20	7-04	Connection to New Drainage Structure	7	EA		
21	7-05	Catch Basin Type 1	3	EA		
22	7-05	Catch Basin Type 2 48 In. Diam.	2	EA		
23	7-05	Area Drain	1	EA		
24	7-05	Adjust Catch Basin or Manhole	4	EA		
25	7-05	Adjust & Install New Sewer Manhole Frame and Cover	1	EA		
26	7-08	Ductile Iron Watermain, 12" Diam	110	LF		

SUNSET HWY & 77 <sup>TH</sup> AVE SE INTERSECTION IMPROVEMENTS						
ITEM NO.	SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
27	7-08	2" Blowoff Assembly	1	EA		
28	7-12	Adjust Water Valve Box	11	EA		
29	7-15	Adjust Water Meter Box	3	EA		
30	8-01	Stormwater Pollution Prevention Plan (SWPPP, SPCC)	1	LS		
31	8-01	Erosion Control / Water Pollution Prevention	1	LS		
32	8-02	Property Restoration	1	FA	\$8,750	\$8,750
33	8-04	Cement Concrete Traffic Curb and Gutter	270	LF		
34	8-04	Cement Concrete Traffic Curb	400	LF		
35	8-04	Cement Concrete Extruded Curb Type 6	140	LF		
36	8-09	Raised Pavement Marker Type 1	300	EA		
37	8-09	Raised Pavement Marker Type 2	100	EA		
38	8-13	Monument Adjustment, Case and Cover	1	EA		
39	8-14	Decorative Stamped Cement Concrete Median	40	SY		
40	8-14	Scored Cement Concrete Sidewalk	240	SY		
41	8-14	Cement Concrete Sidewalk	100	SY		
42	8-14	Cement Concrete Driveway Entrance	50	SY		
43	8-14	Detectable Warning Surface	185	SF		
44	8-20	Modifications to Existing Illumination System, Complete	1	LS		
45	8-20	Install Rectangular Rapid Flashing Beacon (RRFB) System, Complete	1	LS		
46	8-21	Permanent Signing	1	LS		
47	8-21	Remove Pavement Markings	1	LS		
48	8-21	Paint Line, 4 Inch	130	LF		
49	8-21	Paint Line, 6 Inch	1030	LF		
50	8-21	Plastic Stop Line	62	LF		
51	8-21	Plastic Traffic Arrow	2	EA		
52	8-21	Plastic Bicycle Symbol	9	EA		
53	8-21	Green Bicycle Lane Treatment	1200	SF		

SUNSET HWY & 77 <sup>TH</sup> AVE SE INTERSECTION IMPROVEMENTS						
ITEM NO.	SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
54	8-23	Temporary Pavement Markings	1	LS		
55	8-25	Bollards	10	EA		
56	8-26	Detectable Strip	35	LF		

Total Bid

Amount..... \$ \_\_\_\_\_

#### BID SUMMARY

Unit prices for all items, all extensions, and the total amount of bid must be shown on all Schedules. Where conflict occurs between the unit price and the total amount named for any item, the unit price shall prevail, and the totals shall be corrected to conform thereto.

The bidder shall bid on all items included in the Bid Form.

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Subcontractor Listing – RCW 39.30.060

Pursuant to RCW 39.30.060, the Bidder shall list as part of its Bid either itself or the names of the subcontractors with whom the Bidder, if awarded the contract, will subcontract for performance of the work of heating, ventilation and air conditioning (“HVAC”), plumbing as described in chapter 18.106 RCW, and electrical as described in chapter 19.28 RCW. The Bidder shall not list more than one subcontractor for each category of work.

Failure of the Bidder to submit as part of the Bid the names of such subcontractors or to name itself to perform such work or the naming of two or more subcontractors to perform the same category of work shall render the Bidder’s Bid nonresponsive and therefore, void.

The requirement of this section to name the Bidder’s proposed HVAC, plumbing, and electrical subcontractors applies only to proposed HVAC, plumbing, and electrical subcontractors who will contract directly with the general contractor submitting the Bid to the City.

Electrical work must be performed by a licensed electrical contractor. Bidders are cautioned that installation of electrical equipment (PVC or metal conduit, junction boxes or similar work) may be considered electrical work even if for future use and no electrical current is involved.

If the subcontract work categories as described above are not applicable to the work being bid, the bidder must indicate that the subcontract category is “NOT APPLICABLE.”

**HVAC**

Subcontractor Name: \_\_\_\_\_

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

**Plumbing**

Subcontractor Name: \_\_\_\_\_

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

**Electrical**

Subcontractor Name: \_\_\_\_\_

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

PROPOSAL SIGNATURE SHEET

If Sole Proprietor, Partnership or Joint Venture

IN WITNESS hereto the undersigned have set their hands this

\_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

Name of Bidder (name each partner  
or joint venture partner) \_\_\_\_\_

Washington Contractor's Registration  
No. \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Authorized Signature \_\_\_\_\_

Position/Title \_\_\_\_\_

If Corporation or Limited Liability Company (LLC)

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and  
its seal affixed by its duly authorized officers this

\_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

Name of Corporation or Limited  
Liability Company (LLC) \_\_\_\_\_

Washington Contractor's Registration  
No. \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

State of Incorporation or Organization \_\_\_\_\_

Authorized Signature \_\_\_\_\_

Position/Title \_\_\_\_\_



## **BID GUARANTY BOND**

KNOW ALL BY THESE PRESENTS: That we, \_\_\_\_\_,  
as Principal, and \_\_\_\_\_, as Surety, are jointly and severally held  
and firmly bound unto the City of Mercer Island, hereinafter called the Obligee, each in the penal sum of  
five percent (5%) of the Principal's Total Bid Price for the work, this sum not to exceed  
\_\_\_\_\_ DOLLARS (\$\_\_\_\_\_) (hereinafter referred to as "penal sum") of  
lawful money of the United States, for the payment whereof unto the Obligee.

WHEREAS, the Principal is herewith submitting its bid proposal for the

### **Sunset Hwy & 77<sup>th</sup> Ave SE Intersection Improvements**

NOW, THEREFORE, the condition of this obligation is such that if the Principal is awarded the Contract,  
and if the Principal, within the time specified, fulfills all of the requirements of the Contract Documents  
which are conditions precedent to the execution of the Agreement, enters into, executes and delivers to the  
Obligee an agreement on the form provided herein complete with evidences of insurance, and if the  
Principal, within the time specified, gives to the Obligee the performance and payment bond on the forms  
provided herein, then this obligation shall be void; otherwise, the Principal and Surety shall pay unto the  
Obligee the penal sum; provided however, in no event shall the Surety's liability exceed the penal sum.  
Provided further, if the difference in money between the Principal's Total Bid Price and the amount for  
which the Obligee legally contracts with another party to fulfill the Contract is greater than the penal sum,  
the Principal shall pay unto the Obligee the difference between the penal sum and the amount the Obligee  
pays another to fulfill the Contract.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as  
Principal, and that nothing of any kind or nature whatsoever that will not discharge the Principal shall  
operate as a discharge or a release of liability of the Surety.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure  
to the benefit of the Principal, the Surety and the Obligee and their respective heirs, executors,  
administrators, successors and assigns.

SIGNED this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

Principal: \_\_\_\_\_

Surety: \_\_\_\_\_

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

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

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

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

Address: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (    ) \_\_\_\_\_

Telephone: (    ) \_\_\_\_\_

**Note: A power of attorney must be provided which appoints the Surety's true and lawful attorney-in-fact to  
make, execute, seal and deliver this bid guaranty bond.**

## Bidder's Qualification Certificate

The undersigned hereby certifies and submits the following:

Company Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Owner Name \_\_\_\_\_

Contact Person \_\_\_\_\_

Contact Person's Title \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

Washington State Contractor Registration # \_\_\_\_\_

Washington State Unified Business Identifier (UBI) # \_\_\_\_\_

Federal Tax ID # \_\_\_\_\_

City of Mercer Island Business License #  
(required prior to award of contract) \_\_\_\_\_

	Yes or No	Account / Registration Number (as applicable)
Does the contractor have industrial insurance coverage for its employees working in Washington as required by Title 51 RCW?	_____	_____
Does the contractor have a Washington State excise tax registration number as required by Title 82 RCW?	_____	_____
Does the contractor have a Washington State Employment Security Department number as required by Title 50 RCW?	_____	_____
Has the contractor been disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3)?	_____	_____
Within the three-year period immediately preceding the date of the bid solicitation, has the contractor been 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 to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, or 49.52 RCW?	_____	_____

**By:**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Print Name**

\_\_\_\_\_  
**Title**

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

**Contractor Declaration Pursuant to RCW 39.04.350(2)**

**Project Name:**            Sunset Hwy & 77th Ave SE Intersection Improvements

**Bidder/Contractor:**       \_\_\_\_\_

I, \_\_\_\_\_, declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct:

1.    I am the representative for the above-named bidder/contractor, and as its \_\_\_\_\_ I am authorized to make the declaration herein on its behalf.
  
2.    Within the three-year period immediately preceding the date of the bid solicitation for the above-named project, the above-named bidder/contractor has not been 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 to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW.

\_\_\_\_\_  
Date and Place

\_\_\_\_\_  
Signature

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## *AGREEMENT FORMS*

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**CITY OF MERCER ISLAND, WASHINGTON  
PUBLIC WORKS CONTRACT  
FOR  
SUNSET HWY & 77TH AVE SE INTERSECTION IMPROVEMENTS**

THIS PUBLIC WORKS CONTRACT ("Contract") dated [insert date agreement drafted], is effective on the date the Contract is fully executed by the Parties. The Parties to this Contract are the CITY OF MERCER ISLAND, a Washington municipal corporation ("City" or "Owner"), and [INSERT FULL LEGAL NAME OF CONTRACTOR], a [insert state where formed] [choose type of person or entity] ("Contractor").

A. The City desires to retain an independent contractor to furnish all labor and materials necessary to perform work at [insert address], Mercer Island, Washington ("Property"); and

B. The Contractor has the requisite skill and experience to perform such work and has submitted a proposal dated [insert date proposal received] to complete such work ("Proposal").

NOW, THEREFORE, the parties ("Parties") agree to the following terms and conditions:

**1. SERVICES BY CONTRACTOR**

- 1.1 Description of Work. Contractor shall perform all work and furnish all tools, materials, supplies, equipment, labor and other items incidental thereto necessary for the construction and completion of the work, more particularly described in the Contract Documents for the Sunset Hwy & 77th Ave SE Intersection Improvements Project, including this Public Works Contract, the Contractor's completed Bid Form, the City's General Terms and Conditions (May 2020 ed.), any Supplemental and/or Special Conditions, Technical Specifications, Drawings and Addenda, which documents are incorporated by this reference, ("Work"), which Work shall be completed to the City's satisfaction, within the time period prescribed by the City and pursuant to the direction of the City Manager or his or her designee.
- 1.2 Completion Date. The Work shall be commenced within ten (10) days of receipt by the Contractor of the City's Notice to Proceed and shall be Substantially Completed by July 1, 2023 and Physically Completed by August 31, 2023 (the "Contract Time") as may be extended in accordance with the Contract Documents. In the event the Work is not completed within the time specified, Contractor agrees to pay to the City liquidated damages in the amount set forth in Section 1.3 of this Contract.
- 1.3 Liquidated Damages. TIME IS OF THE ESSENCE OF THIS CONTRACT. Delays inconvenience the residents of Mercer Island and cost taxpayers undue sums of money, adding time needed for administration, engineering, inspection and supervision. It is impractical for the City to calculate the actual cost of delays. Accordingly, the Contractor agrees to pay liquidated damages as follows: Liquidated damages for failure to achieve timely Substantial Completion shall be in the amount of \$150 per day.
- 1.4 Performance Standard. Contractor shall perform the Work in a manner consistent with accepted practices for highly skilled and competent contractors performing this type of work in this area.

- 1.5 Compliance with Laws. Contractor shall perform the Work in accordance with all applicable federal, state and City laws, including but not limited to all City ordinances, resolutions, standards, or policies, as now existing, or hereafter adopted or amended, and obtain all necessary permits and pay all permit, inspection, or other fees, at its sole cost and expense.
- 1.6 Utility Location. Contractor is responsible for locating any underground utilities affected by the Work and is deemed to be an excavator for purposes of Chapter 19.122 RCW, as amended. Contractor shall be responsible for compliance with Chapter 19.122 RCW, including utilization of the "one call" locator system before commencing any excavation activities.
- 1.7 Air Environment. Contractor shall fully cover any and all loads of loose construction materials including without limitation, sand, dirt, gravel, asphalt, excavated materials, construction debris, etc., to protect said materials from air exposure and to minimize emission of airborne particles to the ambient air environment within the City of Mercer Island.

## **2. TERM**

This Contract shall commence on the effective date of this Contract and continue until the Work is complete, and formally accepted by City, and all warranties have expired.

## **3. REQUISITE SKILL**

The Contractor warrants that it has the requisite skill to complete the Work and is appropriately accredited and licensed by all applicable agencies and governmental entities, including but not limited to being registered to do business in the City of Mercer Island by obtaining a City of Mercer Island business registration. Contractor represents that it has visited the site and is familiar with all of the plans and specifications in connection with the completion of the Work.

## **4. COMPENSATION**

- 4.1 Total Compensation. In consideration of the Contractor performing the Services, the City agrees to pay the Contractor an amount not to exceed [insert maximum value of contract in words] Dollars (\$[insert \$ amount in figures]), based on the Proposal submitted by Contractor dated [insert date proposal received] and as may be adjusted under the Contract Documents.
- 4.2 Contractor Responsible for Taxes. Except as otherwise stated in the Contract Documents, the Contractor shall be solely responsible for the payment of any taxes imposed by any lawful jurisdiction as a result of the performance and payment of this Contract.
- 4.3 Method of Payment. Payment by the City for the Work will only be made after the Work has been completed, a voucher or invoice is submitted in a form satisfactory to the City, and such invoice is approved by the appropriate City representative. Payment shall be made within thirty (30) days of receipt of such invoice or voucher unless otherwise set forth in the Bid Form. The Contractor's acceptance of such payment for the Work shall constitute full compensation for the performance of the Work. Invoices shall be submitted to:

City of Mercer Island  
ATTN: Lia Klein, Transportation Engineer



9611 SE 36th Street  
Mercer Island, WA 98040

- 4.4 Retainage. Pursuant to Chapter 60.28 RCW, five percent (5%) of the Total Compensation shall be retained by the City to assure payment of Contractor's state taxes as well as payment of subcontractors, suppliers, and laborers. Upon execution of this Contract, Contractor shall complete, execute, and deliver to the City the Contractor's Retainage Agreement set forth in the Contract Documents. No payments shall be made by the City from the retained percentage fund ("Fund") nor shall the City release any retained percentage escrow account to any person, until the City has received from the Department of Revenue a certificate that all taxes, increases, and penalties due from the Contractor and all taxes due and to become due with respect to the Contract have been paid in full or that they are, in the Department's opinion, readily collectible without recourse to the State's lien on the retained percentage. Upon non-payment by the general contractor, any supplier or subcontractor may file a lien against the retainage funds, pursuant to Chapter 60.28 RCW. Subcontractors or suppliers are required to give notice of any lien within thirty (30) days of the completion of the Work and in the manner provided in RCW 39.08.030. Within sixty (60) days after completion of all Work on this Contract, the City shall release and pay in full the money held in the Fund, unless the City becomes aware of outstanding claims made against this Fund.

## **5. EQUAL OPPORTUNITY EMPLOYER**

In all Contractor services, programs or activities, and all Contractor hiring and employment made possible by or resulting from this Contract, there shall be no discrimination by Contractor or by Contractor's employees, agents, subcontractors or representatives against any person because of sex, sexual orientation, age (except minimum age and retirement provisions), race, color, creed, national origin, marital status or the presence of any disability, including sensory, mental or physical handicaps, unless based upon a bona fide occupational qualification in relationship to hiring and employment. This requirement shall apply, but not be limited to the following: employment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Contractor shall not violate any of the terms of Chapter 49.60 RCW, Title VII of the Civil Rights Act of 1964, the Americans With Disabilities Act, Section 504 of the Rehabilitation Act of 1973 or any other applicable federal, state, or local law or regulation regarding non-discrimination. Any material violation of this provision shall be grounds for termination of this Contract by the City and, in the case of the Contractor's breach, may result in ineligibility for further City agreements.

## **6. INDEPENDENT CONTRACTOR/CONFLICT OF INTEREST**

It is the intention and understanding of the Parties that the Contractor shall be an independent contractor and that the City shall be neither liable nor obligated to pay Contractor sick leave, vacation pay or any other benefit of employment, nor to pay any social security or other tax which may arise as an incident of employment. The Contractor shall pay all income and other taxes as due. Industrial or any other insurance which is purchased for the benefit of the City, regardless of whether such may provide a secondary or incidental benefit to the Contractor, shall not be deemed to convert this Contract to an employment contract. It is recognized that Contractor may perform work during the Term of this Contract for other third parties; provided, however, that such performance of other work shall not conflict with or interfere with the Contractor's ability to perform the Work. Contractor agrees to resolve any such conflicts of interest in favor of the City.

## **7. INDEMNIFICATION**

### **7.1 Indemnification and Hold Harmless.**

- A. The Contractor shall protect, defend, indemnify, and hold harmless City, its elected officials, officers, agents, volunteers, and employees, from any and all claims, demands, suits, penalties, losses, damages, judgments, or costs of any kind whatsoever, including attorneys' fees (hereinafter "claims"), arising out of or in connection with the performance of this Contract except for injuries and damages caused by the sole negligence of the City. However, should a court of competent jurisdiction determine that this Contract is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence.
- B. The Contractor's obligations under this section shall include, but not be limited to,
  - i. The duty to promptly accept tender of defense and provide defense to City at the Contractor's own expense.
  - ii. The duty to indemnify and defend City, its elected officials, officers, agents, and employees, from any claim, demand, and/or cause of action brought by or on behalf of any of its employees, or agents. The foregoing duty is specifically and expressly intended to constitute a waiver of the Contractor's immunity under Washington's Industrial Insurance Act, RCW Title 51, as respects City with a full and complete indemnity and defense of claims made by the Contractor's employees. The parties acknowledge that these provisions were mutually negotiated upon by them.
  - iii. To the maximum extent permitted by law, the Contractor shall indemnify and defend City, its elected officials, officers, agents and employees, from and be liable for all damages and injury which shall be caused to owners of property on or in the vicinity of the work or which shall occur to any person or persons or property whatsoever arising out of the performance of this Contract, whether or not such injury or damage is caused by negligence of the Contractor or caused by the inherent nature of the work specified.
- C. City may, in its sole discretion, (1) withhold amounts sufficient to pay the amount of any claim for injury, and/or (2) pay any claim for injury of which City may have knowledge, regardless of the formalities of notice of such claim, arising out of the performance of this Contract.
- D. Any amount withheld will be held until the Contractor secures a written release from the claimant, obtains a court decision that such claim is without merit, or satisfies any judgment on

such claim. In addition, the Contractor shall reimburse and otherwise be liable for claims costs incurred by City, including, without limitation, costs for claims adjusting services, attorneys, engineering, and administration.

- E. In the event City incurs any judgment, award, and/or costs arising therefrom, including attorneys' fees, to enforce the provisions of this article, all such fees, expenses, and costs shall be recoverable from the Contractor.
- F. This provision has been mutually negotiated by the City and the Contractor.

7.2 Survival. The provisions of this Section 7 shall survive the expiration or termination of this Contract with respect to any event occurring prior to such expiration or termination.

## **8. INSURANCE**

8.1 The Contractor agrees to carry without interruption from commencement of the Contractors work through the term of the contract and for thirty (30) days after Physical Completion, unless otherwise indicated herein, the following insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the Work by Contractor, its agents, representatives, employees or subcontractors with a carriers having a current A.M. Best rating of not less than A:VII. The City, at its discretion, may require additional types and greater limits of insurance coverage commensurate with the risk associated with the performance of the Work.

- A. Workers' Compensation and Employer's Liability Insurance in amounts sufficient pursuant to the laws of the State of Washington.
- B. Commercial general liability insurance shall be written on a form at least as broad as Insurance Services Office (ISO) occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors, products-completed operations for three years following substantial completion of the Work, stop gap liability, personal injury and advertising injury, and liability assumed under an insured contract. The Commercial General Liability insurance shall be endorsed to provide the Aggregate Per Project Endorsement ISO form CG 25 03 05 09. There shall be no exclusion for liability arising from explosion, collapse, or underground property damage. The City shall be named as an additional insured under the Commercial General Liability insurance policy with respect to the Work performed for the City using ISO Additional Insured endorsement CG 20 10 10 01 and Additional Insured Completed Operations endorsement CG 20 37 10 01 or substitute endorsements providing coverage at least as broad, with limits of no less than \$2,000,000 each occurrence, \$2,000,000 general aggregate, and a \$2,000,000 products-completed operations aggregate limit.
- C. Automobile liability insurance covering all owned, non-owned, hired, and leased vehicles. Coverage shall be written on ISO form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage with combined single limits for bodily injury and property damage of not less than \$1,000,000 per accident.

- D. Asbestos Abatement or Hazardous Materials. If asbestos abatement or hazardous materials work is performed, Contractor shall review coverage with the City Attorney's office and provide scope and limits of coverage that are appropriate for the scope of Work and are satisfactory to the City. Contractor shall not commence any Work until its coverage has been approved by the City Attorney's office.
- E. Builders Risk insurance covering interests of the City, the Contractor, Subcontractors, and Sub-subcontractors in the work. Builders Risk insurance shall be on a special perils policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including flood, earthquake, theft, vandalism, malicious mischief, and collapse. The Builders Risk insurance shall include coverage for temporary buildings, debris removal, and damage to materials in transit or stored off-site. This Builders Risk insurance covering the work will have a deductible of \$5,000 for each occurrence, which will be the responsibility of the Contractor. Higher deductibles for flood and earthquake perils may be accepted by the City upon written request by the Contractor and written acceptance by the City. Any increased deductibles accepted by the City will remain the responsibility of the Contractor. The Builders Risk insurance shall be maintained until the City has granted substantial completion of the project. An installation floater may be acceptable in lieu of Builders Risk for renovation projects only if approved in writing by the City. Builders Risk insurance shall be written in the amount of the completed value of the project with no coinsurance provisions.

8.2 The City shall be named as additional insured on all such insurance policies, with the exception of workers' compensation coverages. The Contractor's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it. If the Contractor maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Contractor, irrespectively of whether such limits maintained by the Contractor are greater than those required by this Contract or whether any certificate of insurance furnished to the City evidences limits of liability lower than those maintained by the Contractor. Contractor shall provide certificates of insurance and amendatory endorsements, concurrent with the execution of this Contract, evidencing such coverage and, at City's request, furnish the City with copies of all insurance policies and with evidence of payment of premiums or fees of such policies. The Contractor shall provide the City and all Additional Insureds for this work with written notice of any policy cancellation within two business days of their receipt of such notice.

8.3 The Contractor shall cause each and every Subcontractor to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except that the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors. The Contractor shall ensure that the City is an additional insured on each and every Subcontractor's Commercial General Liability insurance policy using an endorsement at least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

- 8.4. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Contractor from the City.
- 8.5. Waiver of Subrogation. The Contractor and the City waive all rights against each other, any of their Subcontractors, Sub-subcontractors, agents, and employees, each of the other, for damages caused by fire or other perils to the extent covered by Builders Risk insurance or other property insurance obtained pursuant to the Insurance Requirements Section of this Contract or other property insurance applicable to the work. The policies shall provide such waivers by endorsement or otherwise.
- 8.6. The Contractor's maintenance of insurance, its scope of coverage and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.
- 8.7. The provisions of this Section shall survive the expiration or termination of this Contract with respect to any event occurring prior to such expiration or termination.

## **9. PERFORMANCE/PAYMENT BOND OR ADDITIONAL RETAINAGE**

Pursuant to RCW 39.08.010, Contractor shall provide Performance Bond and Payment Bond each in an amount equal to 100% of the amount of this Contract to cover the performance of all provisions of this Contract and the payment of all laborers and suppliers. The Contract bonds shall be in a form set forth in the Contract Documents. The Contract bond shall assure that the Contractor will faithfully perform all of the provisions of the Contract as well as pay all laborers, mechanic subcontractors, materialmen, and suppliers. Contractor's obligations under this Contract shall not be limited to the bond amount.

Alternatively, pursuant to RCW 39.08.010, on contracts of Fifty-Five Thousand Dollars (\$55,000) or less, at the option of the Contractor, the City may, in lieu of a bond, retain ten percent (10%) of the Contract amount for a period of thirty (30) days after the date of final acceptance, or until receipt of all necessary releases from the Department of Revenue and the Department of Labor and Industries and settlement of any liens filed under Chapter 60.28 RCW, whichever is later.

## **10. SAFETY**

Contractor shall take all necessary precautions for the safety of its employees on the work site and shall comply with all applicable provisions of federal, state, and municipal safety and health laws and codes, including without limitation, all OSHA/WISHA requirements, Safety and Health Standards for Construction Work (Chapter 296-155 WAC), General Safety and Health Standards (Chapter 296-24 WAC), and General Occupational Health Standards (Chapter 296-62 WAC). Contractor shall erect and properly maintain, at all times, all necessary guards, barricades, signals, and other safeguards at all unsafe places at or near the Work for the protection of its employees and the public, safe passageways at all road crossings, crosswalks, street intersections, post danger signs warning against known or unusual hazards and do all other things necessary to prevent accident or loss of any kind. Contractor shall protect from damage all water, sewer, gas, steam or other pipes or conduits, and all hydrants and

all other property that is likely to become displaced or damaged by the execution of the Work. The Contractor shall, at its own expense, secure and maintain a safe storage place for its materials and equipment and is solely responsible for the same.

## **11. PREVAILING WAGES**

- 11.1 Wages of Employees. This Contract is subject to the minimum wage requirements of Chapter 39.12 of the Revised Code of Washington, as now existing or hereafter amended or supplemented. In the payment of hourly wages and fringe benefits to be paid to any of Contractor's laborers, workpersons and/or mechanics, Contractor shall not pay less than the "prevailing rate of wage" for an hour's work in the same trade or occupation in the locality within the State of Washington where such labor is performed, as determined by the Industrial Statistician of the Department of Labor and Industries of the State of Washington. Prevailing wages paid pursuant to this Agreement shall be the prevailing wage rates which are in effect on the date when the bids, proposals, or quotes were required to be submitted to the City.

The State of Washington prevailing wage rates applicable for this public works project, which is located in King County, may be found at the following website address of the Department of Labor and Industries: <https://lni.wa.gov/licensing-permits/public-works-projects/prevailing-wage-rates/>. A copy of the applicable prevailing wage rates is also available for viewing at the office of the City located at 9611 SE 36th St, Mercer Island, WA 98040. Upon request, the City will mail a hard copy of the applicable prevailing wages for this project.

- 11.2 Reporting Requirements. Contractor shall comply with all reporting requirements of the Department of Labor and Industries of the State of Washington. Upon the execution of this Contract, Contractor shall complete and file a Statement of Intent to Pay Prevailing Wages with the Department of Labor and Industries. If requested by the City, the Contractor shall provide certified payroll records for its employees and the employees of its subcontractors. Upon completion of the Work, Contractor shall complete and file an Affidavit of Wages Paid with the Department of Labor and Industries. Contractor shall deliver copies of both the Statement of Intent to Pay Prevailing Wages and the Affidavit of Wages Paid, certified by the Department of Labor and Industries, to the City.

## **12. SUBCONTRACTOR RESPONSIBILITY**

Contractor shall verify responsibility criteria for each first-tier subcontractor, and a subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Verification shall include that each subcontractor, at the time of subcontract execution, meets the responsibility criteria listed in the Instructions to Bidders and possesses an electrical contractor license, if required by chapter 19.28 RCW, or an elevator contractor license, if required by chapter 70.87 RCW. This verification requirement must be included in every public works subcontract or every tier.

## **13. OWNERSHIP OF DOCUMENTS**

All originals and copies of work product, including plans, sketches, layouts, designs, design specifications, records, files computer disks, magnetic media, all finished or unfinished documents or material which may be produced or modified by Contractor while performing the Work shall become the property of the City and shall be delivered to the City at its request.

#### **14. CONFIDENTIALITY**

If it is necessary to provide proprietary information, the Contractor shall clearly mark the information on each page of the document(s) as "Proprietary and Confidential". The City is subject to laws regarding the disclosure of public records and document. Proposals and other materials, submitted by the Contractor become public record and may be subject to public disclosure, in whole or in part, and may be released by the City in the event of a request for disclosure. In the event the City receives a public record request for information and the Contractor has marked the requested document as "Proprietary and Confidential", the City shall notify the Contractor of such request and withhold disclosure of such information for not less than five (5) business days, to permit the Contractor to seek judicial protection of such information; provided that the Contractor shall be solely responsible for all attorney fees and costs in such action and shall save and hold harmless the City from any costs, attorneys fees or penalty assessments under Chapter 42.56 RCW for withholding or delaying public disclosure of such information.

#### **15. BOOKS AND RECORDS**

The Contractor agrees to maintain books, records, and documents which sufficiently and properly reflect all direct and indirect costs related to the performance of this Contract and such accounting procedures and practices as may be deemed necessary by the City to assure proper accounting of all funds paid pursuant to this Contract. These records shall be subject at all reasonable times to inspection, review or audit by the City, its authorized representative, the State Auditor, or other governmental officials authorized by law to monitor this Contract.

#### **16. CLEAN UP**

At any time ordered by the City and immediately after completion of the Work, the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. In the event the Contractor fails to perform the necessary clean up, the City may, but in no event is it obligated to, perform the necessary clean up and the costs thereof shall be immediately paid by the Contractor to the City and/or the City may deduct its costs from any remaining payments due to the Contractor.

#### **17. GENERAL PROVISIONS**

This Contract, the Contract Documents and any supporting contract documents contain all of the agreements of the Parties with respect to any matter covered or mentioned in this Contract and no prior agreements or understandings shall be effective for any purpose. No provision of this Contract may be amended except by written agreement of the Parties. Any provision of this Contract which is declared invalid, void or illegal shall in no way affect, impair, or invalidate any other provision hereof and such other provisions shall remain in full force and effect. The Contractor shall not transfer or assign, in whole or in part, any or all of its obligations and rights hereunder without the prior written consent of the City. In the event the City consents to any such assignment or transfer, such consent shall in no way release the Contractor from any of its obligations or liabilities under this Contract. Subject to the preceding sentence, this Contract shall be binding upon and inure to the benefit of the Parties' successors in interest, heirs, and assigns. In the event the City or the Contractor defaults on the performance of any terms in this Contract, and the Contractor or City places the enforcement of the Contract or any part

thereof, or the collection of any monies due, in the hands of an attorney, or files suit, each Party shall pay all its own attorneys' fees and expenses. The venue for any dispute related to this Contract shall be King County, Washington. Failure of the City to declare any breach or default immediately upon occurrence thereof, or delay in taking any action in connection with, shall not waive such breach or default. This Contract shall be governed by and interpreted in accordance with the laws of the State of Washington. Each individual executing this Contract on behalf of the City and Contractor represents and warrants that such individuals are duly authorized to execute this Contract. Time is of the essence of this Contract and each and all of its provisions in which performance is a factor. Adherence to completion dates is essential to the Contractor's performance of this Contract.

IN WITNESS WHEREOF, the Parties have executed this Contract the            day of            , 20            .

**CONTRACTOR:**

**CITY:**

[INSERT FULL LEGAL NAME OF CONTRACTOR]

CITY OF MERCER ISLAND

By: \_\_\_\_\_  
[insert full legal name and title of signator]

By: \_\_\_\_\_  
Jessi Bon, City Manager

Address:

Attest:

Phone:  
Email:

By: \_\_\_\_\_  
Andrea Larson, City Clerk

Approved as to form:

By: \_\_\_\_\_  
Bio Park, City Attorney



## Bond No. \_\_\_\_\_

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

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

SURETY

Title

B-11

## Bond No \_\_\_\_\_

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

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 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.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the office executing on behalf of the surety.

SURETY

Surety Signature \_\_\_\_\_ Date \_\_\_\_\_

---

Printed Name
Date

Title

--

# RETAINAGE AGREEMENT

Contract Title Sunset Hwy & 77th Ave SE Intersection Improvements  
Project No. 22-32

Contract Date \_\_\_\_\_

Contractor Name \_\_\_\_\_

Contractor Address \_\_\_\_\_

Contractor Phone \_\_\_\_\_

Contractor Federal ID # \_\_\_\_\_

## State Law on How Contract Retainage Monies can be Reserved:

RCW 60.28.010 Retained percentage, labor and material Contracts for public improvements or work other than for professional services, provides that there shall be reserved by the city from the monies earned by the contractor on estimates during the progress of the improvement or work, a sum of five percent of such estimates, said sum to be retained by the city as a trust fund for the protection and payment of any persons performing work or supplying provisions or supplies during the work. The monies reserved for contract retainage may be reserved by the contractor choosing one of the following four options:

**All investments selected below are subject to City approval.**

Contractor Options (Contractor shall place an "x" in one of the boxes below.)

- [ ] (a) Retained in a non-interest bearing fund by the public body until released in accordance with applicable state statutes;
- [ ] (b) Deposited by the public body in an interest bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until released in accordance with applicable state statutes, provided that interest on such account shall be paid to the contractor;
- [ ] (c) Placed in escrow with a bank or trust company by the public body until released in accordance with applicable state statutes. The cost of the investment program and the risk thereof is to be borne entirely by the contractor.
- [ ] (d) Contractor may submit a Retainage Bond equal to 5% of the total awarded bid amount for all schedules to be held by the public body until released in accordance with applicable state statutes.

## Contractor's Bank

If Contractor selects options (b) or (c) above, Contractor shall designate below the bank in which the retainage is to be deposited:

ACCOUNT NO. \_\_\_\_\_

BANK NAME \_\_\_\_\_

BANK ADDRESS \_\_\_\_\_

BANK PHONE # \_\_\_\_\_

## Agreement

Contractor and City agree that all or part of the monies in the account can only be approved for disbursement by Bank to Contractor upon written authorization of the City Finance Director, or his/her authorized designee.

By \_\_\_\_\_  
City of Mercer Island

By \_\_\_\_\_  
Contractor

Date \_\_\_\_\_  
FORM19

Date \_\_\_\_\_

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## INTRODUCTION TO THE SPECIAL PROVISIONS

*(December 10, 2020 APWA GSP)*

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2021 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

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

*(March 8, 2013 APWA GSP)*

*(April 1, 2013 WSDOT GSP)*

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT/APWA, current edition
- City of Mercer Island Standard Details

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

## DIVISION 1: GENERAL REQUIREMENTS

### 1-01 DEFINITIONS AND TERMS

#### 1-01.3 Definitions

(January 19, 2022 APWA GSP)

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

#### **Dates**

##### ***Bid Opening Date***

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

##### ***Award Date***

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

##### ***Contract Execution Date***

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

##### ***Notice to Proceed Date***

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

##### ***Substantial Completion Date***

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

##### ***Physical Completion Date***

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

##### ***Completion Date***

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

##### ***Final Acceptance Date***

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

Supplement this Section with the following:

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

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

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

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

**Additive**

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

**Alternate**

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

**Business Day**

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

**Contract Bond**

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

**Contract Documents**

See definition for "Contract".

**Contract Time**

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

**Notice of Award**

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

**Notice to Proceed**

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

**Traffic**

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

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

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

Delete this Section and replace it with the following:

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

Bidders must meet the minimum qualifications of RCW 39.04.350(1), as amended:

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

*Add the following:*

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

Delete this section and replace it with the following:

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

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

<b>To Prime Contractor</b>	<b>No. of Sets</b>	<b>Basis of Distribution</b>
Reduced plans (11" x 17") and Contract Provisions	6	Furnished automatically upon award.
Contract Provisions	6	Furnished automatically upon award
Large plans (22" x 34") and Contract Provisions	\$\$2\$\$	Furnished only upon request.

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

**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; 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.

### **1-02.7 Bid Deposit**

*(March 8, 2013 APWA GSP)*

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

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

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

### **1-02.10 Withdrawing, Revising, or Supplementing Proposal**

*(July 23, 2015 APWA GSP)*

Delete this section, and replace it with the following:

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

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

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

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

### **1-02.13 Irregular Proposals**

*(October 1, 2020 APWA GSP)*

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
  - a. The Bidder is not prequalified when so required;
  - b. The authorized Proposal form furnished by the Contracting Agency is not used or is altered;
  - c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
  - d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
  - e. A price per unit cannot be determined from the Bid Proposal;
  - f. The Proposal form is not properly executed;
  - g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
  - h. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
  - i. The Bidder fails to submit written confirmation 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 form, 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, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
  - m. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
  - n. More than one Proposal is submitted for the same project from a Bidder under the same or different names.
2. A Proposal may be considered irregular and may be rejected if:
  - a. The Proposal does not include a unit price for every Bid item;
  - b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
  - c. Receipt of Addenda is not acknowledged;



- d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
- e. If Proposal form entries are not made in ink.

#### **1-02.14 Disqualification of Bidders**

*(May 17, 2018 APWA GSP, Option B)*

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet Supplemental Criteria 1-7 listed in this Section.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-7 shall be provided by the Bidder as stated later in this Section.

##### **1. Delinquent State Taxes**

- A Criterion: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder does not owe delinquent taxes to the Washington State Department of Revenue, or if delinquent taxes are owed to the Washington State Department of Revenue, the Bidder must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

##### **2. Federal Debarment**

- A Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.
- B. Documentation: The Bidder shall not be listed as having an “active exclusion” on the U.S. government’s “System for Award Management” database ([www.sam.gov](http://www.sam.gov)).

##### **3. Subcontractor Responsibility**

- A Criterion: The Bidder’s standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder’s subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also “responsible” subcontractors as defined by RCW 39.06.020.

- B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

4. **Claims Against Retainage and Bonds**

- A. Criterion: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:
- Name of project
  - The owner and contact information for the owner;
  - A list of claims filed against the retainage and/or payment bond for any of the projects listed;
  - A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

5. **Public Bidding Crime**

- A. Criterion: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

6. **Termination for Cause / Termination for Default**

- A. Criterion: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances.

## 7. Lawsuits

- A. Criterion: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Contracting Agency shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts.

As evidence that the Bidder meets the Supplemental Criteria stated above, the apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets the supplemental criteria together with supporting documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with the Supplemental Criteria. The Contracting Agency reserves the right to request further documentation as needed from the low Bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may consider mitigating factors in determining whether the Bidder complies with the requirements of the supplemental criteria.

The basis for evaluation of Bidder compliance with these mandatory and supplemental criteria shall include any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from others for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Contracting Agency which is believed to be relevant to the matter.

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

determined to be not responsible has received the Contracting Agency's final determination.

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

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

*(August 14, 2013 APWA GSP)*

Revise this section to read:

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

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

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

### **1-03.2 Award of Contract**

*(Special Provision)*

*Supplement*

The Award of contract, if made, will be made to the lowest responsive and responsible bidder. No Award will be made until necessary investigations are made by Contracting Agency as to the responsibility of the apparent low bidder. Contracting Agency shall be the sole judge as to the responsibility of the bidder to satisfactorily perform the work as specified and within the time limit set.

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

*(October 1, 2005 APWA GSP)*

Revise this section to read:

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

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

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

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

#### **1-03.4 Contract Bond**

*(July 23, 2015 APWA GSP)*

Delete the first paragraph and replace it with the following:

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

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
  - a. Is registered with the Washington State Insurance Commissioner, and
  - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
  - a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
  - b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and

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

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

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

*(December 10, 2020 APWA GSP)*

Revise the second paragraph to read:

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

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

#### **1-04.4 Changes**

##### **1-04.4(1) Unexpected Site Changes**

*(Special Provision)*

*Modification*

Section 1-04.4(1), including title, is revised as follows:

##### **1-04.4(1) Unexpected Site Changes**

All references to "Minor Change" shall be revised to read "Unexpected Site Changes".

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

*(July 23, 2015 APWA GSP, Option A)*

Revise the first paragraph to read:

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of any Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original Proposal quantity, and if the total extended bid price for that item at time of award is equal to or greater than \$5,000. In that case, payment for contract work may be adjusted as described herein.

**1-04.9 Use of Buildings or Structures****1-04.9(1) Construction Staging and/or Personnel Parking***(Special Provision)**New Section*

The Contractor shall be responsible for providing a Construction Staging and/or Personnel Area in a safe condition and orderly manner throughout the duration of the project. Prior to any construction activity, the Contractor shall provide written notification; informing the Engineer and all employees, contractors, and subcontractors who intend to arrive at this project with vehicles, equipment or supplies; of the location, purpose, and restrictions that apply to the Construction Staging and Personnel Parking Area.

No Construction Staging and/or Personnel Parking Area will be provided by the Contracting Agency. It is the Contractor's responsibility to locate and arrange for the use of this area. The Contractor must restrict all parking and storage activities to approved Construction Staging and Personnel Parking Area(s) for this project.

The purpose of the Construction Staging and/or Personnel Parking Area for this project is to provide all contractors, subcontractors, and personnel associated with this project a safe and orderly location to store equipment, tools, and supplies, and for parking construction or personal vehicles. There is a limited amount of available parking in and around the project area. The use of on-street parking areas in the vicinity of the project is prohibited without the expressed written approval of the Engineer and Public Works Director. Do not use private parking space in or around this project to park construction or personal vehicles without the expressed written approval of the owner of the property. Such approval is to be provided to the Engineer.

All costs associated with providing, maintaining, permitting, operating, and closing the Construction Staging and/or Personal Parking Area(s) for this project shall be considered incidental to and included in the unit contract prices of other Bid Items in this Contract.

**1-05 CONTROL OF WORK****1-05.4 Conformity With and Deviations from Plans and Stakes**

Section 1-05.4 is supplemented with the following:

*(August 7, 2017 WSDOT GSP)****Contractor Surveying - Roadway***

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

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

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length of the project or be replaced at the Contractors expense.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.
2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.
3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.
4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor
5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.
6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.
7. Establish intermediate elevation benchmarks as needed to check work throughout the project.



8. Provide references for paving pins at 25-foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.
9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.
10. Contractor shall determine if changes are needed to the profiles or roadway sections shown in the Contract Plans in order to achieve proper smoothness and drainage where matching into existing features, such as a smooth transition from new pavement to existing pavement. The Contractor shall submit these changes to the Engineer for review and approval 10 days prior to the beginning of work.

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

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

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

	<u>Vertical</u>	<u>Horizontal</u>
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

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

The Contractor shall calculate coordinates for the alignment. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the work. The Contracting Agency will require up to seven calendar days from the date the data is received.

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

Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are needed that are not described in the Plans, then those stakes shall be marked, at no additional cost to the Contracting Agency as ordered by the Engineer.

#### ***Payment***

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

"Roadway Surveying", lump sum.

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

Section 1-05.4 is supplemented with the following:

*(Special Provision)*

*Supplement*

#### **Contractor Surveying – ADA Features**

##### **ADA Feature Staking Requirements**

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, and grades necessary for the construction of the ADA features. Calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility. The Contractor shall build the ADA features within the specifications in the Standard Plans and contract documents.

##### **ADA Feature As-Built Measurements**

The Contractor shall be responsible for providing electronic As-Built records of all ADA feature improvements completed in the Contract.

The survey work shall include but not be limited to completing the measurements, recording the required measurements and completing other data fill-ins found on the ADA Measurement Forms, and transmitting the electronic Forms to the Engineer. The ADA Measurement Forms are found at the following website location:

<https://wsdot.wa.gov/engineering-standards/design-topics/design-ada>

In the instance where an ADA Feature does not meet accessibility requirements, all work to replace non-conforming work and then to measure, record the as-built measurements, and transmit the electronic Forms to the Engineer shall be completed at no additional cost to the Contracting Agency, as ordered by the Engineer.

**Payment**

ADA Features Surveying shall be included in the lump sum contract price for "Roadway Surveying".

**1-05.4(3) Record Drawings**

*(Special Provision)*

*Supplement*

The Contractor shall be required to maintain two sets of Record Drawings and Specifications for the Contract on site during the construction. The Contractor's superintendent or authorized representative shall update the documents with record information on a daily basis.

Record information shall include, but not be limited to, the final location of all new materials incorporated into the work and all existing improvements encountered, such as water lines, underground power, telephone, fiber optic and gas lines with such dimension, depths, nature of composition, and locations shown so as to be able to identify and locate the improvements in the field from the Control Centerline Stationing or other permanent structures that are to remain. The record drawings shall be made accessible to the Engineer at all times and one set shall be submitted to the Engineer monthly, along with the Contractor's request for progress payments.

Upon completion of the record drawing review, the Engineer shall return the set of record drawings to the Contractor for the Contractor's continued use, or the Engineer may return new, unused sets of documents for the Contractor's use.

Record Drawings must be submitted to the City and approved prior to granting Substantial Completion.

If the location of the feature constructed or installed **varies** from the Plan locations or elevations, Record Drawings shall contain the following information:

- 1) All existing or abandoned utilities encountered during construction and not shown on the Contract Drawings
- 2) Sanitary Sewer and Storm Sewers
  - a) Type and size of structure, horizontal location, rim and invert elevation, material and diameter of all pipes entering or leaving the structure.
  - b) Type and diameter of sewer or storm drain pipe, length of pipe between structures, slope of pipe based on actual invert elevations, horizontal location of pipe relative to the construction centerline

- c) Type and diameter of side sewers, distance to nearest manhole, length of pipe from sewer main to right-of-way line, slope of pipe based on actual inverts, invert elevation at right-of-way

3) Water Distribution System

- a) Type and size of pipe, including types of joints, deflection of pipe to the nearest degree, horizontal location of pipe relative to the construction centerline, vertical location to the nearest 0.5' for all valves, fittings and crossings of other underground utilities, length of pipe between fittings
- b) Station and offset to all valves, hydrants, blow-offs, air vacs and PRVs, types and sizes of pipe attached to the facility
- c) Material and size of service lines, horizontal location of the service line and meter box to the nearest station, meter size, length of service line from main to meter

4) Public Roadway Improvements

- a) Centerline elevations to the nearest 0.1' at 50 stations and intersections curb elevations
- b) Horizontal Location of driveway centerlines to the nearest station, length and width of driveway

5) Illumination and Signalization

- a) Station, offset and elevation, when applicable, for permanent vehicle detection loops, junction boxes, above ground cabinets, luminaire & signal poles, conduits and wiring.

**Payment**

Record Drawings shall be included in the lump sum contract price for "Roadway Surveying".

**1-05.4(5) Payment**

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid Items that are included in the proposal:

<b>Roadway Surveying</b>	<b>Per Lump Sum</b>
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All costs associated with roadway surveying, licensed surveying, structure surveying, utility surveying, Record Drawings and cross sectioning as required by the Standard Specifications and these Special Provisions shall be measured and paid under the bid item "Roadway Surveying" and no additional payment will be made. Additionally, all ADA Features Surveying work described in Section 1-05.4 shall be considered included and paid under the lump sum bid item "Roadway Surveying"

Primary horizontal and vertical control data shall not be furnished by the Contracting Agency and the Contractor shall establish horizontal vertical control as part of the "Roadway Surveying" bid item provided in the Proposal. Available horizontal and vertical control data provided in the Plans is for the Contractor's convenience and shall be verified as part of the "Roadway Surveying" Work.

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

*(October 1, 2005 APWA GSP)*

Supplement this section with the following:

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

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

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

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

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

#### **1-05.11 Final Inspection**

Delete this section and replace it with the following:

#### **1-05.11 Final Inspections and Operational Testing**

*(October 1, 2005 APWA GSP)*

##### **1-05.11(1) Substantial Completion Date**

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work

with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

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

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

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

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

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

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

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

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

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but

prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

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

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

#### **1-05.12 Final Acceptance**

Add the following new section

##### **1-05.12(1) One-Year Guarantee Period**

*(March 8, 2013 APWA GSP)*

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

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

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

#### **1-05.13 Superintendents, Labor and Equipment of Contractor**

*(August 14, 2013 APWA GSP)*

Delete the sixth and seventh paragraphs of this section.

**1-05.14 Cooperation with Other Contractors***(Special Provision)**Supplement*

The Contractor shall afford Contracting Agency and other contractors working in the area reasonable opportunity for the introduction and storage of their materials and the execution of their respective work, and Contractor shall properly connect and coordinate its work with theirs.

Other utilities, districts, agencies, and/or contractors who may be working within the project area are as follows:

- Sound Transit
- Mercer Island School District
- Puget Sound Energy/Gas
- Mercer Island Water & Sewer
- Lumen/CenturyLink  
Telecommunications

The Contractor shall coordinate and afford franchise utilities the opportunity to relocate existing facilities in direct conflict with proposed improvements.

**1-05.14(1) Notifications Relative to Contractor's Activities***(Special Provision)**New Section*

The Contractor shall give written notification to the Engineer and to the listed agencies and individuals, in time for them to receive such notice at least 3 calendar days prior to commencement of Work on the Project site. This notification must include:

- the time of the commencement and completion of work
- names of streets or locations of alleys to be closed
- routes of detours where possible
- schedule of operations
- name(s) and phone number(s) of the construction superintendent in responsible charge
- names of individuals having full authority to execute the orders or directions of the Engineer, in the event of an emergency. Include phone numbers with 24/7 availability.

The Contractor shall copy the Engineer on all communications with others related to this project, whether written, or logs of phone conversations:

- All fire, ambulance and police agencies servicing the project area(s).

**1-05.15 Method of Serving Notices***(March 25, 2009 APWA GSP)*

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of



dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

*Add the following new sections:*

**1-05.16 Water and Power**

*(October 1, 2005 APWA GSP)*

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

**1-05.17 Oral Agreements**

*(Special Provision)*

*Supplement*

No oral agreement or conversation with any officer, agent, or employee of the Contracting Agency, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Contracting Agency, unless subsequently put in writing and signed by the Contracting Agency.

**1-05.18 Daily Construction Report**

*(Special Provision)*

*New Section*

The Contractor and subcontractors shall maintain daily, a Daily Construction Report of the Work. The Diary must be kept and maintained by Contractor's designated project superintendent(s). Entries must be made on a daily basis and must accurately represent all of the project activities on each day. The Contractor shall provide signed copies of diary sheets for the previous week to Engineer at each Weekly Coordination Meeting.

Every single diary sheet/page must have:

- Project name & number;
- Consecutive numbering of pages, and
- Typed or printed name, signature, and date of the person making the entry.

At a minimum, the diary shall, for each day, have a separate entry detailing each of the following:

1. Day and date.
2. Weather conditions, including changes throughout the day.
3. Complete description of work accomplished during the day, with adequate references to the Plans and Contract Provisions so the reader can easily and accurately identify said work on the Plans. Identify location/description of photographs or videos taken that day.

4. Each and every changed condition, dispute or potential dispute, incident, accident, or occurrence of any nature whatsoever which might affect Contractor, Contracting Agency, or any third party in any manner.
5. List all materials received and stored on- or off-site by Contractor that day for future installation, including the manner of storage and protection of the same.
6. List materials installed that day.
7. List all subcontractors working on-site that day.
8. List the number of Contractor's employees working during each day, by category of employment.
9. List Contractor's equipment on the site that day; showing which were in use, and which idle.
10. Notations to explain inspections, testing, stake-out, and all other services furnished by Contracting Agency or other party during the day.
11. Verify the daily (including non-work days) inspection and maintenance of traffic control devices and condition of the traveled roadway surfaces.
12. Any other information that serves to give an accurate and complete record of the nature, quantity, and quality of Contractor's progress on each day.
13. Hours worked.

It is expressly agreed between Contractor and Contracting Agency that the Daily Diary maintained by Contractor shall be the "Contractor's Book of Original Entry" for the documentation of any potential claims or disputes that might arise during this Contract. Failure of Contractor to maintain this Diary in the manner described above will constitute a waiver of any such claims or disputes by Contractor.

Engineer or his representative on the job site will also complete a Daily Construction Report.

All costs associated with the Contractor's Daily Construction Report are considered incidental to and included in the various bid items.

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

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

*(October 1, 2005 APWA GSP)*

Supplement this section with the following:

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

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

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who

may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

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

### **1-07.2 State Sales Tax**

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

### **1-07.2 State Sales Tax**

*(June 27, 2011 APWA GSP)*

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(4) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

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

The Contracting Agency will pay the retained percentage (or release the Contract Bond is a FHWA-Funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.050). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

### **1-07.2(2) State Sales Tax — Rule 171**

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

**1-07.2(3) State Sales Tax — Rule 170**

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

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

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

**1-07.2(4) Services**

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

**1-07.7 Load Limits**

*(WSDOT GSP March 13, 1995)*

Section 1-07.7 is supplemented with the following:

If the sources of materials provided by the Contractor necessitates hauling over roads other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

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

*(Special Provision)*

*Supplement*

Contractor shall maintain jobsite, all streets used by it, and utilities in a neat, orderly, workmanlike, and usable condition. Contractor shall clean up on a daily basis all refuse, rubbish, scrap material, and debris caused by his operations, including sweeping of streets.

On the event the Contractor fails to conform to these requirements, the Contracting Agency shall have the right to have the work done by others and the cost shall be deducted from moneys due to the Contractor.

The Contractor shall maintain access to driveways adjacent to the project limits at all times. Cement concrete driveway approaches shall be poured in two halves (minimum) to facilitate ingress/egress. At the direction of the Engineer, the Contractor may be directed to place

HMA for use in temporary driveway access based on site conditions or to maintain a clean site.

The Contractor shall coordinate with all emergency services within the project site to allow access at all times. This may require additional coordination and temporary facilities to be utilized during the prosecution of the Work such as providing temporary steel sheeting or HMA patching. The costs for coordination and temporary facilities shall be considered part of the project and included in all Bid Items and no additional compensation will be made.

**1-07.17 Utilities and Similar Facilities**  
(Special Provision)

Section 1-07.17 is supplemented with the following:

Locations and dimensions shown in the Plans for existing buried facilities are in accordance with available information obtained without uncovering. The actual locations may not correspond to the locations shown in the Plans. The Contractor shall be responsible for determining the exact location of all utilities prior to beginning construction. See RCW 19.122 for the latest rules on contacting the one-number locator service, etc.

The Contractor is also warned that there may be utilities on the project that are not part of the One-Call System. If One-Call is not obtainable, notice shall be provided to the individual utility owners of the Contractor's intent to excavate, within the same time frame cited in RCW 19.122.030.

All existing utilities and services shown on the plans shall be maintained in continuous service during the Contractor's operations. During contractor operations if a utility is found in conflict with the contract work, the contractor shall notify the Engineer immediately. If any utility requires relocation or temporary shutoff, the Contractor shall coordinate all interruptions of service with the utility owner. Disruptions to the services require a minimum of forty-eight (48) hours notice to the impacted utility for notification to the property owner.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

Puget Sound Energy (Power)  
PO Box 97034 EST-11W  
Bellevue, WA  
Attn: Hong Nguyen  
Office: 425-449-6609  
Hong.Nguyen@pse.com

Puget Sound Energy (Gas)  
13230 SE 32<sup>nd</sup> St.  
Bellevue, WA 98005  
Attn: Ryan Yelle  
Office: 425-449-7589  
Ryan.Yelle@pse.com

CenturyLink  
1550 Newport Way NW  
Issaquah, WA 98027  
Attn: Tung Le  
Cell: 206-641-6622  
tung.le@centurylink.com

City of Mercer Island Water & Sewer  
Allen Hunter  
Office: 206-960-0520  
allen.hunter@mercergov.org

**1-07.18 Public Liability and Property Damage Insurance***(January 4, 2016 APWA GSP)*

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

**1-07.18 Insurance****Indemnification/Hold Harmless**

The contractor shall defend, indemnify and hold the City, its officers, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits, including attorney fees, arising out of in in connection with the performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

**Insurance**

The Contractor shall procure and maintain for the duration of this Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, their agents, representatives, employees or subcontractors.

**No Limitation**

Contractor's maintenance of insurance, its scope of coverage and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

**A. Minimum Scope of Insurance**

Contractor shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be written on ISO occurrence form GC 00 01 and shall cover liability arising from premises, operations, independent contractors, products-completed operations, stop gap liability, personal injury and advertising injury, and liability assumed under an insured contract. The Commercial General Liability insurance shall be endorsed to provide the Aggregate Per Project

Endorsement ISO form CG 25 03 11 85. There shall be no endorsement or modification of the Commercial General Liability insurance for liability arising from explosion, collapse or underground property damage. The City shall be named as an insured under the Contractor's Commercial General Liability insurance with respect to the work performed for the City using ISO Additional Insured endorsement CG 20 10 10 01 and Additional Insured Completed Operations endorsement CG 20 37 10 01 or substitute endorsements providing equivalent coverage.

3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

## **B. Minimum Amounts of Insurance**

Contractor shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
2. Commercial General Liability insurance shall be written with limits no less than \$2,000,000 each occurrence, \$2,000,000 general aggregate, and a \$2,000,000 products-completed operations aggregate limit.

## **C. Other Insurance Provisions**

The Contractor's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that the shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

## **D. Acceptability of Insurers**

Insurance is to be placed with insurers with a current AM. Best rating of not less than A: VII.

## **E. Verification of Coverage**

Contractor shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Contractor before commencement of the work.

## **F. Subcontractors**

The Contractor shall have sole responsibility for determining the insurance coverage and limits required, if any, to be obtained by subcontractors, which determination shall be made in accordance with reasonable and prudent business practices.

## **G. Notice of Cancellation**

The Contractor shall provide the city and all Additional Insured' s for this work with written notice of any policy cancellation, within two business days of their receipt of such notice.

## H. Failure to Maintain Insurance

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

## I. Environmental Risks

Contractor's Pollution Legal Liability insurance covering losses caused by pollution conditions that arise from the operations of the Contractor. The Contractor's Pollution Legal Liability insurance shall be written in an amount of at least \$1,000,000 per loss, with an annual aggregate of at least \$1,000,000.

If coverage the Contractor's Pollution Legal Liability insurance is written on a claims-made basis, the Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning from the time that work under the contract is completed.

The City of Mercer Island shall be named by endorsement as an insured on the Contractor's Pollution Legal Liability insurance policy.

## 1-07.23 PUBLIC CONVENIENCE AND SAFETY

### 1-07.23(1) Construction Under Traffic

*(Special Provision)*

*Supplement*

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

#### **Work Zone Clear Zone**

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.



Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

<b>Posted Speed</b>	<b>Distance From Traveled Way (Feet)</b>
<b>35 mph or less</b>	<b>10 *</b>
<b>40 mph</b>	<b>15</b>
<b>45 to 55 mph</b>	<b>20</b>
<b>60 mph or greater</b>	<b>30</b>

\* or 2-feet beyond the outside edge of sidewalk

#### **Minimum Work Zone Clear Zone Distance**

#### **1-07.24 Rights of Way**

*(July 23, 2015 APWA GSP)*

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

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

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

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

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

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

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

## **1-08 PROSECUTION AND PROGRESS**

Add the following new section:

### **1-08.0 PRELIMINARY MATTERS**

*(May 25, 2006 APWA GSP)*

Add the following new section:

#### **1-08.0(1) Preconstruction Conference**

*(October 10, 2008 APWA GSP)*

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

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and the Contractor's Traffic Control Plan;
6. To discuss such other related items as may be pertinent to the work;

The Contractor shall prepare and submit at the preconstruction meeting the following:

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

Add the following new section:

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

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

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

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 48 hours prior to the day(s) the Contractor is requesting to change the hours.

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

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

**1-08.3 Progress Schedule****1-08.3(1)A Project Specific Scheduling and Order of Work***(Special Provision)**New Section*

The order of work will be at the Contractor's option with the exception noted below and shall be in keeping with good construction practice and the terms of the Contract. However, the Contractor shall schedule his activities and have all work performed within the time

constraints noted in the various documents, permits, and the Contract. The Contractor is cautioned to review said documents and permits and schedule the Work activities appropriately as no separate monies will be paid to the Contractor by the Owner due to the time constraints imposed by such documents.

Substantial completion shall include the following work:

- All cement concrete work is installed,
- All final asphalt pavement lifts are installed,
- All storm drainage and water system improvements are installed, tested, and operational,
- The RRFB system is installed, tested, and operational,
- Permanent Channelization is complete.
- Traffic lanes have been returned to their normal configuration.

### **Trenching**

All trenches within the roadway area shall be backfilled and patched with temporary asphalt at the end of each working day, unless prior permission is granted by the Project Engineer. Temporary patching asphalt shall be HMA or cold mix asphalt as approved by the Project Engineer.

### **Relocation, adjustment, and replacement concurrent with Construction**

Minor unexpected relocations, adjustments, and relocations by franchise utilities, and performed by Others shall be performed concurrent with the Contractor's activities. Puget Sound Energy will begin utility pole relocations prior to notice to proceed, but some work may run concurrent with Contractor's activities. Preliminary PSE pole relocation plans are included in Appendix C for reference.

### **Measurement and Payment**

All costs associated with project specific scheduling and sequencing shall be incidental to the various bid items of this Contract.

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

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

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

*(July 23, 2015 APWA GSP)*

Revise this section to read:

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by

the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

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

### **1-08.5 Time for Completion**

*(Special Provision)*

*Supplement*

This project shall be Substantially completed within \*\*\* **85** \*\*\* working days.

*(September 12, 2016 APWA GSP, Option A)*

Revise the third and fourth paragraphs to read:

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

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

Revise the sixth paragraph to read:

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

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The

following documents must be received by the Project Engineer prior to establishing a completion date:

- a. Certified Payrolls (per Section 1-07.9(5)).
- b. Material Acceptance Certification Documents
- d. Final Contract Voucher Certification
- e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors

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

*(March 3, 2021 APWA GSP, Option B)*

Revise the second and third paragraphs to read:

Accordingly, the Contractor agrees:

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

#### **Liquidated Damages Formula**

$$LD=0.15C/T$$

Where:

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

C = original Contract amount

T = original time for Physical Completion

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

**1-09 MEASUREMENT AND PAYMENT****1-09.2(1) General Requirements for Weighing Equipment***(Special Provision)**Replacement*

Delete the last paragraph of this section and replace it with the following:

It is the responsibility of the Contractor to see that tickets are given to the Inspector on the project for each truckload of material delivered. The City will not have a receiver at the point of delivery. Pay quantities will be prepared on the basis of said tally tickets, delivered to the Inspector by the Contractor on or within one (1) business day of the delivery of materials. Tickets not provided to the Inspector will not be honored for payment.

**1-09.6 Force Account***(October 10, 2008 APWA GSP)*

Supplement this section with the following:

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

**1-09.7 Mobilization***(Special Provision)**Supplement*

Section 1-09.7 is supplemented with the following:

Obtaining a site for the Contractor's mobilization, field office(s), storage of materials, and other general operations shall be the responsibility of the Contractor. All costs associated with securing sites shall be included in the lump sum bid price for Mobilization and no other compensation will be made for this item. The Contractor will provide City with copy(s) of agreement(s).

Payment will be made in accordance with Section 1-04.1 for the following bid item(s) when included in the proposal:

<b>Mobilization</b>	<b>Per Lump Sum</b>
---------------------	---------------------

The lump sum bid price for "Mobilization" shall include, but not limited to, the following items: the movement of the Contractor's personnel, equipment, supplies and incidentals to the project site; the establishment of the Contractor's office, and other facilities necessary for work on the project; providing sanitary facilities for the Contractor's personnel; obtaining permits or licenses required to complete the project not furnished by the Owner; maintain and producing Record Drawings as required herein; removal of Contractor stored or placed items for mobilization purposes; site cleanup of all Contractor occupied areas or Contractor

storage/stockpile areas; and other work and operations which must be performed or costs that must be incurred.

#### **1-09.9 Payments**

*(March 13, 2012 APWA GSP)*

Delete the first four paragraphs and replace them with the following:

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

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

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

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

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

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

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

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



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

### **1-09.13 Claim Resolution**

#### **1-09.13(3) Claims \$250,000 or Less**

*(October 1, 2005 APWA GSP)*

This section to be deleted and replaced with:

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

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

*(November 30, 2018 APWA GSP)*

Revise the third paragraph to read:

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

### **1-10 TEMPORARY TRAFFIC CONTROL**

#### **1-10.2 Traffic Control Management**

*(Special Provision)*

*Supplement*

Phase One: Northbound 77th Ave SE traffic shall remain closed for duration of phase one construction at the intersection. Northbound access to buildings and businesses on 77<sup>th</sup> Avenue shall be provided at all times. Southbound traffic shall be maintained 24 hours per day. West segment of Sunset Highway traffic shall have flagger-controlled access. Two-way access shall be provided while contractor is on site. Right-in/right-out shall be provided while contractor is off-site. East segment of Sunset Highway shall be closed just west of the intersection of 78<sup>th</sup> Avenue; however driveway and garage access shall be maintained to the adjacent building.

Phases Two and Three: One-way traffic on West segment of Sunset Highway shall only be allowed while contractor is on-site and during crosswalk installation. Provide for two-way traffic during construction off hours. No temporary stoppage of southbound traffic will be allowed from 7:30am-9am and 3:30pm-6pm. Should any temporary stoppage of southbound traffic occur during the hours of 9am-3pm impact the 77th Ave SE off-ramp from I-90, the contractor shall

clear traffic immediately. Further traffic control restrictions may be required should 77th Ave SE off ramp operations be impacted.

**1-10.2(1) General**  
(September 7, 2021, WSDOT GSP OPT1)

*Supplement*

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

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

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

Evergreen Safety Council  
12545 135th Ave. NE  
Kirkland, WA 98034-8709  
1-800-521-0778  
<https://www.esc.org>

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

Integrity Safety  
13912 NE 20th Ave.  
Vancouver WA 98686  
(360) 574-6071  
<https://www.integritysafety.com>

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

**1-10.2(2) Traffic Control Plans**

(Special Provision)

*Supplement*

Traffic Control Plans and Phasing and Sequencing Plans, including any revisions and updates, are the sole responsibility of the Contractor.

The Traffic Control Plans (TCP) shall be submitted at a scale of 1" = 20' and shall also show hauling routes, which must be approved in advance by the Engineer.

Per 1-08.0(1), the Contractor shall bring a preliminary TCP to the preconstruction meeting which shall include a proposed construction schedule, construction phasing, pedestrian route plan, and associated temporary traffic control implementation.

The TCP shall also include necessary phasing and sequencing diagrams to clarify the proposed order of work and work zones. The following minimum Traffic Control requirements shall be maintained during the construction of the project:

- Driveway closure shall be coordinated with property owners prior to reconstruction.
- Lane closures during working hours are allowable provided one lane of traffic is maintained at all times. Emergency response vehicles shall have immediate access at all times.
- Unless a pay item has specifically been included in the contract, dust, mud control and street cleaning is considered **incidental** to the project.
- The Contractor shall provide for cleaning all surfaced roadways as a result of the execution of this project. Flushing shall not be allowed.

The Contractor shall submit a Traffic Control Plan or Plans showing a method of handling traffic. All construction signs, flaggers, spotters and other traffic control devices shall be shown on the Traffic Control Plan(s) except for emergency situations. Generic TCP Plans will not be acceptable. The Contractor's proposed Traffic Control Plans shall show the necessary lane closures, lane shifts, construction signs, flaggers, spotters, and other traffic control devices required to support each phase of the construction. A separate plan shall be prepared for each major construction phase. The Contractor-provided Plans shall be prepared by the Contractor's Traffic Control Supervisor or a licensed engineer in the State of Washington and shall conform to the requirements contained in the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), the latest version of the Work Zone Traffic Control Guidelines published by the Washington State Department of Transportation.

Traffic Control Plans shall specify how accessible pedestrian routes shall be maintained through the project site.

The Contractor shall maintain a pedestrian path for safe crossing at all times for at least one side of the roadway and one side of each intersection. Pedestrian access shall be ADA compliant and shall be maintained at all times. Pedestrian access shall be continuous along the project frontage and provide access to adjacent businesses and buildings and shall be fully accessible after work hours and on weekends.

Payment for developing an approved Traffic Control Plan, including pedestrian access route plan, shall be considered **incidental** to the lump sum price in the Proposal for "Project Temporary Traffic Control" and no additional compensation will be made.

If operations of the Contractor are shown to significantly impede traffic flow during peak hours, the Engineer may restrict the Contractor's time for operating within the street.

The Contractor shall also be aware of any additional restrictions within the Contract Documents, in particular Special Provisions section 1-07.16(1) and 1-08.0(1).

### **1-10.3 Traffic Control Labor, Procedures, and Devices**

#### **1-10.3(3)A Construction Signs** (Special Provision)

*Supplement*

Supplement this section with the following:

Project Signs and posts will be provided by the Contractor. Contractor shall coordinate with installation locations and protect signs from damage throughout construction. Costs associated with this work shall be incidental to other items of work.

### **1-10.3(3)C Portable Changeable Message Sign**

*(Special Provision)*

*Supplement*

Five days prior to commencement of work the Contractor shall place a portable changeable message sign at each end of the project as directed by the Engineer. Messages to display will be determined by the Engineer.

Portable Changeable Message signs shall remain in operation on the project until substantial completion.

### **1-10.5 Payment**

*(Special Provision)*

*Supplement*

Supplement this section with the following:

<b>Project Temporary Traffic Control</b>	<b>Lump Sum</b>
--	-----------------

No separate payment will be made for the preparation of the Pedestrian Traffic Control Plan. All costs with developing, implementing, and maintaining temporary ADA pedestrian access path via boardwalks, procurement, placement and compaction of crushed surfacing top course for temporary paths, or other labor, tools, and materials to comply with MUTCD Chapter 6D requirements included in the approved Pedestrian Traffic Control Plan shall be included in the lump sum bid item "Project Temporary Traffic Control".

No separate payment will be made for Traffic Control Supervisor, Other Traffic Control Labor, Construction Signs Class A or B, Portable Changeable Message Signs, or other work required under this section unless a specific bid items have been provided in the Proposal.

All costs for minimizing drop-offs and maintaining access to existing streets and driveways including, but not limited to, steel sheeting, and channelization devices, must be included by the Contractor in the lump sum Bid price for "Project Temporary Traffic Control". No additional or separate compensation will be allowed.

**END OF DIVISION 1**



## DIVISION 2: ROADWAY EXCAVATION AND EMBANKMENT

### 2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

#### 2-01.1 Description

*(Special Provision)*

*Supplement*

The Contractor shall stake the proposed clearing limits at a minimum of 25' interval. The Contractor shall notify Engineer upon completion of the staked limits and shall allow 48 hours, after notification, for the Engineer to approve the clearing limits before commencing activities. At the direction of the Engineer, the limits shall be adjusted in the field. When staking the clearing limits, the Contractor shall strive to protect from damage existing landscaping items, such as vegetation, rockeries, irrigation and other items not indicated for removal.

When trees, fencing, landscape vegetation, rockeries, irrigation systems on private property conflicts with the proposed improvements, the Contractor shall allow seven (7) days notice to the property owners before commencing removal of the materials to allow time for private salvage. Items to be salvaged by adjacent homeowners will be determined in the field on an individual basis. If the property owners do not desire to salvage materials, then clearing may commence upon approval of the limits.

#### 2-01.2 Disposal of Usable Materials and Debris

*(Special Provision)*

*Supplement*

No waste site has been provided for the disposal of excess or excavated materials. The Contractor shall make his or her own arrangements for obtaining waste sites in accordance with Section 2-01.2(2) and 2-03.3(7)C of the Standard Specifications.

The Contractor shall make the opportunity available to the Engineer to allow salvaging of exiting materials once removed to a site designated by the Engineer, prior to the Contractor providing haul and disposal of the materials. This does not imply that the Engineer will accept the materials removed for salvage. If materials are to be salvaged by the Engineer, the Contractor will provide haul to the designated site (within the City of Mercer Island).

#### 2-01.5 Payment

*(Special Provision)*

*Supplement*

Payment will be made in accordance with section 1-04.1, for the following bid items that are included in the Proposal:

<b>Clearing and Grubbing</b>	<b>Lump Sum</b>
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The unit bid price for the above including all incidental work shall be full compensation for all labor, materials tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specification and these Special Provisions.

## 2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

### 2-02.1 Description

*(Special Provision)*

*Supplement*

The following is added at the end of this section:

The Contractor shall remove and dispose of all items shown on the site preparation plans and other minor items necessary to complete the work. The contractor shall review the plans, specifications and project site to verify items to be removed within the clearing and grading limits.

Work shall consist of removing all materials noted in this section as well as any other materials noted for removal on the Plan or as necessary for construction of the proposed improvements for which a separate bid item is not provided. The following specific items shall be included under "Removal of Structure and Obstructions", as well as other minor items noted on the Plans:

- Remove Bollards / Guard Posts (Various Locations per Plans), 9 EA
- Remove Tree, 3 EA
- Remove Existing Catch Basin (Various Locations per Plans), 2 EA
- Removal of Storm Sewer Pipe (Various Locations per Plans), 60 LF
- Concrete Art Foundation Structure at NE Corner (52+50, 30'-40' left), 1 EA

In general, the Contractor shall remove/dispose or abandon existing items which are in conflict with the new improvements, as noted above, and/or shown on the site preparation and demolition Plans. Where not in conflict, or where not specified for relocation, demolition or removal Contractor shall protect all improvements. Miscellaneous small items requiring removal may not have been shown on the Plans.

All items that are to be removed *inside* the roadway prism, which is defined as edge of pavement removal limits (ie: sawcut) to the back of sidewalk or cut/fill line shown on the plans, whichever is furthest from roadway, and not specifically mentioned as a pay item, will be paid as *Roadway Excavation*, Section 2-03 herein. Items *outside* the roadway prism, and not specifically mentioned as a pay item, will be paid as *Removal of Structure and Obstruction*, Section 2-02.5 herein.

Structure excavation, backfill and compaction quantities for the removal of items are not shown in the Plans. This excavation, backfill and compaction work shall be considered incidental to the lump sum "Removal of Structures and Obstructions" and no further compensation shall be made; however, backfill material used to fill voids created by removing structures and obstructions will be paid for under the "Crushed Surfacing Top Course" bid item

### 2-02.3 Construction Requirements

*(Special Provision)*

*Supplement*

All material removed for the construction of the project shall be hauled off-site to a legal disposal site by the Contractor. The Contractor shall determine the requirements of his selected disposal site related to accepting the material to be deposited on the site. Testing of the material by the disposal site or refusal of the site to accept the material shall not be the basis for additional payment or for an extension of the contract time. The cost of all such requirements shall be included in the various bid prices in the Proposal.

**2-02.3(1) Saw Cutting***(Special Provision)**New Section*

All pavement removed, regardless of type, shall be sawcut with a neat, full depth, vertical edge/line. Where the plans call for asphalt to be recycled or rotomilled in place, the pavement edge may be created by asphalt milling equipment.

Prior to the placement of Hot Mix Asphalt in locations illustrated in the plans, the Contractor shall sawcut a neat, full depth (up to 12" in depth), vertical edge/line within the existing pavement where the proposed pavement adjoins. The sawcut shall also be set at a continuous offset from the face of curb as illustrated in the plans.

The Contractor shall be responsible for ensuring that special precautions are undertaken so that in accordance with Department of Ecology guidelines no concrete (asphalt or cement) or concrete by-products are discharged into any storm drain or surface water. Cutting operations will increase the pH of water, therefore filtering is not acceptable.

Thoroughly clean saw cuts where necessary by the use of high pressure water (1,400 psi or greater). All wastewater shall be collected using vacuuming and/or pumped into containers for disposal.

Impervious surfaces contaminated from cutting operations shall be cleaned by sweepers to prevent contaminants from entering storm systems.

All costs associated with saw cutting as well as collection and disposal of wastewater shall be considered incidental to and included in the unit contract prices for the associated removal bid items which require saw cutting.

**2-02.3(2) Asphalt Removal***(Special Provision)**New Section*

This work shall consist of asphalt pavement, driveway, and sidewalk/walkway removal to the limits identified on the plans or as directed by the Engineer. Regardless of thickness, existing asphalt shall be removed to install the proposed improvements.

All costs associated with asphalt pavement, driveway, and sidewalk/walkway removal and disposal shall be considered included in the bid items except when a specific bid item is included in the contract proposal.

**2-02.3(3) Cement Concrete Curb and Gutter Removal***(Special Provision)**New Section*

This work shall consist of removing cement concrete curb and gutter, cement concrete pedestrian curb, extruded curb, pedestrian curb, including any reinforcement, and other curbing indicated for removal on the plans or as directed by the Engineer.

All costs associated with cement concrete curbing removal and disposal shall be considered included in the bid items except when a specific bid item is included in the contract proposal.

**2-02.3(4) Cement Concrete Sidewalk Removal***(Special Provision)**New Section*

This work shall consist of cement concrete sidewalk/walkway removal to the limits identified on the plans or as directed by the Engineer. Regardless of depth, existing concrete sidewalk



shall be removed to install the proposed improvements. This work shall also consist of the removal of associated pedestrian curb adjacent to the concrete sidewalk.

All costs associated with cement concrete driveway and sidewalk removal and disposal shall be considered included in the bid items except when a specific bid item is included in the contract proposal.

## **2-02.3(3)6 Removal of Drainage Structures**

*(Special Provision)*

*New*

Where shown in the Plans or where designated by the Engineer, the Contractor shall remove existing catch basins, manholes, pipes, and other drainage features in accordance with Section 2-02 of the Standard Specifications. Removal shall be conducted in such a manner as to prevent damage to surrounding facilities including any existing storm sewers, sanitary sewers, electrical conduits or other facilities to remain. All remaining facilities including but not limited to storm sewers, sanitary sewers, monuments, valves, vaults, and electrical conduits damaged due to the Contractor's operations shall be replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Contracting Agency. Catch basins, manholes, and other drainage structures designated for removal, including all debris, shall be completely removed. All removed catch basins, manholes, and other drainage structures shall become the property of the Contractor and shall be disposed of in accordance with Section 2-02 of the Standard Specifications. All undamaged frames, grates, and solid covers in a re-useable condition shall become the property of the City of Mercer Island and shall be delivered to a location specified by the Engineer.

Saw cutting (full depth) of existing asphalt concrete pavement and cement concrete curb and gutter surrounding the structure required for removal shall be considered incidental to various bid items. Saw cuts shall be in accordance with Section 2-02 of these Special Provisions.

Backfilling of catch basins, manholes, pipes and other drainage structures to be removed and replaced shall not be performed until the new structure is installed and shall be in accordance with Section 7-05. Backfilling of a structure to be replaced shall be performed using CSTC and paid in accordance with the Bid Schedule. Backfilling of catch basins, manholes, pipes and other drainage structures to be completely removed shall be performed using CSTC and paid in accordance with the Bid Schedule.

Prior to backfilling any voids, the Contractor shall remove pipe as noted in the plans. Pipe shown to be abandoned or ordered by the Engineer to be abandoned shall be plugged with concrete in accordance with Section 2-09.3(1)E of the Standard Specifications.

Material, labor, tools, and equipment necessary to remove and/or plug any abandoned pipe shall be considered incidental to the other removal and pipe related bid items.

The Contractor shall maintain existing drainage, where designated by the Engineer, until the new drainage system is completely installed and functioning.

## **2-02.4 Measurement**

*(Special Provision)*

*Supplement*

"Asphalt Removal Incl Haul" shall be measured per square yard on the surface of pavement removed as identified on the plans.

"Cement Concrete Sidewalk Removal Incl Haul" shall be measured per square yard on the surface pavement removed as identified on the plans.

“Cement Concrete Curb and Gutter Removal” shall be measured per linear foot as identified on the plans.

## 2-02.5 Payment

(Special Provision)

Supplement

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Removal of Structure and Obstructions</b>	<b>Lump Sum</b>
<b>Asphalt Removal Incl Haul</b>	<b>Per Square Yard</b>
<b>Cement Concrete Curb and Gutter Removal Incl Haul</b>	<b>Per Linear Foot</b>
<b>Cement Concrete Sidewalk Removal Incl Haul</b>	<b>Per Square Yard</b>

The Lump Sum Contract price for “*Removal of Structure and Obstruction*” shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but is not limited to, excavation, removal, cutting, and disposal of existing surface and underground utilities, and the items shown on the Plans and specified herein. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Square Yard Contract price for “*Asphalt Removal Incl Haul*” shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but is not limited to, excavation, removal, breaking, and disposal of existing asphalt pavements, walkways, and driveways, regardless of thickness. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Linear Foot Contract price for “*Cement Concrete Curb and Gutter Removal Incl Haul*” shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but is not limited to, excavation, removal, breaking, and disposal of existing cement concrete curb and gutter. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Square Yard Contract price for “*Cement Concrete Sidewalk Removal Incl Haul*” shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but is not limited to, excavation, removal, breaking, and disposal of existing cement concrete sidewalk, walkways, and driveways, regardless of thickness or reinforcement. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

Saw cutting shall be considered incidental and the unit price shall be included in the various bid items that it relates to.

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## 2-03 ROADWAY EXCAVATION AND EMBANKMENT

### 2-03.1 Description

*(Special Provision)*

*Supplement*

The work described in this Section, regardless of the nature or type of the materials encountered, includes excavating subgrade below the existing roadway, existing sidewalk, existing curb and gutter, and existing driveways to establish subgrade required by the proposed improvements and daylighting to existing ground per the details in the Plans.

Should the contractor remove the existing surface treatment and encounter suitable base material that has been inspected and accepted by the Engineer, the contractor shall stop excavation and grade existing ground for proposed improvements.

Any excavation beyond that necessary for construction, unless otherwise ordered by the Engineer in writing, shall not be paid for. Unauthorized over-excavated areas shall be filled with crushed surfacing to be furnished, placed, and compacted at the Contractor's expense.

Unsuitable material is not anticipated within the project footprint. Should unsuitable material be discovered by the Contractor and the Engineer determines the material is unsuitable, the Engineer may direct the Contractor to remove unsuitable material. Removal and haul of the unsuitable material shall be tracked using force account.

### 2-03.4 Measurement

*(Special Provision)*

*Supplement*

No basis of measurement shall apply for "Roadway Excavation Including Haul" which shall be paid for as a lump sum item.

No separate measurement for payment will be made for compaction. All costs associated with compaction shall be included with the other various unit Bid prices in the Proposal.

No separate measurement for payment will be made for disposal of surplus materials. All costs associated with this work shall be included with the other various Bid items in the Proposal.

No specific unit of measurement shall apply to the lump sum bid item "Roadway Excavation Incl. Haul". The quantity is estimated to be 380 cubic yards as measured in place prior to excavation. No shrinkage or swell factors have been included and no deduction for pavement removal is included. Should the Owner direct the Contractor to perform additional excavation beyond that shown on the Contract Plans, the additional roadway excavation will be measured and paid for at a unit cost determined by dividing the lump sum bid amount by the applicable volume specified above.

Should the Contractor disagree with the estimated quantities shown for "Roadway Excavation Incl. Haul" it shall be the Contractor's responsibility to perform a survey of the existing grade and of the bottom of subgrade after excavation and present this information to the Owner. Should it be determined that the quantities are in error, the lump sum Bid amount will be adjusted by a unit price calculated as described above. All costs required to survey the site and develop the terrain models shall be borne by the Contractor.

**2-03.5 Payment***(Special Provision)**Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Roadway Excavation Incl. Haul</b>	<b>Per Lump Sum</b>
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The lump sum price for "Roadway Excavation Incl. Haul" shall be full compensation for the cost of all labor, tools, equipment, and materials necessary or incidental for excavating, hauling, and disposing of all materials excavated below existing pavement to establish roadway subgrade at an off-site location provided and paid for by the Contractor.

**2-04 HAUL****2-04.1 Description***(Special Provision)**Supplement*

In reference to the term "haul" as used in Section 2-04 and Section 2-09.3(1)D of the Standard Specifications, all costs and expense involved in haul will be considered incidental to the unit contract prices of the bid items and no additional compensation will be made.

**2-04.2 Hauling on Routes Other Than State Highways***(Special Provision)**New*

If the sources of materials provided by the Contractor necessitate hauling over roads other than City streets or State highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use and cleaning, if necessary, of the haul routes.

**2-04.5 Payment***(Special Provision)**Supplement*

All costs associated with hauling materials of any description to, from, and within the project site shall be included in the appropriate unit Bid prices in the Proposal and no further compensation will be paid.

**2-09 STRUCTURE EXCAVATION****2-09.3(1)C Removal of Unsuitable Base Material***(Special Provision)**Supplement*

Unsuitable and unstable foundation material shall be excavated, removed, and replaced per the Standard Specifications.

**2-09.3(1)D Disposal of Excavated Material***(Special Provision)**Supplement*

All costs associated with disposing, hauling, or reusing excavated material shall be considered **incidental** to the various bid items and no additional compensation shall be considered when a bid item is not included in the contract.

**2-09.3(3)D Shoring and Cofferdams***(Special Provision)**Supplement*

Providing shoring and cribbing and all aspects involved therein shall be the sole responsibility of the Contractor. All structure excavation shall be performed in strict compliance with Chapter 296-155 WAC and Chapter 49.17 RCW of the Washington Safety and Health Act.

**2-09.4 Measurement***(Special Provision)**Supplement*

“Shoring or Extra Excavation Class B” will be by lump sum.

**2-09.5 Payment***(Special Provision)**Modification*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Shoring or Extra Excavation Class B</b>	<b>Per Lump Sum</b>
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The lump sum bid price for “Shoring or Extra Excavation Class B” shall be full compensation for the cost of all labor, tools, equipment, and materials necessary or incidental to install shoring and establish safe working environment below grade in accordance with the Standard Specifications and these Special Provisions. Structure Excavation CI B incl haul shall be included in the various item shown in the bid proposal and no additional payment will be made.

**END OF DIVISION 2**

## **DIVISION 3: PRODUCTION FROM QUARRY AND PIT SITES AND STOCKPILING**

### **3-01 PRODUCTION FROM QUARRY AND PIT SITES**

#### **3-01.4 Contractor Furnished Material Sources**

*(Special Provision)*

*Supplement*

No source has been provided for any materials necessary for the construction of this improvement.

If the source of materials provided by the Contractor necessitates hauling over roads other than City streets, the Contractor shall at his or her own expense make all arrangements for the use of haul routes.

#### **3-01.5 Payment**

*(Special Provision)*

*Supplement*

All costs of any work required under Division 3 shall be included in the unit contract prices for the various items in the Proposal.

**END OF DIVISION 3**

## DIVISION 4: BASES

### 4-04 BALLAST AND CRUSHED SURFACING

#### 4-04.1 Description

*(Special Provision)*

*Supplement*

All crushed surfacing material included in this contract is to be used only as indicated on the Plans or as designated by the Engineer and is not for the convenience of the Contractor. The work shall consist of the placement and compaction of crushed surfacing top course beneath pavement, curbs, paths, and sidewalk at locations indicated on the Plans. The Contractor shall place the material on the project as directed.

Also included in this work is the crushed surfacing top course required for the bedding and backfill of the storm drainage improvements and watermain improvements.

Also included in this work is the crushed surfacing top course required for placing and constructing temporary pedestrian facilities throughout the project site as directed by the engineer.

#### 4-04-4 Measurement

*(Special Provision)*

*Supplement*

The basis of measurement for "Crushed Surfacing \_\_\_\_\_ Course" will be by the ton based on certified truck tickets collected by the inspector at the end of each working day. Tickets will be accepted for payment after the end of each working day only when prior arrangements have been made with the inspector.

Should the Contractor not prepare subgrade to the correct line and grades and crushed surfacing materials are placed in excess of the depths required by the Plans, the excess depth will not be measured for payment. The crushed surfacing in these areas will instead be measured by neat line to be converted to tons for deduction in quantities accepted based on the certified truck tickets.

Crushed surfacing top course or base course used for temporary purposes, including but not limited to driving surfaces, will not be measured for payment unless it is incorporated into construction of the final improvements as required by the Plans.

Water used in placing and compacting surfacing materials will not be measured for payment.

#### 4-04-5 Payment

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Crushed Surfacing Top Course</b>	<b>Per Ton</b>
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The unit bid price for the above including all incidental work (temporary placement and compaction for sidewalks and driveways, etc.) shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions. The Contract Bid price for "Crushed Surfacing \_\_\_\_ Course" shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work as defined in the Plans, Standard Specifications and these Special Provisions. Work elements shall include, but not be limited to procuring, hauling, placing, grading, and compacting crushed surfacing material. Water used in placing and compacting surfacing materials shall be considered incidental to the material being placed.

It is the Contractor's responsibility to track crushed surfacing materials measured for separate payment and those not measured for payment by providing separate stockpiles or another method acceptable by the Engineer. Should the Contractor not provide separate stockpiles or other method as outlined above, crushed surfacing material paid for per Ton will not be based on certified truck tickets, but instead be measured by neat line to be converted to tons based upon neat line measurements in the field and on the cross sections provided in the Plans.

#### **END OF DIVISION 4**



## DIVISION 5: SURFACE TREATMENTS AND PAVEMENTS

### 5-04 HOT MIX ASPHALT

*(July 18, 2018 APWA GSP)*

Delete Section 5-04 and amendments, Hot Mix Asphalt and replace it with the following:

#### 5-04.1 Description

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

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

This work shall also include placing and compacting Temporary HMA for pavement transitions, temporary walkways, and other temporary facilities as directed by the engineer.

#### 5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Portland Cement	9-01
Sand	9-03.1(2)
(As noted in 5-04.3(5)C for crack sealing)	
Joint Sealant	9-04.2
Foam Backer Rod	9-04.2(3)A

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

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

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP. The RAP shall be sampled and tested at a frequency of one sample for every 1,000 tons produced and not less than ten samples per project. The asphalt content and gradation test data shall be reported to the Contracting Agency when submitting the mix design for approval on the QPL. The Contractor shall include the RAP as part of the mix design as defined in these Specifications.

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

The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA. The Contractor shall submit to the Engineer for approval the process that is proposed and how it will be used in the manufacture of HMA.

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

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

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

#### **5-04.2(1)A Vacant**

#### **5-04.2(2) Mix Design – Obtaining Project Approval**

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

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

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

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

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

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

Mix designs for HMA accepted by Nonstatistical evaluation shall;

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

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

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

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

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

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

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

### 5-04.3 Construction Requirements

#### 5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year without written concurrence from the Engineer.

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

**Minimum Surface Temperature for Paving**

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

#### 5-04.3(2) Paving Under Traffic

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

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

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

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

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

#### 5-04.3(3) Equipment

##### 5-04.3(3)A Mixing Plant

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

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

#### **5-04.3(3)B Hauling Equipment**

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

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

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

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

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

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

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

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

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

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

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

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

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

To be approved for use, an MTV:

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

To be approved for use, an MTD:

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

#### **5-04.3(3)E Rollers**

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

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

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

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

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

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

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

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

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

#### **5-04.3(4)A Crack Sealing**

##### **5-04.3(4)A1 General**



When the Proposal includes a pay item for crack sealing, seal all cracks ¼ inch in width and greater.

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

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

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall be topped off with additional sand slurry. After the sand slurry is placed, the filler shall be struck off flush with the existing pavement surface and allowed to cure. The HMA overlay shall not be placed until the slurry has fully cured. The requirements of Section 1-06 will not apply to the portland cement and sand used in the sand slurry.

In areas where HMA will be placed, use sand slurry to fill the cracks.

In areas where HMA will not be placed, fill the cracks as follows:

1. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
2. Cracks greater than 1 inch in width – fill with sand slurry.

**Hot Poured Sealant:** For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's recommendations. Furnish a Type 1 Working Drawing of the manufacturer's product information and recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures, allowable storage time and temperatures after initial heating, allowable reheating criteria, and application temperature range. Confine hot poured sealant material within the crack. Clean any overflow of sealant from the pavement surface. If, in the opinion of the Engineer, the Contractor's method of sealing the cracks with hot poured sealant results in an excessive amount of material on the pavement surface, stop and correct the operation to eliminate the excess material.

#### **5-04.3(4)A2 Crack Sealing Areas Prior to Paving**

In areas where HMA will be placed, use sand slurry to fill the cracks.

**5-04.3(4)A3 Crack Sealing Areas Not to be Paved**

In areas where HMA will not be placed, fill the cracks as follows:

- A. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
- B. Cracks greater than 1 inch in width – fill with sand slurry.

**5-04.3(4)B Vacant****5-04.3(4)C Pavement Repair**

The Contractor shall excavate pavement repair areas and shall backfill these with HMA and crushed surfacing base course in accordance with the details shown in the Plans and as marked in the field. The Contractor shall conduct the excavation operations in a manner that will protect the pavement that is to remain. Pavement not designated to be removed that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.

Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required. The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

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

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

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

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

**5-04.3(5)A Vacant****5-04.3(6) Mixing**

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

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

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

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

#### **5-04.3(7) Spreading and Finishing**

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

HMA Class 1"	0.35 feet
HMA Class ¾" and HMA Class ½"	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class ⅜"	0.15 feet

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

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

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

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

#### **5-04.3(9) HMA Mixture Acceptance**

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

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

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

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

#### **HMA Tolerances and Adjustments**

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

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

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

For Aggregates in the mixture:

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

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

- b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.
2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.
  - a. **Aggregates** –2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).
  - b. **Asphalt Binder Content** – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

#### 5-04.3(9)A Vacant

#### 5-04.3(9)B Vacant

#### 5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

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

#### 5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots

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

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

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

**5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling**

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

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

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

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

**5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing**

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

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

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

**5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors**

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

Table of Price Adjustment Factors	
Constituent	Factor "f"
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40

Air Voids (Va) (where applicable)	20
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Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

#### **5-04.3(9)C5 Vacant**

#### **5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments**

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

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

#### **5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests**

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency,  $V_a$ . The results of the retest will be used for the acceptance of the HMA in place of the original subplot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$500 per sample.

#### **5-04.3 (9)D Mixture Acceptance – Commercial Evaluation**

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

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

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

#### **5-04.3(10) HMA Compaction Acceptance**

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

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

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

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

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

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

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of



the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

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

### **Test Results**

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

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

### **5-04.3(10)A HMA Compaction – General Compaction Requirements**

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

### **5-04.3(10)B HMA Compaction – Cyclic Density**

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow

WSDOT SOP 733. A \$500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

#### **5-04.3(10)C Vacant**

#### **5-04.3(10)D HMA Nonstatistical Compaction**

##### **5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots**

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

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per subplot per WSDOT T 738.

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

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

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

##### **5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing**

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

##### **5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments**

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a subplot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will

be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

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

#### **5-04.3(11) Reject Work**

##### **5-04.3(11)A Reject Work General**

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

##### **5-04.3(11)B Rejection by Contractor**

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

##### **5-04.3(11)C Rejection Without Testing (Mixture or Compaction)**

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

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

##### **5-04.3(11)D Rejection - A Partial Sublot**

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal sublot any material that is suspected of being defective in relative density,

gradation or asphalt binder content. Such isolated material will not include an original sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

#### **5-04.3(11)E Rejection - An Entire Sublot**

An entire sublot that is suspected of being defective may be rejected. When a sublot is rejected a minimum of two additional random samples from this sublot will be obtained. These additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

#### **5-04.3(11)F Rejection - A Lot in Progress**

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the Composite Pay Factor (CPF) of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PFi for any constituent or the CPF of a lot in progress is less than 0.75.

#### **5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)**

An entire lot with a CPF of less than 0.75 will be rejected.

#### **5-04.3(12) Joints**

##### **5-04.3(12)A HMA Joints**

##### **5-04.3(12)A1 Transverse Joints**

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

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

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

#### **5-04.3(12)A2 Longitudinal Joints**

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than  $\frac{1}{2}$  of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

#### **5-04.3(13) Surface Smoothness**

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than  $\frac{1}{8}$  inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than  $\frac{1}{4}$  inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of \$500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This requirement may be waived when requested by the Contractor, at the discretion of the Engineer or when the adjustment details provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.

Utility appurtenance adjustment discussions will be included in the Pre-Paving planing (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.

#### **5-04.3(14) Planing (Milling) Bituminous Pavement**

The planing plan must be approved by the Engineer and a pre planing meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing submittals.

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

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

Use the cold milling method for planing unless otherwise specified in the Contract. Do not use the planer on the final wearing course of new HMA.

Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.

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

A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.

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

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

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

#### **5-04.3(14)A Pre-Planing Metal Detection Check**

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

Should such metal be identified, promptly notify the Engineer.

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

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

### **5-04.3(14)B Paving and Planing Under Traffic**

#### **5-04.3(14)B1 General**

In addition the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:
  - a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).
  - b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.
  - c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.
  - d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.
  - e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.
2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.

3. Permanent pavement marking must comply with Section 8-22.

#### **5-04.3(14)B2 Submittals – Planing Plan and HMA Paving Plan**

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.
3. Haul routes from Supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA Supplier facilities to be used.
5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving, and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.



10. Tonnage of HMA to be placed each day.
11. Approximate times and days for starting and ending daily operations.

#### **5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing**

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

1. General for both Paving Plan and for Planing Plan:
  - a. The actual times of starting and ending daily operations.
  - b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
  - c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other contractors who may operate in the Project Site.
  - d. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
  - e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planing and to paving.
  - f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed
  - g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, street car rail, and castings, before planing, see Section 5-04.3(14)B2.
  - h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
  - i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
  - j. Other items the Engineer deems necessary to address.
2. Paving – additional topics:
  - a. When to start applying tack and coordinating with paving.
  - b. Types of equipment and numbers of each type equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type equipment as it relates to meeting Specification requirements.
  - c. Number of JMFs to be placed, and if more than one JMF how the Contractor will ensure different JMFs are distinguished, how pavers and MTVs are

distinguished if more than one JMF is being placed at the time, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.

- d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.
- e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

#### **5-04.3(16) HMA Road Approaches**

HMA approaches shall be constructed at the locations shown in the Plans or where staked by the Engineer. The Work shall be performed in accordance with Section 5-04.

#### **5-04.3(18) Uses for HMA**

*(Special Provision)*

*New*

Uses for "HMA Class ½" PG64-22" shall consist of new roadway pavement, roadway overlay, preleveling lifts, and side street overlay paving.

Uses for "Commercial HMA" shall consist of pathways, sidewalks, driveway areas, and utility adjustments.

#### **5-04.3(19) Incidental uses for HMA**

*(Special Provision)*

*New*

Incidental uses for Hot Mix Asphalt shall consist of restoration and adjustment to paved areas such as the back of sidewalks, sidewalk ramps, behind driveway approaches, placement of asphalt berms and other such uses as directed by the Project Engineer.

#### **5-04.4 Measurement**

*(Special Provision)*

*Supplement*

The basis of measurement for "HMA Class ½" PG58H-22" and "Temporary HMA" will be by the ton based on certified truck tickets collected by the inspector at the end of each working day, with no deduction being made for the weight of asphalt binder, blending sand, mineral filler, or any other component of the HMA.

Tickets will be accepted for payment after the end of each working day only when prior arrangements have been made with the inspector.

All costs for tack coat shall be considered incidental to and included in other unit Contract prices.

Preparation of Untreated Roadway will be considered incidental and included in the various bid items and no additional payment will be made.

Cold Mix, if used by the Contractor, will not be measured for separate payment and shall be considered incidental to the lump sum bid item "Project Temporary Traffic Control".

#### **5-04.5 Payment**

Incidental uses for HMA, shall be measured and paid under the "Temporary HMA" bid item.

*(Special Provision)**Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Planing Bituminous Pavement</b>	<b>Per Square Yard</b>
<b>HMA CI ½" PG58H-22</b>	<b>Per Ton</b>
<b>Temporary HMA</b>	<b>Per Ton</b>

Items to be included in the bid price, but shall not necessarily be limited to all necessary materials, labor, and equipment to satisfactorily complete furnishing, hauling and placement of HMA, compaction, preparation of existing roadway surfaces, furnishing and applying tack coat as defined in the Standard Specifications and Special Provisions.

All costs associated with Preparation of Existing Surfaces, Tack Coat, and Longitudinal Joint Seals shall be considered included in the cost of the Hot Mix Asphalt furnished and installed.

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

## **5-05 CEMENT CONCRETE PAVEMENT**

### **5-05.1 Description**

This work shall consist of construction of the raised scored cement concrete pavement intersection, approach ramps, roadway and colored scored cement concrete crosswalks on each leg of the intersection in conformity with the lines, grades, thicknesses, and typical cross-section shown on the Plans.

### **5-05.2 Materials**

*Supplement this section with the following:*

**Scored Cement Concrete Pavement – Cement Concrete Roadway**

Scored Cement Concrete Pavement at center of raised intersection, approach ramps and roadway shall receive treatment consisting of roadway scoring as detailed on the Plans.

**Cement Concrete Crosswalk – Colored and Scored Cement Concrete Crosswalk**

Colored Cement Concrete Crosswalk areas shall receive Crosswalk Treatment consisting of color additives, curing compound, broom finish (perpendicular to traffic) and sealer, as detailed on the Plans.

Color for mock-up sample for colored scored cement concrete crosswalk shall be a uniform color grey #860 "Cobblestone" by Davis Color.

Color additives shall contain pure concentrated mineral pigments specially processed for mixing into concrete and complying with ASTM C979.

Crosswalk Treatment area shall be cured and sealed with a curing compound and sealer to be approved by color additive manufacturer, for use with colored concrete, and shall comply with ASTM C309.

Curing compound and sealer shall be water based, non-flammable, low gloss, non-yellowing, non-clouding and wear resistant. Compound and sealer shall protect against water damage, oil and common stains, formulated for exterior use.

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

*Item 2 Submittals is supplemented with the following:*

The submittal for the concrete mix design shall provide the following: the date, the amount of materials (i.e. cement, sand, aggregates, water), the type and amount of each admixture, and the designated 28-day compressive strength specific to the mix design being submitted. The design compressive strength shall be a minimum of 4,000 psi.

### **5-05.3(4)A Acceptance of Portland Cement Concrete Pavement**

*Delete the first through fourth paragraphs and replace with the following:*

Acceptance of concrete will be on a non-statistical acceptance basis.

### **5-05.3(8) Joints**

*The second paragraph is revised to read:*

The Contractor shall submit a concrete panel jointing plan in accordance with the Plans and these Specifications for Engineer's approval at least three (3) working days prior to the commencement of any pavement construction. When a concrete panel jointing plan is included in the Plans, the Contractor may adopt or submit a revised jointing plan in accordance with Standard Plans and the Specifications at the Contractor's own expense. The Contractor's jointing plan shall be approved in writing by the Engineer before the start of concrete paving.

The faces of all joints shall be constructed perpendicular to the surface of the cement concrete pavement.

### **5-05.3(8)D Isolation Joints**

*This section is supplemented with the following:*

The joint alignment shall be at right angles to the Pavement Structure centerline unless otherwise specified in the Contract.

Isolation joints shall be constructed with pre-molded material, 3/8-inch in thickness and conform to Section 9-04.1(2) Pre-molded Joint Filler for Expansion Joints and as shown on the Standard Details in these Specifications.

The joint material shall be held accurately in place during the placing and finishing of the concrete by a bulkhead, a holder, metal cap or any other approved method. The joint shall be perpendicular to the paved surface and the holder shall be in place long enough to prevent sagging of the joint material.

A wood filler strip or metal cap shall be placed on the top of the pre-molded joint filler to form the groove, and shall remain in place until after the finishing and the concrete is sufficiently set to resist sloughing in the groove. The joint filler shall be stapled together at the ends to preserve continuity.

Immediately after removal of side forms, the edges of the pavement shall be carefully inspected and wherever the joint filler is not fully exposed, the concrete shall be chipped down until the edge of the filler is fully exposed for the entire depth.

#### **5-05.3(8)E Sealing Through Joints**

*This is a new section*

After the pavement is cured and before carrying any traffic, the space left by the removal of the wood filler strip or the metal cap above the top of the expansion joint filler strip shall be thoroughly cleaned of all loose material. The groove shall be completely free of any projecting concrete from the sides and the groove shall be continuous across the slab to each edge. It shall then be filled level with the pavement surface with joint sealant meeting the requirements of Section 9-04.2 Joint Sealants.

The joint sealant material shall be "black" color and heated and placed in accordance with the manufacturer's instructions. Burned material will be rejected. The through joint groove shall be dry at the time of pouring the sealing compound.

#### **5-05.3(10) Tie Bars and Corrosion Resistant Dowel Bars**

*This section is added with the following:*

Placement of tie bars and dowel bars shall be in accordance with the WSDOT Standard Plan A-40.10-02 in Appendix A. Dowel bars should have a diameter of 1 1/8".

#### **5-05.3(11) Finishing**

*This section is supplemented with the following:*

The final layout shall be determined in field and approved by Engineer.

Intersection and Crosswalk Treatment Installer's Additional Qualifications: Installer shall provide a list of 5 successfully installed projects that include sandblast, broom finish and architectural score joint concrete work within the Western United States. Include the following information: Address/ name of project; square footage; date of installation; contact name and phone number; up to (2) photos of each project.

#### Mock-Up Sample

Prior to start of pavement work the Contractor shall provide (2) two ten foot by ten foot mock-up sample of the Scored Cement Concrete Roadway; including sandblast finish and scoring. Engineer shall approve mock-up sample prior to start of work. The final approved sample shall be the standard for the balance of the rest of the work installed, and shall be protected from damage until final acceptance and approval. Mockups provided for approval by Engineer shall be incidental to and included in the unit bid price for "Intersection Treatment" per these Special Provisions.

Prior to start of pavement work the Contractor shall provide (2) two five feet by five feet mock-up samples of the colored scored cement concrete crosswalk; including broom finish. Engineer shall approve a mock-up sample prior to start of work. The final approved sample shall be the standard for the balance of the rest of the work installed, and shall be protected from damage until final acceptance and approval. Mockups provided for approval by Engineer shall be incidental to and included in the unit bid price for "Colored Scored Cement Concrete Crosswalk" per these Special Provisions.

No additional concrete shall be placed prior to the test panel being approved by the Engineer.

Asphalt mastic joint fillers shall be 3/8" x 4" and of the same material as that used in the curb with matching expansion joint locations. Expansion joints, architectural score joint and decorative stamped finish shall be provided as shown on the Plans, or in locations to be approved by the Engineer for best appearance.

In advance of curing operations, the pavement shall receive an initial texturing followed by final finishing. Initial texturing shall be performed with a burlap drag or broom device, creating striations in the same orientation as the final finish. The concrete roadway surface shall be finished with a transverse tining. Where integral concrete curbs are constructed, the roadway surface finish shall end 12 inches from the flowline.

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.

**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.

### **5-05.3(14) Cold Weather Work**

*This section is supplemented with the following:*

Engineer shall be notified at least 24 hours prior to placement of concrete.

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**

*Replace the first paragraph of this section with the following:*

“Cement Concrete Roadway” shall be measured per cubic yard of placed concrete.

“Colored Scored Cement Concrete Crosswalk” shall be measured per cubic yard of placed concrete.

### **5-05.5 Payment**

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Cement Concrete Roadway</b>	<b>Per Cubic Yard</b>
<b>Colored Scored Cement Concrete Crosswalk</b>	<b>Per Cubic Yard</b>

The contract bid price “Cement Concrete Roadway” shall be full compensation for all labor, materials, curing compound, sealers, broom finish, tools and installing casting boxouts where necessary or as noted in the Plans, the Standard Specifications and these Special Provisions.

The contract bid price for “Colored Scored Cement Concrete Crosswalk” shall be full compensation for all labor, materials, sandblast finish, tools and installing casting boxouts where necessary or as noted in the Plans, the Standard Specifications and these Special Provisions.

**END OF DIVISION 5**



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## DIVISION 7: DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS AND CONDUITS

### 7-00.1 GENERAL

*(Special Provision)*

*New*

For the convenience of the Contractor the Plans show approximate locations of various existing utilities and other obstructions. This information, if shown, has been obtained from records and cannot be guaranteed accurate. The Contractor shall diligently check for interferences with existing utilities ahead of his or her work including exploration in advance of excavation.

The Contractor is further alerted to the provisions of RCW 19.122 and his or her responsibilities by performing excavation required by the Contractor Documents and Standard Specifications.

Structure Excavation Class B Including Haul for the installation and/or removal of underground utilities, pipes, and structures shall be considered **incidental** to and included in the structure

### 7-04 STORM SEWERS

#### 7-04.1 Description

*(Special Provision)*

*Supplement*

The work shall consist of all excavation, trenching, backfilling, and installation of the pipe where indicated on the Plans.

This work shall also include connecting existing pipe to new drainage structures.

#### 7-04.2 Materials

*(Special Provision)*

*Supplement*

Drain Pipe shall meet the requirements of Section 9-05.12

Pipe bedding, pipe zone backfill material, and trench backfill shall be Crushed Surfacing Top Course and conform to Section 9-03.9(3) of the Standard Specification.

#### 7-04.3 Construction Requirements

*(Special Provision)*

*Supplement*

Connection of new storm drain pipe to existing storm drain pipe shall be considered **incidental** to the various storm drainage bid items and no additional compensation will be made.

The Contractor shall furnish a Fernco (or approved equal) coupling device at each connection to existing storm drain pipes. All costs for couplings shall be included in the unit price for storm drainage pipe installed and no additional compensation will be made.

All costs associated with providing temporary metal sheeting for temporary storm sewer trench cover shall be considered **incidental** to the various storm drainage bid items and no additional compensation will be made.

See Section 7-08 herein for further construction requirements.

**7-04.3(2) Connections to Concrete Drainage Structures***(Special Provision)**New*

When connecting to a concrete structure, openings must be core-drilled or line drilled unless an existing knockout is available. Pipe connections shall be made with non-shrink Portland cement grout to make a watertight fit. Connections to existing and new drainage structures shall be included in the unit prices contained in the bid proposal and no additional payment will be made.

**7-04.3(3) Utility Clearances***(Special Provision)**New*

Ethafoam HS 600 Plank foam board, or approved equal, shall be placed between the storm pipe and other utilities for vertical clearances less than six (6) inches and shall be **incidental** to other bid items.

**7-04.4 Payment***(Special Provision)**Supplement*

Storm sewer pipe shall be measured per linear foot of installed and accepted storm sewer pipe.

"Connection to New Drainage Structure" shall be measured per each completed and accepted connection of new drainage structure to existing pipe.

**7-04.5 Payment***(Special Provision)**Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Storm Sewer Pipe, 12 In Diam.</b>	<b>Per Linear Foot</b>
<b>Storm Sewer Pipe, 8 In Diam.</b>	<b>Per Linear Foot</b>
<b>Connection to New Drainage Structure</b>	<b>Per Each</b>

The contract bid price above, including all incidental work, shall be full compensation for all labor, material, tools, equipment, and all costs associated with structure excavation Cl. B incl. haul, connecting to drainage structures, providing fittings and couplings for connection to existing pipes, installing bedding and backfill material for the installation of drainage pipe, compaction, cleaning and flushing, and testing to satisfactorily complete the Work as defined in the Standard Specifications and these Special Provisions.

Pipe bedding and backfill material will be paid by ticketed ton as tracked by delivery tickets provided to the onsite inspector at the time of delivery under the item "Crushed Surfacing Top Course".

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

### 7-05.1 Description

*(Special Provision)*

*Supplement*

This work consists of furnishing and installing curb inlets, catch basins, area drains, and manholes of the type and size shown in the Plans, the Standard Specifications, and the Standard Plans, in reasonably close conformity with the lines and grades as shown on Plans and staked by the Contractor's surveyor.

All work necessary to intercept existing storm drain lines for the installation of catch basins, inlets, or manholes as shown on the Plans or as directed by the Engineer, shall be considered **incidental** to the type and size of drainage structure installed.

This work shall also consist of replacing existing grates with solid lids, furnishing and installing new catch basin vaned frames and grates, and furnishing and installing new manhole frames and covers as indicated on the Plans.

### 7-05.2 Materials

*(Special Provision)*

*Supplement*

New catch basins, area drains, and inlets shall conform to the Standard Plans for the types and sizes specified. Included in the costs for all drainage structures shall be furnishing and installing frames and grates and solid covers as indicated on the Plans.

All new locking catch basin frames and grates shall have vaned grates, behind curb inlets, or solid lids, as indicated on the Plans. All frames and grates shall be the 18" x 24" size per WSDOT Standard Detail B-30.10-03.

Concrete adjustment rings shall conform to the ASTM C-32, Grade MA.

Area Drains shall conform to WSDOT Standard Plan B-10.70

### 7-05.3 Construction Requirements

*(Special Provision)*

*Supplement*

The Contractor is advised that the locations of gas, water, telephone, and cable service lines are not necessarily shown on the Plans. It will be the Contractor's responsibility to coordinate with franchise utilities so that services are adjusted and maintained per City standards. This will include coordination and making necessary arrangements with service providers for the reconnection or relocation of service lines away from the proposed storm drainage system.

All costs associated with temporarily plugging existing storm drain pipes so that new drainage structures can be installed shall be considered **incidental** to and included in the unit contract price for the type and size of structure installed.

### New Catch Basin Adjustment to Grade

Newly installed drainage structures shall include at least one adjustment riser. If additional adjustment is required to achieve finished grade, the Contractor shall install a combination 2", 4", 6" and/or 12" precast risers so that no more than three risers are used at any one drainage structure.

### **Furnish and Install New Solid Locking Frame and Cover**

Where indicated on the Plans, the Contractor shall remove existing frames, grates, and/or solid covers and install new locking ductile iron frame and covers and adjust the frame and cover to new finished grade as necessary. The removed catch basin grate shall become the property of the City and shall be delivered to the City Maintenance Shop. Work described in this section shall be paid under the item "Adjust Catch Basin or Manhole".

### **Furnish and Install New Locking Catch Basin Frame and Vaned Grate**

Where indicated on the Plans, the Contractor shall remove existing frames and grates and install new locking ductile iron frames and vaned grates on the existing catch basin and adjust the frame and grate to finished grade as necessary. The removed catch basin frame and grates shall become the property of the City and shall be delivered to the City Maintenance Shop. New frame and vaned grates shall be adjusted vertically and horizontally to match the flowline of the newly constructed concrete curb and gutter shall be completely grouted on the inside prior to exposure to traffic loads and prior to placing asphalt overlay. Work described in this section shall be paid under the bid item "Adjust Catch Basin or Manhole".

### **Adjust and Install New Sanitary Sewer Manhole Frame and Cover**

The Contractor shall remove existing frames and covers and install new ductile iron frames and covers on the existing sewer manhole and adjust the frame and cover to new finished grade as necessary, in locations on the Plans and/or as designated by the Engineer. The new frames and covers will be furnished to the contractor by the City and will be available for pickup at the City Maintenance Shop. The removed manhole frames and covers shall become the property of the City and shall be delivered to the City Maintenance Shop.

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

*(Special Provision)*

*Supplement*

Jackhammer around the casting with a maximum clearance of twelve (12) inches. Following the removal of the asphalt and concrete around the structure, clean the castings and the inside of the structure, and remove all tack coat, asphalt, paper, and other debris. Remove failed, crushed, or defective brickwork down to solid full-width bricks. Provide and install new concrete brick or concrete riser sections, conforming to Section 9-12.2, to bring the frame to the proper finished grade and cross slope of the finished asphalt pavement. Set the casting on full-width bricks or risers, using shims to make final grade adjustment. Completely grout the inside and outside to fill any voids between riser bricks. Remove all wooden shims prior to final grout work. Place "HMA CI 1/2" PG58H-22" around the casting in compacted lifts to match into the adjacent finished pavement. Seal all asphalt joints. Compaction shall be done using a pneumatic or hydraulic 'pogo stick'.

Any utility structure lid, casting, cover, grate, or asphalt patch in the traveled way whose finished grade is higher or lower than the adjacent finished asphalt pavement, as measured by a six (6) foot straight edge, by 1/4-inch or more shall be readjusted by the Contractor at his or her own expense.

Utility castings shown on the drawings or designated by the Engineer for replacement shall be installed and adjusted to final grade in the above described manner.

Payment will be made once for each structure that a Locking Frame & Grate has been furnished, installed, and adjusted to finished grade. No payment will be made for lowering castings to or interim adjustments to accommodate roadway grinding or other construction sequencing.

Concrete adjustment rings shall conform to the ASTM C-32, Grade MA.

Solid catch basin covers located in the proposed sidewalk shall be coated in slip resistant material. The slip resistant lid shall be treated with:

1. Mebac #1 as manufactured by IKG Industries, or
2. SlipNOT Grade 3-coarse as manufactured by W.S. Molnar Co.

Work described in this section shall be paid under the bid item "Adjust Catch Basin or Manhole".

#### **7-05.3(2)A Abandon Existing Storm Sewer Pipes**

Where it is required that an existing storm sewer pipe be abandoned (or portions of pipe installed as part of this project which are to be abandoned as shown on the Plans), the structure shall be broken down to a depth of at least 4 feet below the revised surface elevation, all connections plugged, the manhole base shall be fractured to prevent standing water, and the manhole filled with sand and compacted to 90 percent density as specified in Section 2-03.3(14)C. Debris resulting from breaking the upper part of the manhole may be mixed with the sand subject to the approval of the Engineer. The ring and cover shall be salvaged and all other surplus material disposed of.

A cement-based grout shall be used to fill the void of the abandoned storm sewer pipe. The grouting material must have a strength of at least 100 psi and shall have flow characteristics appropriate for filling a storm sewer. The grout mix designed and method of installation shall be approved by the Engineer prior to beginning the operation (See Section 9-03.22).

Work described in this section shall considered incidental to the various bid items and no separate unit of measurement or payment shall be made.

#### **7-05.5 Payment**

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Catch Basin Type 1</b>	<b>Per Each</b>
<b>Catch Basin Type 2 48 In. Diam</b>	<b>Per Each</b>
<b>Area Drain</b>	<b>Per Each</b>
<b>Adjust Catch Basin or Manhole</b>	<b>Per Each</b>
<b>Adjust &amp; Install New Sewer Manhole Frame and Cover</b>	<b>Per Each</b>

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

## **7-08 GENERAL PIPE INSTALLATION REQUIREMENTS**

### **7-08.1 Description**

*(Special Provision)*

*Supplement*

Material excavated shall not be used as backfill and shall be hauled away to an approved waste site at the Contractor's expense.

Trench and structure excavation shall be considered **incidental** to and included in the unit contract price for pipe. Pipe bedding material, pipe backfill material, and structure backfill material will be paid for by the ton under a separate bid item. Trench shall be excavated to a sufficient width to allow for pipe installation, compaction equipment, and shoring when necessary. Paving width shall be shown on the City Standard Detail. No additional payment will be made for excavation and backfill of additional trench widths beyond the maximum trench width (nor for related quantities such as bedding, paving, imported backfill, rock excavation, etc.) unless extra trench width has been specifically directed by the Engineer.

Contractor shall pothole ahead of pipe-laying a sufficient distance for utility crossings and where noted on the plans to provide sufficient distance to make vertical adjustments as necessary to avoid existing utilities. Should the Contractor fail to pothole know utility crossings, any subsequent adjustments necessary shall not be cause for additional cost or time claim.

All construction shall conform to these Specifications, to the lines, limits and grades shown on the drawings and as designated by the Engineer. Backfill shall be compacted to 95% dry density. Line and grade shall be provided by the Contractor.

### **7-08.2 Materials**

*(Special Provision)*

*Supplement*

Aggregates for foundation material, pipe zone bedding, pipe zone backfill, and trench backfill shall meet the requirements of Section 9-03.9(3) Crushed Surfacing Top Course.

### **7-08.3 Construction Requirements**

#### **7-08.3(1)B Shoring**

*(Special Provision)*

*Supplement*

Shoring design shall be the responsibility of the Contractor. No implication of methods, means or materials is implied within the Bid Documents.

#### **7-08.3(1)C Bedding the Pipe**

*(Special Provision)*

*Supplement*

If foundation material at the base of structure excavation is unsuitable, it shall be removed and replaced per the provisions of 2-03.3(14)E of the standard specifications. Unsuitable material excavation shall be directed by the engineer and be measured and tracked via force account.

Crushed Surfacing Top Course for pipe bedding as indicated on the plans shall be in accordance with Section 9-03.9(3) of the Standard Specifications.

#### **7-08.3(2)F Plugs and Connections**

*(Special Provision)*

*Supplement*

##### **Plugging Existing Pipe**

Plugging existing storm sewer or culvert pipe shall be considered **incidental** to and included in the unit contract price of the various bid items in the contract.

##### **Connections**

New storm sewer pipe shall be connected to existing catch basins and manholes per Section 7-05.3(3) Connections to Existing Manholes of the Standard Specifications.

Connection of an existing pipe to a new drainage structure shall be considered **incidental** and included in the various unit bid prices for catch basins and concrete inlets.

Connection of a new pipe to a new drainage structure shall be considered **incidental** and included in the various unit bid prices for catch basins and concrete inlets.

#### **7-08.3(3) Backfilling**

*(Special Provision)*

*Supplement*

Select trench backfill material shall be:

Crushed Surfacing Top Course

9-03.9(3)

All trenches shall be backfilled with select materials which will be measured and paid as "Crushed Surfacing Top Course".

Crushed Surfacing Top Course shall be used for pipe zone bedding, pipe zone backfill, and trench backfill unless otherwise directed by the Engineer.

Native backfill materials shall only be used when approved by the Engineer; therefore the Contractor shall assume all trenches shall be backfilled with select materials.

#### **7-08.5 Payment**

*(Special Provision)*

*Supplement*

Crushed Surfacing Top Course for pipe zone bedding, pipe zone backfill, and trench backfill shall be paid by ticketed ton as tracked by delivery tickets provided to the onsite inspector at the time of delivery under the item "Crushed Surfacing Top Course".

### **7-09 WATER MAINS**

#### **7-09.2 Materials**

*(Special Provision)*

*Supplement*

Pipe and fittings larger than two (2) inches shall be of Ductile Iron construction, unless otherwise shown on the Plans. Only domestic made ductile iron and steel materials are allowed.

Ductile Iron Pipe Fittings shall be per Section 9-30.2(2).

Valves two (2) inches and larger shall be NRS resilient seat type gate valves meeting AWWA C509 or C550, unless otherwise shown on the Plans or details.

Aggregates for foundation material, pipe zone bedding, pipe zone backfill, and trench backfill shall meet the requirements of Section 9-03.9(3) Crushed Surfacing.

Replace the first sentence of the second paragraph with the following:

If requested by the Owner, the pipe manufacturer shall test all pipe and fittings as required by these Standard Specifications and the standards referenced.

### **7-09.3(7) Trench Excavation**

*(Special Provision)*

*Supplement*

Trench excavation, pipe bedding, and pipe backfill shall be considered **incidental** to and included in the unit contract price for pipe. Trench shall be excavated to a sufficient width to allow for pipe installation, compaction equipment, and shoring when necessary. Pay width shall be as shown on the City Standard Detail. No additional payment will be made for excavation and backfill of additional trench widths beyond the maximum trench width (nor for related quantities such as bedding, paving, imported backfill, rock excavation, etc.) unless extra trench width has been specifically directed by the City Inspector.

Contractor shall pothole ahead of pipe-laying a sufficient distance for utility crossings and where noted on the plans to provide sufficient distance to make vertical adjustments as necessary to avoid existing utilities. Should the Contractor fail to pothole known utility crossings, any subsequent adjustments necessary shall not be cause for additional cost or time claim. Potholing shall be performed in accordance with Section 8-05.3 herein.

### **7-09.3(19) Connections**

#### **7-09.3(19)A Connection to Existing Mains**

*(Special Provision)*

*Supplement*

No shut down of water mains will be permitted on Mondays, Fridays, overnight, over weekends, holidays, or the day before or after holidays, unless otherwise authorized by the Engineer.

The Contractor shall pre-dig all connections to verify existing pipeline material, size, outside diameter, and location prior to starting connections to the existing water system. All materials and equipment (including emergency equipment) necessary to expedite the tie-in shall be on hand prior to the shutdown of existing water service or main.

The Contractor shall replace at his expense any and all existing utilities or structures removed or damaged during construction which were to remain.

Connections to the existing mains may be made by wet-tapping the main.

#### **7-09.3(19)B Maintaining Service**

*(Special Provision)*

*Supplement*

The Contractor shall schedule, cause, and control all work which requires shutdown of the existing water system and services to be performed and completed so that the shutdown is no



longer than six (6) hours in duration. Whenever a shutdown exceeds six (6) hours in duration the Contractor shall provide temporary service. Water main shutdowns shall be scheduled from 9:00 am to 3:00 pm.

Shutdown of existing water lines will be performed only by the City and upon request to the Engineer. Shutdown of service shall be planned in detail with appropriate scheduling of the work and coordination with the Engineer. Water main shut downs shall be scheduled with the City of Mercer Island Water Utility crews at least three weeks in advance of the date of shutdown.

Individual water service users shall be notified one (1) week in advance of their service shutoff through door hangers, postcards, or personal contact.

### **7-09.3(24) Flushing**

*(Special Provision)*

*Revised Section*

The last paragraph is changed to be as follows:

The Contractor shall secure a hydrant meter with approved backflow device from the City for obtaining water from the existing system during construction. A deposit of \$2,900 is required for the meter. All water used during construction must be obtained through the hydrant meter and backflow device. The hydrant meter and backflow device must be returned to the City at the end of the Project, after which the City will invoice the Contractor for water usage. Upon payment of the water charges, and after confirmation of no damage to the assembly, the City will return the full deposit to the Contractor. Prior to placing new water main connections into service, the installed pipes shall be disinfected and flushed with City of Mercer Island water. A satisfactory test result shall be received by the City for the water samples collected after the flushing before the new main is allowed to be connected for service.

Disposal shall be to the sanitary sewer system at a rate of discharge approved by the Engineer. Precautions shall be taken to avoid back siphonage and/or contamination of the water system (maintain an air-gap between all water discharging to the sewer system). Coordinate with the City Inspector two (2) weeks in advance of flushing to monitor downstream sewer station.

### **7-09.3(24)D Dry Calcium Hypochlorite**

*(Special Provision)*

*Revised Section*

"70%" is changed to "75%".

### **7-09.3(24)N Final Flushing and Testing**

*(Special Provision)*

*Supplement*

The following is added:

Ductile iron water pipe and fittings will not be accepted until the water in the pipe during acceptance tests remains free of deleterious tastes and odors. The Contractor shall, at his own expense, provide all necessary labor, equipment, and water for cleaning and flushing until pipe and fittings are acceptable. The Contractor shall, at his own expense, handle and dispose of flushing water in accordance with current regulations in a manner acceptable to the Engineer. Disposal of chlorinated water shall be to the

sanitary sewer system at a rate of discharge approved by the Engineer. Precautions shall be taken to avoid back siphonage and/or contamination of the water system (maintain an air-gap between all water discharging to the sewer system). All flushing shall be discharged into the Sanitary Sewer.

### **7-09.3(25) Plugging Existing Pipe**

*(Special Provision)*

*New Section*

All openings of water lines to be abandoned in place and plugged shall be plugged, capped, and/or flanged with a mechanical watertight ductile iron or steel plug, cap, or flange. Concrete for plugging pipes shall be Commercial Concrete conforming to Section 6-02 Concrete Structures, and in accordance to the Standard Specifications Section 7-08.3(4).

### **7-09.4 Measurement**

*(Special Provision)*

*Supplement*

Measurement for Ductile Iron Pipe for Watermain, 12 In. Diam. shall be per linear foot of watermain pipe completely installed in place and accepted by the Engineer.

Measurement for 2 In. Blowoff Assembly shall be per each assembly installed completely in place.

### **7-09.5 Payment**

*(Special Provision)*

*Supplement*

The requirements of Section 2-03.14(E) of the Special Provisions shall apply to unsuitable base materials.

Payment will be made for the following bid item(s):

<b>Ductile Iron Pipe for Watermain, 12 In. Diam.</b>	<b>Per Linear Foot</b>
<b>2 In. Blowoff Assembly</b>	<b>Per Each</b>

The unit contract price per linear foot for "Ductile Iron Pipe for Watermain 12 In. Diam.", shall be full pay for all work to complete the installation of the water main including but not limited to saw cutting, removal of existing improvements regardless of material, structure excavation Class B including haul and disposal, placement and compaction of pipe zone bedding and trench backfill, supply and installation of all pipe, restraint and fittings, bends, blocking, tracer tape and toning wire, testing, disinfecting the pipe line, and flushing.

The unit contract price for "2 In. Blowoff Assembly" shall be full pay for all work to complete the installation of the blowoff assembly per the detail in the Plans including but not limited to saw cutting, excavating, backfilling, laying and jointing pipe, tapping the main, corporation stop, pipe and fittings, gate valve, valve boxes, brass plugs, cover and cleanup.

**7-12 VALVES FOR WATER MAINS****7-12.1 Description***(Special Provision)**Supplement***Adjusting Water Valves to Grade**

Existing and new water valve boxes shall be adjusted to finished grade per the requirements of Adjusting Manholes and Catch Basins to Grade per 7-05.3(1) herein.

**7-12.2 Materials***(Special Provision)**Supplement*

New Water valve boxes (when needed to replace existing boxes) will be furnished to the Contractor by the City and will be available for pickup at the City Maintenance Shop.

**7-12.5 Payment***(Special Provision)**Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Adjust Water Valve Box	Per Each
------------------------	----------

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions. Payment will only be made once per valve box upon adjustment to finished grade. Interim adjustments, if required, shall be included in the unit price bid for 'Adjust Water Valve Box'.

**7-15 SERVICE CONNECTIONS****7-15.1 General***(Special Provision)**Supplement*

This work consists of adjusting water meter boxes to the back of sidewalk, reconnecting water service connections, installing new boxes all as shown on the Plans. If water meters are to be replaced, they will be provided by the City to the Contractor unless otherwise noted on the plans. Water meter boxes are to be provided by the City unless the existing box is in adequate condition to remain as determined by the Engineer.

**7-12.2 Materials***(Special Provision)**Supplement*

New Water Meter boxes (when needed to replace existing boxes) will be furnished to the Contractor by the City and will be available for pickup at the City Maintenance Shop.

**7-12.5 Payment***(Special Provision)**Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Adjust Water Meter Box	Per Each
------------------------	----------

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions. Payment will only be made once per meter box upon adjustment to finished grade. Interim adjustments, if required, shall be included in the unit price bid for 'Adjust Water Meter Box'.

**END OF DIVISION 7**

## DIVISION 8: MISCELLANEOUS CONSTRUCTION

### 8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

#### 8-01.1 Description

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

The Stormwater Pollution Prevention Plan (SWPPP) shall consist of the Contractor's complete requirement to comply with Section 8-01.3(1) of the Standard Specifications and these Special Provisions. The SWPPP shall update and modify as necessary the Site Preparation and Erosion Control Plan drawings provided as part of the Contract Plans to reflect the Contractor's actual sequence of work and BMP's to be utilized. The Contractor shall prepare, review, and modify the SWPPP as necessary to be consistent with the actual work schedule, sequencing, and construction methods that will be used on the project. The Contractor's SWPPP shall also incorporate the content and requirements for the Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with Section 1-07.15(1).

#### Water

The Contractor shall make, at the Contractor's expense, whatever arrangements may be necessary to ensure an adequate supply of water required for erosion control. The Contractor shall also furnish all necessary hose, equipment, attachments and accessories for the adequate irrigation of planted areas to be maintained through the one-year warranty period and as may be required to complete the work as specified. All costs shall be incidental to and included in the bid items involved and no additional compensation shall be made.

#### 8-01.2 Materials

*(Special Provision)*

*Supplement*

#### High Visibility Fence

High visibility fence shall be composed of orange high-density polyethylene material and shall be at least four feet in height. Posts for the fencing shall be steel or wood and shall be placed at six-foot centers or as needed to provide rigidity. The fencing shall be attached to the post every six inches with a polyethylene tie. Fencing shall not be fastened to trees. High visibility fence shall not be measured separately for payment and shall be considered incidental to the lump sum bid item "Erosion Control / Water Pollution Prevention."

#### 8-01.3 Construction Requirements

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

*This section is supplemented with the following new subsection:*

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

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

### **General**

The Contractor shall develop a new site specific TESC Plan with catch basin inserts and silt fences placed as shown in the Plans. Contractor TESC Plans shall include all high visibility fence delineation shown on the Contracting Agency Contract Plans. All TESC Plans shall meet the requirements of the current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adaptively managed as needed throughout construction. The Contractor shall develop a schedule for implementation of the TESC work and incorporate it into the Contractor's progress schedule.

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

The Contractor shall provide a Construction Stormwater Pollution Prevention Plan (SWPPP) to the Engineer for review, which will include the SPCC Plan and implementation and maintenance of all approved Best Management Practices (BMPs) throughout the duration of the project.

### **8-01.3(1)A General**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

The Contractor shall install and maintain all temporary erosion control measures and Best Management Practices (BMP's) in accordance with the Contract Provisions. Erosion and sedimentation control measures and BMP's shall comply with the King County Storm Water Management Manual.

When construction operations are such that debris from the work is deposited on the streets or sidewalks, the Contractor shall remove on a daily basis, any deposits or debris which may accumulate on these surfaces. Should daily removal be insufficient to keep the streets clean, the Contractor shall perform removal operations on a more frequent basis. If the Contractor fails to keep the streets free from deposits and debris resulting from the work, the Contractor shall, upon order of the Engineer, provide facilities for and remove all deposits from trucks or other equipment prior to travel over paved streets.

All fines for non-compliance with applicable stormwater-related permits shall be the sole responsibility of the Contractor. No payment will be made to the Contractor for fines resulting from permit violations.

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

*(Special Provision)*

*Replace*

*Delete the second and third paragraphs and replace with the following:*

The ESC Lead is responsible for ensuring the Contractor's compliance with all local, state, federal erosion and sediment control and water quality requirements. The ESC Lead shall

prepare, maintain, and update the Stormwater Pollution Prevention Plan (SWPPP) and Spill Prevention and Countermeasures (SPCC) plan file on-site.

The ESC Lead shall implement the Construction SWPPP. Implementation shall include but is not limited to following:

1. Maintain an on-site SWPPP that reflects current site conditions and work methods. Provide weekly updates to the Project Engineer. The SWPPP shall be updated within seven (7) days of the following occurrences:
  - a. Significant changes in the design, construction, operation, or maintenance at the construction site that have, or could have, a significant effect on the discharge of pollutants to waters of the state.
  - b. Inspections or investigations by site staff or local or state officials determine that the SWPPP is ineffective in controlling pollutants such that applicable discharge or surface water standards violations are apparent.
2. Identify arising needs for adaptive management and/or BMPs which were not originally identified in the SWPPP. Coordinate all proposed SWPPP activities with the Project Engineer.
3. Attend all weekly construction meetings and provide an update on current and planned SWPPP activities.
4. Ensure that all necessary Best Management Practices (BMP) are identified, implemented and maintained throughout construction.
5. Oversee the installation and maintenance of all BMP's to ensure continued performance of their intended function. Damaged or inadequate BMP's shall be corrected immediately through coordination with the Engineer.
6. The ESC Lead shall have the authority to act on behalf of the Contractor and shall be available, on-call, 24 hours a day throughout the project duration.

#### **8-01.4 Measurement**

*(Special Provision)*

*Supplement*

No specific unit of measurement shall apply to the lump sum item "Stormwater Pollution Prevention Plan (SWPPP, SPCC)."

No unit of measurement shall apply to the lump sum bid item "Erosion Control / Water Pollution Prevention", per lump sum.

#### **8-01.5 Payment**

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1 for the following bid item(s):

<b>Stormwater Pollution Prevention Plan (SWPPP, SPCC)</b>	<b>Lump Sum</b>
<b>Erosion Control / Water Pollution Prevention</b>	<b>Lump Sum</b>

The lump sum contract price for the “Erosion Control and Water Pollution Prevention” shall be full pay for all costs associated with complying with these Special Provisions and the Standard Specifications; including creating, submitting, modifying and maintaining a SPCC Plan and the SWPPP; design and submittal of erosion and sediment control BMPs including providing, maintaining on site the standby equipment and materials to comply with current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109 and Washington Administrative Code (WAC) Chapter 173-201A; providing an ECS lead and all stormwater monitoring and reporting, and other specified SWPPP requirements.

## **8-02 ROADSIDE RESTORATION**

### **8-02.1 Description**

*(Special Provision)*

*Supplement*

This section is supplemented with the following:

This section also includes further items in Property Restoration as defined in Section 1-07.16. All existing structures outside of the back of walk limits requiring adjustments shall be addressed under this section.

### **8-02.2 Materials**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

Materials shall also meet the requirements of the following sections of these Special Provisions:

Topsoil Type A	9-14.2(1)
Seed	9-14.3
Arborist Mulch	9-14.5(3)A (New Section)

### **8-02.3(1) Responsibility During Construction**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

Throughout planting operations, the Contractor shall keep the premises clean, free of excess soils, plants, and other materials, including refuse and debris, resulting from his work. As pedestrians will be allowed continuous access the Contractor shall not stockpile materials or park equipment in any manner that may create a hazard and/or obstacles to pedestrians.

The Contractor shall be responsible for care and protection of all plant material temporarily stored on site prior to planting per Section 9-14.7(3).



At the end of each work day, and as each planting area is completed, it shall be neatly dressed, and all surrounding walks and paved areas shall be cleaned to the satisfaction of the Engineer. No flushing will be allowed without approval of the Engineer. At the conclusion of work, the Contractor shall remove surplus soils, materials, and debris from the construction site and shall leave project in a clean condition.

Landscape construction is anticipated to begin after all curbs, sidewalks, driveways, major utilities and associated roadside work is completed. Landscape materials shall not be installed until weather permits and installation has been authorized by the Engineer. If water restrictions are in force, planting landscape materials may be delayed.

The Contractor shall locate all underground utilities (both new and existing) prior to starting work and shall not disturb or damage them. Promptly notify the Engineer of any conflict between the proposed work and any obstructions. The Contractor shall be responsible for making any and all repairs for damage caused by his or her activities.

#### **8-02.3(2)A Roadside Work Plan**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

The Work Plan shall be submitted to the Engineer at least one week prior to initiating proposed work. The use of chemical herbicides shall be considered on a case-by-case basis. The Contractor must submit, as part of the Work Plan, the intent to use chemical herbicides to the Engineer for approval prior to use.

#### **8-02.3(3)A Chemical Pesticides**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

No chemical herbicides will be allowed in planting areas without approval from the Engineer.

#### **8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

The costs of removing all excess material and debris shall be considered incidental to and included in the unit contract prices of other items in this contract, including any additional excavation and replacement of material to install root control fabric.

All costs and expense incurred in performing the specified work shall be considered incidental to other bid items.

#### **8-02.3(11)B Bark or Wood Chip Mulch**

*(Special Provision)*

*Supplement*

*This section is supplemented with the following:*

Arborists Mulch shall be placed over all planting beds as noted on plans to the depth noted on the Plans. After mulch application, wash plant leaves with a fine spray.

Arborist Mulch shall conform to Section 9-14.5(3) of these Special Provisions and shall be supplied by a Contractor's supplied source, and as approved by the Engineer.

### **8-02.3(17) Property Restoration**

*(Special Provision)*

*New Section*

*This section is supplemented with the following:*

Restore all disturbed areas to match original/existing conditions or better. Grass areas shall be restored with hydroseed where directed.

The Contractor is specifically reminded that any unnecessary damage caused by construction activities will be repaired at the Contractor's expense.

Topsoil shall be Type A and Bark Mulch shall be Arborists Mulch, per these special provisions.

Property Restoration	Per Force Account
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*"Property Restoration"*, when approved by Engineer, will be paid by force account per Section 1-09.6 of the Standard Specifications and these Special Provisions, and will be full compensation to relocate, replace, or modify existing private improvements or landscaping where required as a condition of an easement or permit, or where impact resulting from construction activities is determined by Engineer, prior to the impact occurring, to be unavoidable, and authorized to be paid under this force account item. Payment for restoration of landscape areas as noted on the plans, under this force account, shall only include plant material, procurement and installation as directed by the Engineer.

All topsoil, mulch and seeded areas in restoration areas shall be paid for under *"Property Restoration"*.

Removal and reinstallation of the existing door threshold shall be paid for under *"Property Restoration"*.

The force account provided for *"Property Restoration"* also includes any adjustments and or replacements of existing irrigation systems. This work shall also consist of modifying existing landscape lighting systems as may become necessary by these improvements.

The Contractor is advised that protecting existing private irrigation and lighting systems from damage does not constitute a basis for claim or extra work. *"Property Restoration"* has been provided as a basis for modifications or improvements to private lighting systems and irrigation systems that may become necessary, but could not be foreseen prior to construction.

## 8-04 CURBS, GUTTERS, AND SPILLWAYS

### 8-04.1 Description

*(Special Provision)*

*Supplement*

All cement concrete curbing shall be constructed per WSDOT Standard Plans in Appendix B and per 8-04 of the Standard Specifications.

Depressed curb and gutter at driveway entrances and curb ramp opening shall be included in this section and paid as "Cement Concrete Curb and Gutter Type A"

If depressed curb and gutter sections are poured concurrently with the adjacent driveway approaches, these sections of curb and gutter shall be included in the measurement and payment section for "Cement Conc. Driveway Entrance" and **NOT** under any other bid item.

Cement Concrete Extruded Curb Type 6 shall be installed per the details on the Plans and in Appendix B.

### 8-04.2 Materials

*(Special Provision)*

*Supplement*

Commercial concrete for integral curb & traffic curb & gutter will not be allowed.

### 8-04.3 Construction Requirements

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

*(Special Provision)*

*Supplement*

Cement concrete traffic curb & gutter shall be constructed with Class 4000 and meet 9-01.2(1) Portland Cement of the Standard Specifications.

**Cement Conc. Traffic Curb and Gutter SHALL NOT be constructed with slip-form equipment.**

**Cement Conc. Traffic Curb SHALL NOT be constructed with slip-form equipment.**

#### 8-04.3(6) Adjustment of Curbs and Gutters

*(Special Provision)*

*New Section*

The Contractor shall allow for inspection of curb forms or string lines at least 24 hours ahead of concrete delivery. Upon the direction of the Engineer, string lines or curb forms shall be adjusted a minor amount not to exceed 6" at the discretion of the engineer.

The Contractor's progress schedule shall include the 24 hour inspection time and adjustments to the lines and grades shall constitute no basis for claims of delay.

### 8-04.5 Payment

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1 for each of the following Bid Items that are included in the Proposal:

<b>Cement Concrete Traffic Curb and Gutter</b>	<b>Per Linear Foot</b>
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<b>Cement Concrete Traffic Curb</b>	<b>Per Linear Foot</b>
<b>Cement Concrete Extruded Curb Type 6</b>	<b>Per Linear Foot</b>

The unit bid price above, including all incidental work, shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Plans, the Standard Specifications, and these Special Provisions.

## **8-09 RAISED PAVEMENT MARKING**

### **8-09.3 Construction Requirements**

*(Special Provision)*

*Supplement*

Color Blue Type 2 Raised Pavement Markers shall be installed at fire hydrant locations one foot off the center line to the side of the hydrant and shall be paid under the bid item "Raised Pavement Markings Type 2".

### **8-09.4 Measurement**

*(Special Provision)*

*Supplement*

Measurement of Raised Pavement Markers, Type 1 and Type 2, will be per each for the type of marker furnished and installed.

### **8-09.5 Payment**

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Raised Pavement Marker Type 1</b>	<b>Per Each</b>
<b>Raised Pavement Marker Type 2</b>	<b>Per Each</b>

The contract bid prices above, including all incidental work, shall be full compensation for all labor, materials, tools, and equipment necessary, to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

## **8-13 MONUMENT CASES**

### **8-13.1 Description**

*(Special Provision)*

*Supplement*

Work shall also consist of adjusting monument cases to finished grade. Monument cases shall be adjusted in the same manner as manholes per Section 7-05.3(1) *Adjusting Manholes and Catch Basins to Grade* of the Standard Specifications. When adjusting monument case care shall be taken to not disturb the survey monument.

**8-13.5 Payment***(Special Provision)**Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Monument Adjustment, Case and Cover</b>	<b>Per Each</b>
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The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work and as defined in the Standard Specifications and these Special Provisions.

**8-14 CEMENT CONCRETE SIDEWALKS****8-14.1 Description***(Special Provision)**Supplement*

This work shall consist of construction and installation scored cement concrete sidewalks, cement concrete sidewalk, detectable warning surfaces, and cement concrete for medians with a decorative stamped cement concrete finish.

Cement Concrete sidewalk shall consist of cement concrete sidewalk that is finished per the standard specifications, regardless of location, and includes the crosswalk landings at the intersection.

Scored Cement Concrete Sidewalk shall consist of all sidewalk that is saw cut to match the adjacent town center scoring pattern.

Decorative stamped cement concrete finish shall consist of stamped concrete with a decorative finish with a color hardener, antique release agent and clear sealer (with additive) as specified in these Special Provisions.

**8-14.2 Materials***(Special Provision)**Supplement*

Commercial concrete for sidewalk will not be allowed.

**8-14.3 Construction Requirements***(Special Provision)**Supplement***Decorative Stamped Cement Concrete Finish**

Stamped Concrete Finish shall be installed on Cement Concrete island behind curbs with an imprinted finish with colored concrete mix poured from mixer truck. The concrete mix shall be color "Brick Red" with Cadman's product code of 79044, or approved equal. Stamped Concrete shall be finished with an imprint concrete stamp, polymer mat. Imprinted concrete pattern shall made from interlocking stamp patterns. The surface texture is that of new, unused brick, 3-5/8" wide by 7-5/8" long, edges are straight and corners are square, laid in a perpendicular pattern. Imprinted inside joints have appearance of raked, rough, sandy grout joint, 3/8" wide. Pattern shall be laid in a 90 degree angle to the corner radius.

**Scored Cement Concrete Sidewalk**

Cement concrete sidewalk shall be scored by saw cutting only in a 30" x 30" pattern matching the adjacent town center design.

#### **8-14.3(5) Detectable Warning Surface**

*(Special Provision)*

*New Section*

Detectable warning surface shall be furnished and installed on all crosswalk landings at the intersection and as shown in the Plans.

#### **8-14.3(7) Cement Concrete Curb Ramps and Landings**

*(Special Provision)*

*New Section*

Curb ramps and landings on this project may need to be modified from the standard details to fit the project conditions while meeting current ADA requirements.

Compliance with ADA Standards is taken very serious and minor modifications to the dimensions shown on the plans may be required to meet current standards. **Ramps poured which do not meet the current ADA standards shall be removed and replaced at the Contractors expense.**

Per the Standard Specifications, detectable warning surfaces shall be furnished and installed on each curb ramp landing.

Curb ramps shall be finished per the standard plans and specifications.

#### **8-14.4 Measurement**

*(Special Provision)*

*Supplement*

"Cement Concrete Sidewalk" shall be measured by the square yard of installed and accepted cement concrete sidewalk, regardless of thickness. This measurement shall also include the crosswalk landings at intersections.

"Cement Concrete Driveway Entrance" shall be measured by the square yard of installed and accepted cement concrete sidewalk, regardless of finish and thickness.

"Scored Cement Concrete Sidewalk" shall be measured by the square yard of installed and accepted cement concrete sidewalk, regardless of thickness.

"Decorative Stamped Cement Concrete Median" shall be measured by the square yard of installed and accepted cement concrete median, regardless of thickness.

"Detectable Warning Surface" shall be measured by the square foot of installed detectable warning surface.

No measurement will be made for Cement Concrete Pedestrian Curb as identified in the WSDOT Standard Plans, but will be considered included in the Curb Ramp Unit Bid Price.

#### **8-14.5 Payment**

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Decorative Stamped Cement Concrete Median</b>	<b>Per Square Yard</b>
<b>Scored Cement Concrete Sidewalk</b>	<b>Per Square Yard</b>
<b>Cement Concrete Sidewalk</b>	<b>Per Square Yard</b>
<b>Cement Concrete Driveway Entrance</b>	<b>Per Square Yard</b>
<b>Detectable Warning Surface</b>	<b>Per Square Foot</b>

The contract bid prices above, including all incidental work, shall be full compensation for all labor, materials, tools, and equipment necessary to complete the Work as defined in the Plans, the Standard Specifications, and these Special Provisions.

## **8-20 ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, INTELLIGENT TRANSPORTATION SYSTEMS, AND ELECTRICAL**

### **8-20.1 Description**

*(Special Provision)*

*Replacement*

The work associated with the Modifications to the Existing Illumination System and installation of a new Rectangular Rapid Flashing Beacon (RRFB) System (AC powered) consists of furnishing and installation of luminaires, foundations, junction boxes, conduit, conductors, inspections, testing and other incidental materials as may be required to complete construction of the systems listed below and comply with the Plans and these Specifications. The work includes the installation of City-furnished RRFB poles and pole attachments, including RRFB light bars, RRFB controller cabinets, pedestrian push button assemblies, signs, anchor bolts and pole bases as described in Section 8-20.2 Materials.

The work shall consist of, but not necessarily be limited to:

- Modifications to the Existing Illumination System at the intersection of 77<sup>th</sup> Ave SE & Sunset Way SE.
- Installation of a new Rectangular Rapid Flashing Beacon (RRFB) System at the intersection of 77<sup>th</sup> Ave SE & Sunset Way SE.

Unless otherwise noted, the locations of foundations, poles, junction boxes and appurtenances shown in the Plans are approximate. The locations will be verified by the Engineer in the field.

This Work also consists of constructing accessible pedestrian facilities in accordance with details shown in the Plans, Standard Plans, these Specifications, the 2005 PROWAG, and in conformity to lines and grades shown in the Plans or as established by the Engineer.

### **8-20.1(1) Regulations and Codes**

*(Special Provision)*

*Supplement*

The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to the performance of the Work, the protection of adjacent property, and the maintenance of all other facilities. The Contractor will be required to comply with all the provisions and shall save and hold the Contracting Agency harmless from any damage that may be incurred as a result of the Contractor's failure to comply with all the terms of these permits.

All materials and methods required under this section, unless otherwise superseded herein, shall conform to the 2022 edition of the Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction and Amendments (herein referred to as Standard Specifications), to all current amendments to the Standard Specifications, to the latest edition of the State of Washington Standard Plans for Road, Bridge, and Municipal Construction (herein referred to as the Standard Plans), to the State of Washington Sign Fabrication Manual, to the latest edition of the National Electrical Code (NEC), and to the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) as adopted by the State of Washington.

### **8-20.1(3) Permitting and Inspection**

*(Special Provision)*

*Supplement*

The Contractor shall be responsible for coordinating, obtaining, and paying for all electrical inspection and testing necessary to complete this work in a timely fashion.

The Electrical Inspector shall inspect and approve the electrical portions of the project. The Contractor shall notify the Electrical Inspector at least 24 hours in advance of required field inspection. All costs associated with electrical inspection shall be included in the applicable bid items for the work involved. Before work begins, the Contractor shall contact City of Mercer Island Electrical Inspectors to coordinate a schedule of electrical inspection (call the request line at 206-275-7605). This project shall be accomplished in compliance with WAC 296-46B-010 Traffic Management Systems. This project shall conform to the current adopted version of the NEC.

### **Coordination with Associated Representatives**

The Contractor shall contact following representatives for coordination with the below listed agencies:

For luminaire and RRFB final testing:

City Maintenance Representative:

Brian Hartvigson (206) 275-7809

### **8-20.1(4) Restrictions on the Schedule of Work**

*(Special Provision)*

*New Section*

#### **1. Work in Roadway.**

The roadway shall be kept open to traffic at all times, except when specific tasks required by this Contract require construction in the roadway. All work within the traveled way of any roadway shall be limited to the hours as specified in Section 1-08.0(2) of these Special Provisions. Work shall be accomplished such that at least one lane of traffic is open in each direction on every leg during working hours. Exceptions to this will require a 3-day advance approval from the Engineer and approval of a special traffic control plan to be developed by the Contractor.



**8-20.1(5) Errors and Omissions***(Special Provisions)**New Section*

The Contractor shall immediately notify the Engineer upon discovery of any errors or omissions in the Contract Documents, in the layout as given by survey points and instructions, or of any discrepancy between the Contract Documents and the physical conditions of the locality. If deemed necessary, the Engineer shall rectify the matter and advise the Contractor accordingly. Any work done after such discovery without authorization by the Engineer will be done at the Contractor's risk.

**8-20.2 Materials***(Special Provisions)**Supplement*

The Engineer reserves the right to inspect the manufacturing process of all materials. Final inspection and acceptance of the installed materials will not be given until final installation and testing has been completed on the systems. Approval to install materials and equipment must be obtained from the Engineer at the job site before installation.

All materials shall be handled in loading, unloading and erecting in such a manner that they will not be damaged. Any parts that are damaged due to the Contractor's operations shall be repaired or replaced at the Contractor's expense. All repairs shall be to the approval of the Engineer.

The Contractor shall provide all manufacturer warranty documents to the City of Mercer Island.

When submitting material lists for approval, the Contractor shall identify all revisions or changes to manufacturer names, component names, and model numbers listed in these Special Provisions. The Contractor shall also include a brief justification for the revision or change.

**Contracting Agency-Supplied Materials**

The City will supply the following materials:

<u>Description</u>	<u>Quantity</u>
RRFB control cabinet (SC315-G) AC, natural finish	6
RRFB lightbar with confirmation lights (includes universal mounting bracket), black	12
Harness, 16ft, terminal block to lightbar, RRFB, SC315, TPE	12
Pushbutton, Polara iNX audible, 9x12 sign & mount, black	6
Harness, 16ft, Polara iNX or Campbell Guardian button, G-series	6
Sign (crossing walking man) 36x36 fluorescent yellow 3M VIP series 3981 (W11-2) alum.	12
Sign (arrow) 24x12 DG-VIP series 3991 fluorescent yellow (W16-7PL) left down arrow.	4
Sign (arrow) 24x12 DG-VIP series 3991 fluorescent yellow (W16-7PR) right down arrow.	8
Sign (use caution when crossing) 12x12 white sign/black reflective letters.	6
Bundle – Pelco	6
Pole, spun aluminum, 4-1/2" Schedule 40 , 14' length	6
Pedestal base, aluminum, square, with aluminum door, no logo	6
Collar assembly, aluminum, for square base	6
Anchor bolt kit 3/4" #10, set of (4) galvanized	6
Pole cap dome, 4-1/2" OD aluminum	6

The Contractor shall notify the City, via the Engineer, ten working days in advance of the date Contracting Agency-supplied materials are required.

The materials will be available for pick up at the City of Mercer Island maintenance shop.

### **8-20.2(1) Equipment List and Drawings**

*(Special Provisions)*

*Supplement*

Manufacturer's technical information shall be submitted for all luminaires, junction boxes, conduit, wiring, and all other items to be furnished by the Contractor on the Project.

The Engineer shall have 14 calendar days to review information for each submittal that is made.

**Manufacturer's data for all materials proposed for use in the Contract which require approval, shall be submitted in one complete package.**

For each proposed material that is required to be submitted for approval using either the QPL or RAM process, the Contractor will be allowed to submit for approval three materials per material type at no cost. Additional materials may be submitted for approval and will be processed at a cost of \$100.00 per material submitted by QPL submittal and \$300.00 per material submitted by RAM. All costs for the processing of additional materials will be deducted from monies due or that may come due to the Contractor. Subject to a request by the Contractor and a determination by the Engineer, the costs for processing may be waived.

Any deficiencies will require additional time for approval based on the degree of the deficiency and the additional review time required. If the shop drawings are returned to the Contractor to correct deficiencies, an additional 10 calendar days may be required for the approval process.

All approvals by the Engineer must be received by the Contractor before material will be allowed on the job site.

Approval of shop drawings does not constitute final acceptance or guarantee of the material, but is solely to assist the Contractor in providing the specified materials.

### **8-20.3 Construction Requirements**

#### **8-20.3(1) General**

*(Special Provisions)*

*Supplement*

The Contractor shall follow specific requirements for electrical related work to be performed in the right-of-way as outlined in each applicable section of these Specifications.

All adjacent surfaces damaged by the Contractor's operations shall be repaired at the Contractor's expense.

All equipment shall be handled and protected so as to prevent damage. Damaged equipment, if any, shall be repaired or replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

No new foundations shall be constructed as part of this Contract that are in conflict with any existing utilities, or the code required thereby. It shall be the Contractor's responsibility to locate all utilities whether above, on, or below the ground, and to protect against any and all

damages arising from work under this project. At least 48 hours before digging, the Contractor shall call the Utilities Underground Locator Center (telephone 1-800-424-5555). Contractor must maintain locates during the duration of the project once they have been identified.

Underground utilities of record will be shown on the Plans insofar as information is available. These, however, are shown for convenience only and the City assumes no responsibility for improper locations or failure to show utility locations on the construction plans.

The Contractor shall be responsible, if any conflicts with existing underground utilities are expected, for potholing to confirm underground utility locations prior to excavating for pole foundations. Any conflicts shall be brought to the attention of the Engineer for resolution.

The Contractor shall be entirely responsible for coordination with the utility companies and arranging for the movement or adjustment, either temporary or permanent, of their facilities within the project limits.

If a conflict is identified, the Contractor shall contact the Engineer. The Contractor and City shall determine alternative locations for poles, vaults or junction boxes. The Contractor shall get approval from the Engineer prior to installation. The Contractor may consider changing depth or alignment of conduit to avoid utility conflicts.

Before beginning any excavation work for foundations, junction boxes or conduit runs, the Contractor shall confirm that the location proposed on the Contract Plans does not conflict with utility location markings placed on the surface by the various utility companies. If a conflict is identified, the following process shall be used to resolve the conflict:

1. Contact the Engineer and determine if there is an alternative location for the foundation, junction box or conduit trench.
2. If an adequate alternate location is not obvious for the underground work, select a location that may be acceptable and pothole to determine the exact location of other utilities. Potholing must be approved by the Engineer.
3. If an adequate alternate alignment still cannot be identified following potholing operations, the pothole area should be restored and work in the area should stop until a new design can be developed.

The Contractor shall not attempt to adjust the location of an existing utility unless specifically agreed to by the utility owner and approved by the Engineer. Work associated with resolution of utility conflicts shall be paid per Section 8-33 of these Special Provisions.

The Contractor is advised that safe wiring labels required by the State of Washington Department of Labor and Industries shall apply on this project.

### **8-20.3(2) Excavating and Backfilling**

*(Special Provisions)*

*Supplement*

Backfill for all trenches may consist of select native backfill from the excavation providing that such material is free of organic material, clay, or other deleterious material. If sufficient material from the excavation is not available, as determined by the Engineer, the Contractor

shall furnish and install bank run gravel for trench backfill meeting the requirements of Section 9-03.19 of the Standard Specifications.

The Contractor warrants and represents awareness of the statutory provisions contained in RCW 19.122.010 through .900 that the Contractor has read and fully understands the same, and will comply with the requirements of these provisions which are incorporated by reference herein. The Contractor agrees that all trenching as well as excavating for all pole foundations shall be an "excavation" as defined under RCW Chapter 19.122 and that such utilities constitute underground facilities. The parties agree that remedies affected under RCW Chapter 19.122 are also incorporated by reference herein. Any cost to the Contractor as a result of this law shall be at the Contractor's expense.

### **8-20.3(2)A Trench and Backfill**

*(Special Provisions)*

*New Section*

The Contractor shall provide trenching as specified herein, regardless of the material encountered, as necessary for complete and proper installation of electrical conduit. Trenching shall conform to the following:

#### **A. Uniform Construction**

Trenching for conduit runs shall be done in a neat manner, and the trench bottom shall be graded to provide a uniform grade, with a width and depth as specified herein. All trenches for placement of conduit shall be straight and as narrow in width as practical to provide a minimum of pavement disturbance.

#### **B. Trench Inspection**

No work shall be covered until it has been examined by the Engineer. Earth which fills around and over the conduit shall be free of rocks greater than 2 inches up to a depth of 6 inches. When trenching is being accomplished within the sidewalk area, the backfill can be made with acceptable materials from the excavation and shall be considered a necessary part of, and incidental to, the excavation in accordance with the Standard Specifications. Hauling and disposal of un-used excavation material shall be incidental to the cost of trenching or excavating. The compaction requirements for the roadway backfill shall apply.

#### **C. Saw Cut for Trench**

Trenches in all paved areas shall be saw cut. The saw cuts shall be a minimum of 2-inches deep and shall be parallel. Thoroughly clean saw cuts where necessary by the use of high pressure water (1,400 psi or greater). All wastewater shall be collected and disposed of in accordance with Section 1-07.15 of these Special Provisions. Impervious surfaces contaminated from cutting operations shall be cleaned in accordance with Section 1-07.15 of these Special Provisions.

#### **D. Pavement Removal**

Pavement shall be removed in a manner approved by the Engineer. The Contractor shall take care in removing existing paving not to damage the pavement outside of the saw cut lines.

#### **E. Trench Depth**

Trench depth shall be in accordance with Section 8-20.3(5)D of the Standard Specifications, unless agreed to otherwise by the Engineer.

**F. Trench Width**

Trench width shall be in accordance with Section 8-20.3(5)E1 of the Standard Specifications, unless agreed to otherwise by the Engineer.

**G. Trenching in Landscaped Areas**

Trenches shall be placed to have minimum impact on existing landscaping and irrigation systems. Any damage due to the Contractor's operation shall be repaired or replaced by the Contractor at his own expense and to the satisfaction of the Engineer.

**H. Trenching Through Concrete Sidewalk Areas**

Trenching in these areas shall require removal and replacement of the concrete to the limits of the existing sidewalk joints. The costs for removal and replacement shall be incidental to the trenching.

**8-20.3(4) Foundations**

*(Special Provision)*

*Supplement*

The Contractor shall provide all materials for and construct the foundations for RRFB and Pedestrian Push Button poles to the dimensions specified in the Contract Plans.

Location of all concrete foundations shall be potholed and approved by the City Engineer prior to excavation.

Concrete foundations shall be placed against undisturbed earth if possible. CDF shall be used to backfill around pole foundations that are not placed against undisturbed earth. Before placing the concrete, the Contractor shall block out around any other underground utilities that lie in the excavated base so that the concrete will not adhere to the utility line. The Contractor shall secure the anchor bolts required for the item to be mounted on the foundation. Concrete foundations shall be troweled, brushed, edged, and finished in a workmanship-like manner. Concrete shall be promptly cleaned from the exposed portion of the anchor bolts and conduit after placement. Concrete and steel rebar shall be furnished and placed as shown in the Contract Plans.

All excess materials shall be removed from the construction site and disposed of at the Contractor's expense.

After a curing period of 7 days, the Contractor may install the RRFB poles on the new foundations.

**8-20.3(5) Conduit****8-20.3(5)A General**

*(Special Provision)*

*Supplement*

The conduit runs shown on the Plans are schematic; exact alignment shall be approved by the Engineer prior to excavation. All conduits shall be installed within the City or WSDOT right-of-way. Runs may be revised, as directed by the Engineer, to allow for unforeseen conflicts or easements.

All covered underground conduit shall be capped during construction using manufactured seals to prevent entrance of water and debris. Prior to pulling wire, all conduits shall be cleaned with an approved sized mandrel and blown out with compressed air.

When conduit or casing is to be placed under pavement it shall be placed prior to the placement of a sub-base, base, surfacing, and pavement.

Spare conduit shall contain detectable pull tape and shall be labeled City of Mercer Island.

Where sidewalk panels need to be removed for the installation of conduit or junction boxes, the Contractor is responsible for restoring the area near the back of sidewalk as needed to repair damage from sidewalk panel formwork.

Where intercepting and splicing to an existing conduit is called out on the Plans, the Contractor shall verify the conduit size and schedule before ordering the new conduit sections. The size provided on the Plans is an estimation.

The Electrical Inspector shall be notified 48 hours prior to commencing boring operations and shall be present during the boring operations.

### **8-20.3(5)A3 Damaged or Blocked Conduits**

*(Special Provision)*

*New Section*

Damaged or blocked conduits and stubouts shall be repaired by the Contractor. The Contractor shall attempt to remove debris in the conduit by blowing in air. The Contractor shall be careful not to blow air towards the service or controller cabinet. If the blockage doesn't break free, the Contractor shall identify the potential blocked/damaged location using a fish tape. Once the blockage location is identified, the Contractor shall attempt to remove the existing cabling (if any) from the conduit. If the cabling is removed, the Contractor shall attempt to pass a fish tape through the conduit again. If the fish tape passes through the conduit past the identified blockage point easily, the Contractor shall attempt to reinstall all existing cabling along with the new cabling called out in the Contract Plans.

If the existing cabling cannot be removed, or reinstalled after removal, the Contractor shall excavate down to the conduit blockage point and repair the conduit break. The Contractor shall obtain approval from the Engineer prior to removing existing cabling or beginning excavation. All cabling shall be removed from the conduit prior to repairing the broken conduit. Once the conduit is repaired, the Contractor shall restore the disturbed area. The removal of cable, excavation, conduit repair, and surface restoration will be paid for by change order or Minor Change as determined by the Engineer. The cost for other work needed to identify and remedy blocked conduits as described in this Section shall be incidental.

### **8-20.3(6) Junction Boxes, Cable Vaults, and Pull boxes**

*(Special Provision)*

*Supplement*

The Contractor shall supply all junction boxes. Junction boxes shall conform to the requirements of the following:

Junction box Type 1 and Type 2: Standard Plan J-40.10

The locations of the junction boxes as shown on the Plans are approximate and the exact locations shall be determined in the field by the Engineer. The new junction boxes shall not interfere with any other previous or relocated installation. Junction boxes shall be located outside the traveled way, wheelchair ramps and landings, construction joints and driveways.

If the junction boxes are placed in the pedestrian pathway, they shall have slip resistant lids and shall not be placed closer than 12 inches from the edge of any sidewalk or sidewalk joint. Pre-molded joint filler for expansion joints shall be placed around junction boxes installed in sidewalks. All junction box lids shall be set flush with the finished grade.

Prior to the use of any existing junction box, the Contractor shall verify that sufficient bending radius, as defined by the Code, is available both approaching and within the box for the cable being installed. If such is not the case, the Contractor shall notify the Engineer, who shall be the sole judge of whether new conduit bends or a new junction box shall be installed.

When using an existing junction box, the Contractor shall modify the junction box such that it will be bonded to the grounding system. All junction box lids shall be grounded in a manner that will allow removal of the lid without breaking the ground.

Existing junction boxes shall either be replaced or raised to match the new elevation of the sidewalk or shoulder. Wiring shall be replaced if sufficient slack as specified in Section 8-20.3(8) is not maintained. The six-inch gravel pad required in Standard Plans J-40.10 shall be maintained. When existing junction boxes do not have this gravel pad, it shall be installed as part of the adjustment to finished grade.

When junction boxes are installed or adjusted prior to construction of finished grade, pre-molded joint filler for expansion joints may be placed around the junction boxes. The joint filler shall be removed prior to adjustment to finished grade.

The Contractor shall not damage any existing conduits when replacing or excavating existing junction boxes. The Contractor is to maintain the integrity of all junction boxes during reconfiguration of the conduits, installation of new conduits or when excavating.

Wiring shall not be pulled into any conduit until all associated junction boxes have been adjusted to or installed in their final grade and location, unless installation is necessary to maintain system operation. If wire is installed for this reason, sufficient slack shall be left to allow for final adjustment.

### **8-20.3(8) Wiring**

*(Special Provision)*

*Supplement*

All wire splices shall be made in the presence of the Engineer.

For installing new cables in existing occupied or empty conduit, the Contractor shall be responsible for the following steps: 1) Install a new pull rope using a rod/fish tape in the conduit for pulling in the new cabling if a pull rope does not already exist. 2) If the Contractor cannot get the rod/fish tape to pass through the conduit, the Contractor shall blow air through the conduit to remove any debris blocking the rod/fish tape path. The Contractor shall be careful not to blow air into controller or service cabinets. 3) If the rod/fish tape still does not pass through the conduit after blowing air, the Contractor shall disconnect a single existing wire as agreed to by the Engineer (if the conduit is occupied) and use that wire to pull the new wiring plus a new cable to replace the existing cable that is being used for pulling. 4) If no existing wire can be used to pull in the new wire, the Contractor shall try another conduit run if one exists, or pull out all existing wiring from the conduit and use to pull in the new wiring plus all new cabling to replace existing cabling. Rodding, fish taping, blowing air, and disconnecting/ reconnecting cable shall be the Contractor's cost responsibility. In an event that none of these steps led to successful wire installation, the Contractor shall install new conduit as directed by the Engineer.

When removing existing cabling, if the cable won't initially move, the Contractor shall attempt to blow air through the conduit to loosen debris around the cable. Blowing air into the conduit is considered incidental to the cable removal. If the cable will not move after blowing air into the conduit, the Contractor shall contact the Engineer.

**8-20.3(9) Bonding, Grounding***(Special Provision)**Supplement*

Supplemental grounding shall be provided for RRFB poles. Foundations for these poles shall be installed with a bare 4 AWG copper wire, which is connected to the reinforcing cage with an approved acorn clamp or exothermic weld and routed to connect to the pole at the grounding lug.

Contractor shall provide and install bonding and grounding wires as described in Standard Specifications and the National Electric Code for any new metallic junction boxes and any modified existing junction boxes. For the purposes of this section, a box shall be considered "modified" if new current-carrying conductors are installed or modified, including low-voltage conductors.

At points where shields of shielded conductors are grounded, the shields shall be neatly wired and terminated on suitable grounding lugs.

Junction box lids and frames shall be grounded in accordance with Department of Labor and Industries standards, and shall be grounded so that the ground will not break when the lid is removed and laid on the ground next to the junction box.

Location wires shall not be connected to the equipment-grounding system.

**8-20.3(11) Testing***(Special Provision)**Supplement*

All work shall be completed in a manner that provides the Inspector and Engineer with full knowledge of the construction. The work shall proceed in accordance with the approved construction schedule previously supplied to and approved by the Engineer. The Inspector and Engineer may, at their option, require work completed without their knowledge or inspection to be dismantled so that it can be inspected to their satisfaction.

**8-20.3(14)F Rectangular Rapid Flashing Beacon (RRFB) Assembly***(Special Provision)**New*

The Contractor shall install new RRFB assemblies and all associated equipment.

The positions of pedestrian push buttons shall be located generally so that each points at the crosswalk which the button is intended to serve. However, final positioning for the optimum effectiveness shall be approved by the City Engineer.

**8-20.3(17) "As-Built" Plans***(Special Provision)**Supplement*

Upon completion of the construction, the Contractor shall furnish "as-built" plans of the intersection showing all pole locations, junction boxes, miscellaneous equipment, conduit, conductors and with a special symbol identifying those items that have been changed from the original Contract Drawings. All items shall be located within 1-foot horizontal distance and 6 inches vertical distance above, below, or at the surface.

**8-20.4 Measurement***(Special Provision)**Revised*



When bid items are shown as lump sums in Section 8-20.5, 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.

## 8-20.5 Payment

*(Special Provision)*

*Revised*

Payment will be made in accordance with Section 1-04.1 for the following bid item(s) when included in the proposal:

<b>Modifications to Existing Illumination System, Complete</b>	<b>Per Lump Sum</b>
<b>Install Rectangular Rapid Flashing Beacon (RRFB) System, Complete</b>	<b>Per Lump Sum</b>

The lump sum contract price for above listed bid items shall be measured for the total of all labor, materials, tools and equipment necessary or incidental to the installation of complete permanent systems. All items and labor necessary to supply, install and test the powered illumination and RRFB systems, including luminaires, poles, foundations, potholing, controller and cabinet assemblies, RRFB light bars, push button assemblies, junction boxes, conduit, wiring, excavation, backfill, restoring facilities destroyed or damaged during construction, salvaging existing materials, transporting and installing City-furnished equipment, coordination with local agencies and utility companies, electrical inspections and testing, as-built plans and all other components necessary to make complete systems shall be included within the lump sum price.

Saw cutting required shall be incidental to lump sum items and no separate measurement will be made.

Conduit bedding and crushed surfacing top course (CSTC) required for trench backfill shall be incidental to the lump sum items and no separate measurement will be made.

Temporary surface restoration items required for resuming pedestrian and vehicular traffic prior to final surfacing, including steel sheeting, crushed rock, and cold mix asphalt, shall be incidental to the lump sum items and no separate measurement will be made.

The cost of conduit trenching, backfilling, compaction, and landscape restoration outside of paved areas and trenching and backfill for the pipe zone within paved areas shall be included in the above listed bid items lump sums.

Bidders are cautioned to include in the lump sum bid items for "Systems, Complete", all costs related to protection of items to remain, removal and disposal costs of removed items not specified to be salvaged, and costs associated with obtaining electrical inspection and system testing as required.

## 8-21 PERMANENT SIGNING

### 8-21.1 Description

*(Special Provision)*

*Supplement*

Permanent Signing shall include all work to reset, relocate, remove, and install new signage within the project limits as identified in the Plans.

### 8-21.3 Construction Requirements

*(Special Provision)*

*Supplement*

Sign Code Numbers indicated on the Plans are in reference to the Washington State Department of Transportation Sign Fabrication Manual and the Manual on Uniform Traffic Control Devices (MUTCD).

Upon completion of the project, the Contractor shall reset all signs, which have been disturbed or removed during the construction, in their permanent location to the satisfaction of the Owner. Existing concrete at the base of the sign post shall be removed prior to installation in new concrete.

Relocated signs shall be installed on new posts per the standard detail, unless otherwise directed by the engineer.

All signs shall be mounted on 2" X 2", 14 Gauge metal posts otherwise indicated on the Plans or directed by the Engineer. Relocated signs shall be installed on new posts.

Locations are subject to adjustment by the Engineer.

Posts shall have 3' minimum embedment into finished grade.

### 8-21.4 Measurement

*(Special Provision)*

*Supplement*

There shall be no unit of measurement for the lump sum bid item "Permanent Signing". Measurement will be based on a completed and accepted signage installation in accordance with the Plans and as directed by the Engineer.

### 8-21.5 Payment

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Permanent Signing</b>	<b>Lump Sum</b>
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The lump sum contract price for above listed bid items shall be measured for the total of all labor, materials, tools and equipment necessary or incidental to the completed and accepted signage installation in accordance with the Plans and as directed by the Engineer.

## 8-22 PAVEMENT MARKING

### 8-22.1 Description

*(Special Provision)*

*Supplement*

Pavement markings in conflict with the proposed improvements shall be removed.

### 8-22.2 Materials

*(Special Provision)*

*Supplement*

All channelization work to be performed under this contract shall be done in conformance with the "Manual on Uniform Traffic Control Devices" as is currently adopted by the Washington State Department of Transportation or as modified by the Plans and these Special Provisions.

This work shall consist of furnishing and installing pavement markings upon the roadway surface at locations shown in the Plans or as directed by the Engineer. Prior to installing pavement markings the Contractor shall pre-mark the layout of all channelization and receive approval from the Engineer. See Section 8-22.3(1) Preliminary Spotting herein.

Materials for pavement markings shall be paint, plastic, or retroreflective film as noted on the Plans and herein. Paint and sprayed or extruded plastic materials shall be applied with a top dressing of glass beads.

The following markings shall meet Type A Liquid Hot Applied Thermoplastic per 9-34.3(1) of the Standard Specifications:

- Plastic Stop Lines
- Plastic Crosswalk Lines
- Plastic Traffic Arrows
- Plastic Speed Bump Symbol

The following markings shall be PreMark Bike Lanes by Ennis Flint or Approved Equal:

- Plastic Bicycle Symbols including Bicycle Rider, Arrow, Chevron, Green Bicycle Markings

Refer to the current Qualified Products List (QPL) for manufacturers.

### 8-22.3 Construction Requirements

*(Special Provision)*

*Supplement*

Contractor shall coordinate with the Engineer to field mark the channelization to be removed. Part of this effort will include the Contractor field locating the proposed channelization to verify that the proposed channelization matches the existing channelization to remain. Contractor shall be responsible for coordinating this effort with the Engineer. Engineer shall approve the channelization removal extents before the Contractor conducts actual removal.

### 8-22.4 Measurement

*(Special Provision)*

*Supplement*

Measurement for Paint Line, 4 Inch shall be per the linear foot and shall include all 4 Inch paint line including any dashes or skips of similar width.

Measurement for "Plastic Bicycle Symbol" shall be per each and shall include the bicycle rider with the arrow or chevron.

No specific unit of measurement shall be applied to the Bid item "Remove Pavement Markings". All conflicting channelization shall be removed. Channelization to remain that is damaged during construction will be removed as directed by the Engineer.

### 8-22.5 Payment

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Remove Pavement Markings</b>	<b>Lump Sum</b>
<b>Paint Line, 4 Inch</b>	<b>Per Linear Foot</b>
<b>Paint Line, 6 Inch</b>	<b>Per Linear Foot</b>
<b>Plastic Stop Line</b>	<b>Per Linear Foot</b>
<b>Plastic Traffic Arrow</b>	<b>Per Each</b>
<b>Plastic Bicycle Symbol</b>	<b>Per Each</b>
<b>Green Bicycle Lane Treatment</b>	<b>Per Square Foot</b>

The lump sum cost for "Remove Pavement Markings" shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to removing the pavement markings in conflict with the proposed improvements or as necessary to ensure that the proposed pavement markings line up with the existing pavement markings.

## 8-23 TEMPORARY PAVEMENT MARKINGS

### 8-23.3 Construction Requirements

*(Special Provision)*

*Supplement*

Placement of temporary pavement markings shall mimic proposed channelization of 77<sup>th</sup> and Sunset. Contractor shall provide channelization for vehicle lanes and temporary pedestrian crossings for the duration of the contract.

### 8-23.5 Payment

*(Special Provision)*

*Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

**Temporary Pavement Markings****Lump Sum**

The lump sum cost for "Temporary Pavement Markings" shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to removing the pavement markings in conflict with the proposed improvements or as necessary to ensure that the proposed pavement markings line up with the existing pavement markings.

**8-25 BOLLARDS****8-25.1 Description***(Special Provision)**New Section*

This work shall include installing bollards and their foundations at the locations shown on the Plans and as specified herein.

**8-25.2 Materials***(Special Provision)**New Section*

Bollards shall be 44" in height, "Windsor" cast iron or approved equal. Finish shall be powder coated with color Pantone Green (#5605 U). Paint system shall be per manufacturer. Submit color sample for approval prior to fabrication.

Cement Concrete for bollard foundations shall be 4000psi compressive strength.

**8-25.3 Construction Requirements***(Special Provision)**New Section*

Bollards shall be installed per details shown on the Plans.

**8-25.4 Measurement***(Special Provision)**New Section*

Bollards shall be measured per each bollard installed.

**8-25.5 Payment***(Special Provision)**New Section*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

**Bollards****Per Each**

The unit bid price for "Bollards" shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to constructing the foundation, reinforcement, connections, and installing the bollards.

**8-26 DETECTABLE STRIP****8-26.1 Description***(Special Provision)**New Section*

This work shall include installing detectable strip per the details and locations in the Plans.

### **8-26.2 Materials**

*(Special Provision)*

*New Section*

Strips shall be hot applied thermoplastic material.

### **8-26.3 Construction Requirements**

*(Special Provision)*

*New Section*

Detectable Strip shall be as detailed and installed in locations per the Plans. Detectable Strip pieces shall be continuous with no breaks or joints in material. Detectable strip shall be 1' wide with cane detectable ridges no higher than 0.25".

Thermoplastic detectable strip shall be Vanguard GuideStrip or approved equal. Contractor shall submit and/or place sample for approval prior to final installation.

### **8-26.4 Measurement**

*(Special Provision)*

*New Section*

Detectable Strip shall be measured per linear foot of installed strip.

### **8-26.5 Payment**

*(Special Provision)*

*New Section*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

<b>Detectable Strip</b>	<b>Per Linear Foot</b>
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The unit bid price for "Detectable Strip" shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to installing detectable strips per the plans and these specifications.

**END OF DIVISION 8**

## 9-03 AGGREGATES

(March 10, 2010 APWA GSP)

Supplement

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be \*\*\* 2 \*\*\* million.

(March 10, 2010 APWA GSP)

## Revision

Delete Item 1 and replace it with the following:

1. **Job Mix Formula Tolerances.** After the JMF is determined as required in 5-04.3(7)A, the constituents of the mixture at the time of acceptance shall conform to the following tolerances:

	Nonstatistical Evaluation	Commercial Evaluation
Aggregate, percent passing		
1", ¾", ½", and 3/8" sieves	±6%	±8%
U.S. No. 4 sieve	±6%	±8%
U.S. No. 8 sieve	±6%	±8%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%

These tolerance limits constitute the allowable limits as described in Section 1-06.2. The tolerance limit for aggregate shall not exceed the limits of the control points section, except the tolerance limits for sieves designated as 100% passing will be 99-100. The tolerance limits on sieves shall only apply to sieves with control points.

## 9-14 EROSION CONTROL AND ROADSIDE PLANTING

*(Special Provision)*

Supplement

Topsoil Type A mix shall be a 50%/50% mixture of pure compost, and sand, sandy loam or silty sand. The soil shall be high in organic content and comprised of fully composted and mature organic materials.

Refer to Section 9-14.4(8) Compost of the Standard Specifications for compost requirements. No fresh sawdust or other fresh wood by-products shall be added to extend the volume after the composting process.

Chemical and physical characteristic of Topsoil Type A shall comply with the following:

Screen Size 7/16" Maximum

(Approximate Particle Size)

Total Nitrogen 0.25% Minimum

Organic Matter 10% Minimum

pH Range 5.5 to 7.5

Conductivity 5 mmhos/cm Maximum

The Contractor shall provide a complete analysis of Topsoil Type A with one cubic foot sample for review and approval.

#### 9-14.2 Seed

*(Special Provision)*

*Supplement*

The grass seed dealer shall mix the grass seed only. The Contractor shall furnish the Engineer with a dealer's guaranteed statement of the composition, mixture, and the percentage of purity and germination of each variety.

"Seeded Lawn Mix" shall be composed of the following varieties mixed in the proportions indicated:

Mixture Proportions			
Name	% by Weight	% Purity	% Germination
Chewings Fescue (Longfellow, Waldorf, Bargreen)	30%	98%	90%
Hard Fescue	20%	98%	90%
Perennial Rye (blend of two – Fiesta II, Prelude II, Palmer II, Commander)	50%	95%	90%

All seed mixes shall be certified as 99% weed-free and 90% viable seeds by germination tests and by age specifications by species. Apply hydroseed mulch, tackifier, seed and fertilizer per supplier's recommendations.

#### 9-14.3 Fertilizer

*(Special Provision)*

*Supplement*

All Fertilizer applications for grass or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.

Fertilizer for trees and shrubs shall be Best-Paks Biodegradable Packet, 20-10-5, or City of Mercer Island approved equal. Apply per manufacturer's recommendations.



**9-14.4(3) Bark or Wood Chips***(Special Provision)**Supplement*

Bark mulch shall be medium grade composted ground fir or hemlock bark.

The bark shall be uniform in color, free from weed seeds, sawdust and splinters. The mulch shall not contain resin, tannin, wood fiber or other compounds detrimental to plant life. The moisture content of bagged mulch shall not exceed 22%. The acceptable size range of bark mulch material is ½" to 1" with maximum of 20% passing the ½" screen.

**9-14.4(8) Compost***(Special Provision)**Supplement*

Compost shall be 98% minimum material derived from the aerobic decomposition of recycled plant waste and / or secondary sewage treatment. The Contractor shall provide a one cubic foot sample with supplier's certification for review and approval.

**9-14.6(3) Handling and Shipping***(Special Provision)**Supplement*

All plant material shall be transported to planting locations with care to prevent damage. Tie back branches as necessary, and protect bark from chafing with burlap bags. Do not drag plant material along ground without proper protection of roots and branches.

**9-14.6(4) Tagging***(Special Provision)**Supplement*

All plant material except ground cover shall be legibly tagged. Tagging may be by species or variety with minimum of one tag per ten trees or shrubs.

**9-14.6(5) Inspection***(Special Provision)**Supplement*

See also Section 8-02.3(6) **Layout of Planting** herein for additional inspection requirements.

**9-14.8 Root Barrier***(Special Provision)**Supplement*

Root Barrier shall be Deep Root Tree Barrier, UB 24-2 Linear Barrier, or approved equal.

**9-29 ILLUMINATION, SIGNAL, ELECTRICAL****9-29.1 Conduit, Innerduct, and Outerduct***(Special Provision)**Supplement*

PVC solvent cement shall be medium-bodied gray and shall meet ASTM D 2564 including note 8 (label to show pipe sizes for which the cement is recommended).

**9-29.1(4)C HDPE Conduit***(Special Provision)**Supplement*

If the Contractor elects to directional bore, bored conduit shall be High Density Polyethylene (HDPE). All piping system components shall be the products of one manufacturer. The conduit and fittings shall be free, within commercial tolerances of objectionable lines, striations, bubbles, welds or other manufacturing defects which would impair the service of the conduit or fittings. Conduit shall be appropriate for the stress generated by the selected equipment and field conditions. Bored conduit couplings shall meet or exceed all ASTM strength and composition standards for the particular type used. All couplings shall be leak proof. Drilling fluid used for directional boring shall be an inert mixture of water and bentonite clay conforming to the drilling equipment manufacturer's recommendations.

Expansion fittings, deflection fittings, and expansion/deflection fittings embedded in concrete shall be PVC coated.

**9-29.2 Junction Boxes, Cable Vaults, and Pull Boxes****9-29.2(1)A Standard Duty Junction Boxes***(Special Provision)**Supplement*

Junction boxes, cable vaults and pull boxes which are placed within the sidewalk shall have slip resistant lids which meet the requirements of Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guideline (PROWAG).

Grounding lugs shall be stainless steel and shall be mechanically and electrically bonded.

*(September 3, 2019 WSDOT GSP)***Slip-Resistant Surfacing for Junction Boxes, Cable Vaults, and Pull Boxes**

Where slip-resistant junction boxes, cable vaults, or pull boxes are required, each box or vault shall have slip-resistant surfacing material applied to the steel lid and frame of the box or vault. Where the exposed portion of the frame is ½ inch wide or less, slip-resistant surfacing material may be omitted from that portion of the frame.

Slip-resistant surfacing material shall be identified with a permanent marking on the underside of each box or vault lid where it is applied. The permanent marking shall be formed with a mild steel weld bead, with a line thickness of at least 1/8 inch. The marking shall include a two-character identification code for the type of material used and the year of manufacture or application. The following materials are approved for application as slip-resistant material, and shall use the associated identification codes:

1. Harsco Industrial IKG, Mebac #1 - Steel: M1
2. W. S. Molnar Co., SlipNOT Grade 3 – Coarse: S3
3. Thermion, SafTrax TH604 Grade #1 – Coarse: T1

**9-29.6 Light and Signal Standards****9-29.6(1) Steel Light and Signal Standards***(Special Provision)**Supplement*

All RRFB poles shall be supplied by the City.

Scratching, marking, denting, or other damage to poles and fittings at the point of installation shall be cause for rejection. The Contractor shall touch-up paint all visible pole scratches after installation as per the Engineer's directives.

**9-29.10(2) Decorative Luminaires***(Special Provision)**New*

Luminaires and arms shall be Cooper Lighting Solutions Galleon GLEON-SA3A-730-U-SL4-AP or equal approved by the Engineer. Luminaires shall be LED and shall meet the requirements on the Plans. The color of the luminaire housing and arm shall be grey.

**9-29.21 Flashing Beacon***(Special Provision)**Replacement***Rectangular Rapid Flashing Beacon (RRFB) System**

The rectangular rapid flashing beacons (RRFB) poles, assembly lights and controller shall be supplied by the City and shall be AC SC315-G (AC powered system) by Carmanah and as shown on the Plans. RRFB equipment pole placement shall be per the Plans and details and shall be complete in all respects. Signs shall be per the Plans.

Description of Materials Supplied by the City:Quantity

RRFB control cabinet (SC315-G) AC, natural finish	6
RRFB lightbar with confirmation lights (includes universal mounting bracket), black	12
Harness, 16ft, terminal block to lightbar, RRFB, SC315, TPE	12
Pushbutton, Polara iNX audible, 9x12 sign & mount, black	6
Harness, 16ft, Polara iNX or Campbell Guardian button, G-series	6
Sign (crossing walking man) 36x36 fluorescent yellow 3M VIP series 3981 (W11-2) alum.	12
Sign (arrow) 24x12 DG-VIP series 3991 fluorescent yellow (W16-7PL) left down arrow.	4
Sign (arrow) 24x12 DG-VIP series 3991 fluorescent yellow (W16-7PR) right down arrow.	8
Sign (use caution when crossing) 12x12 white sign/black reflective letters.	6
Bundle – Pelco	6
Pole, spun aluminum, 4-1/2" Schedule 40 , 14' length	6
Pedestal base, aluminum, square, with aluminum door, no logo	6
Collar assembly, aluminum, for square base	6
Anchor bolt kit 3/4" #10, set of (4) galvanized	6
Pole cap dome, 4-1/2" OD aluminum	

- Rectangular Rapid Flashing Beacon (RRFB) indications shall comply with the dimensional, operational, and flash pattern requirements of Federal Highway Administration (FHWA) Interim Approval 21 (IA-21, Conditions 4, 5, and 6, excluding Condition 5f;

[https://mutcd.fhwa.dot.gov/resources/interim\\_approval/ia21/index.htm](https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm)).

The flashing pattern shall be user-selectable in the field.

The rectangular rapid flashing beacon (RRFB) pole and base assembly shall be supplied by the City and shall be as described below, and on the Plans and details. The RRFB assembly shall be complete in all respects, capable of supporting RRFB equipment per the Plans, and shall consist of two (2) subassemblies. Pole length shall be a minimum of 14'.

#### Pole Subassembly

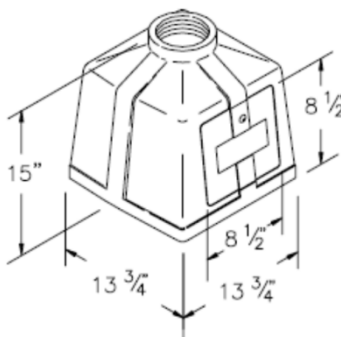
The pole shall be a 4-1/2 inch outside diameter spun aluminum Schedule 40 pipe.

The bottom of the pipe shall be threaded to screw into a breakaway base assembly. Threading and deburring of the pole shall be in accordance with the basic dimensions of American National Standard Taper Pipe Threads, NPT (ANSI B1.2).

#### Base Subassembly

The pole base shall be breakaway, square aluminum pedestal base with aluminum door meeting the following minimum requirements:

- Square cast aluminum with natural finish, minimum weight of 21 lbs. with dimensions as shown in the Figure below.
- Upper end shall be threaded to receive a 4-1/2" outside diameter NPT pipe shaft. Base



threads shall be tapped to allow full pole engagement w/o exposed threads on the pole.

- The base shall be of such design that it may be fastened to a foundation with four (4) 3/4" anchor bolts located 90 degrees apart on the bottom of the base.
- There shall be slots in the bottom of the base 1 1/2" wide and 2 1/2" long measured along the circumference of the bolt circle, allowing a proper fit even if the bolts are placed slightly off center. The base plate shall accommodate bolt circle of 12" and anchor bolts with a diameter of 3/4".
- The base shall be equipped with a removable aluminum door. Door opening shall be free of burrs and sharp edges and be no less than 8 1/2" square. The door shall be attached to

the base using one stainless steel socket button head screw to prevent unauthorized entry.

- The base housing and its components shall be fabricated free of voids, pits, dents, molding and excessive foundry grinding marks. All design radii shall be smooth and intact. Exterior surface finish shall be smooth and cosmetically acceptable by being free of molding fins, cracks and other exterior blemishes.
- Frangibility: The base shall meet or exceed 1985 AASHTO breakaway requirements. Test reports from an FHWA approved independent laboratory shall be provided certifying that the base has been tested and meets all applicable requirements. In addition, a statement of certification from the FHWA stating such tests have been accepted and approved shall be supplied.
- Structural Integrity: To prove structural soundness a certification from a recognized independent structural laboratory shall be provided certifying that the base will withstand a bending moment of 10,750 ft. lbs. Such test shall be performed in the following manner:
  - A force shall be applied at a distance from the bottom of the base to produce a moment. All bases must reach a moment capacity of 10,750 ft. lbs. without breaking, cracking or rupturing in any manner.
  - After force has been removed, the lever arm shall return to within .250" of its original rest position.
  - All tests shall be made using 4" schedule 40 Steel Pipe.
- Hardware: (6) 5/16"-18 x 1½" Socket Head Capscrews (3) 5/16" Dia. x 3/4" Roll Pins
- Finish: Collar Segment: Alodine 1200.
- Fasteners: Zinc w/ Yellow Di-Chromate.
- Packaging: Threaded end shall have protective cap to prevent thread damage. Cardboard sleeve shall cover the entire length of shaft to protect surface finish during storage and shipment.
- The pole shall be galvanized after fabrication per the Standard Specification Section 6-07.3(11)B2 Galvanizing.

#### **9-29.26 Detectable Pull Tape**

*(Special Provision)*

*New*

The Contractor shall furnish and install a flat polyester woven pre-lubed tape that contains a 22-gauge wire.

The tape shall be marked with sequential footage markings and be continuous.

The tape shall meet or exceed a breaking strength of 900 lb., with a width of 1/2-inch.

### **END OF DIVISION 9**

## APPENDIX A

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## **PREVAILING WAGES**

The State of Washington prevailing wage rates for King County apply to work performed under this contract. The applicable prevailing wage rates may be found at the following website address of the Department of Labor and Industries:

<https://secure.lni.wa.gov/wagelookup/>

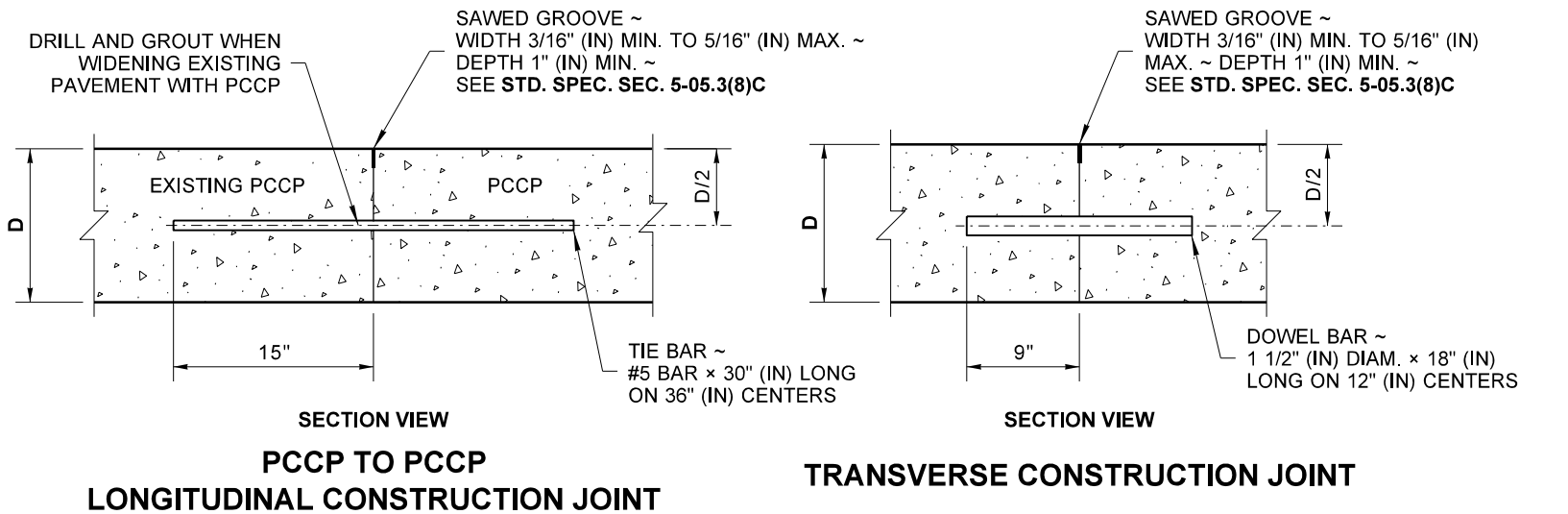
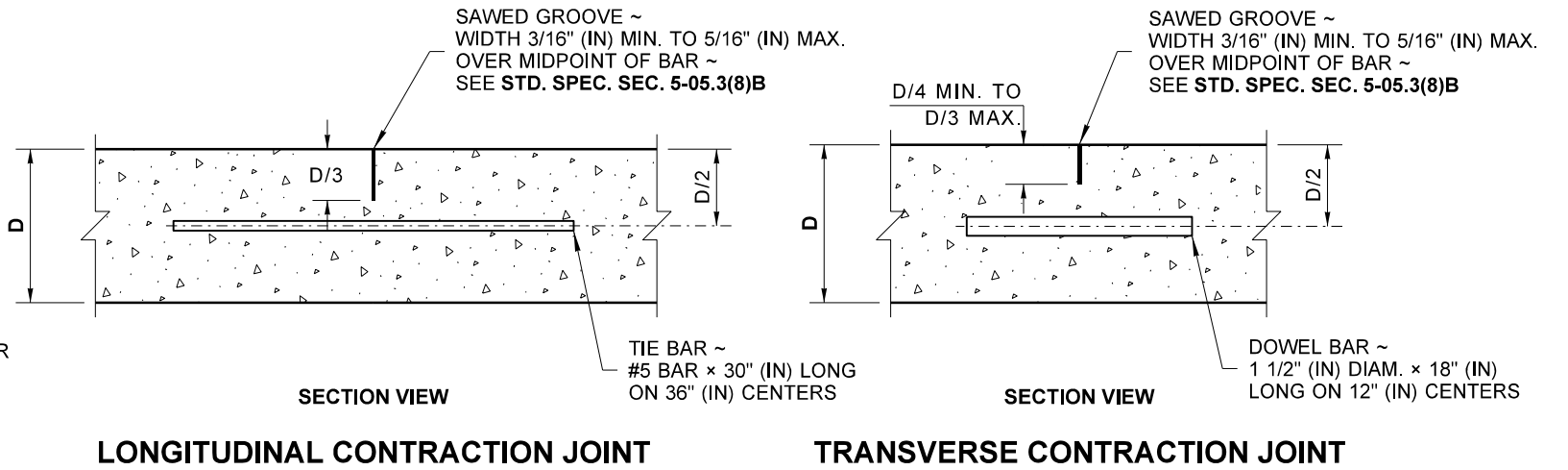
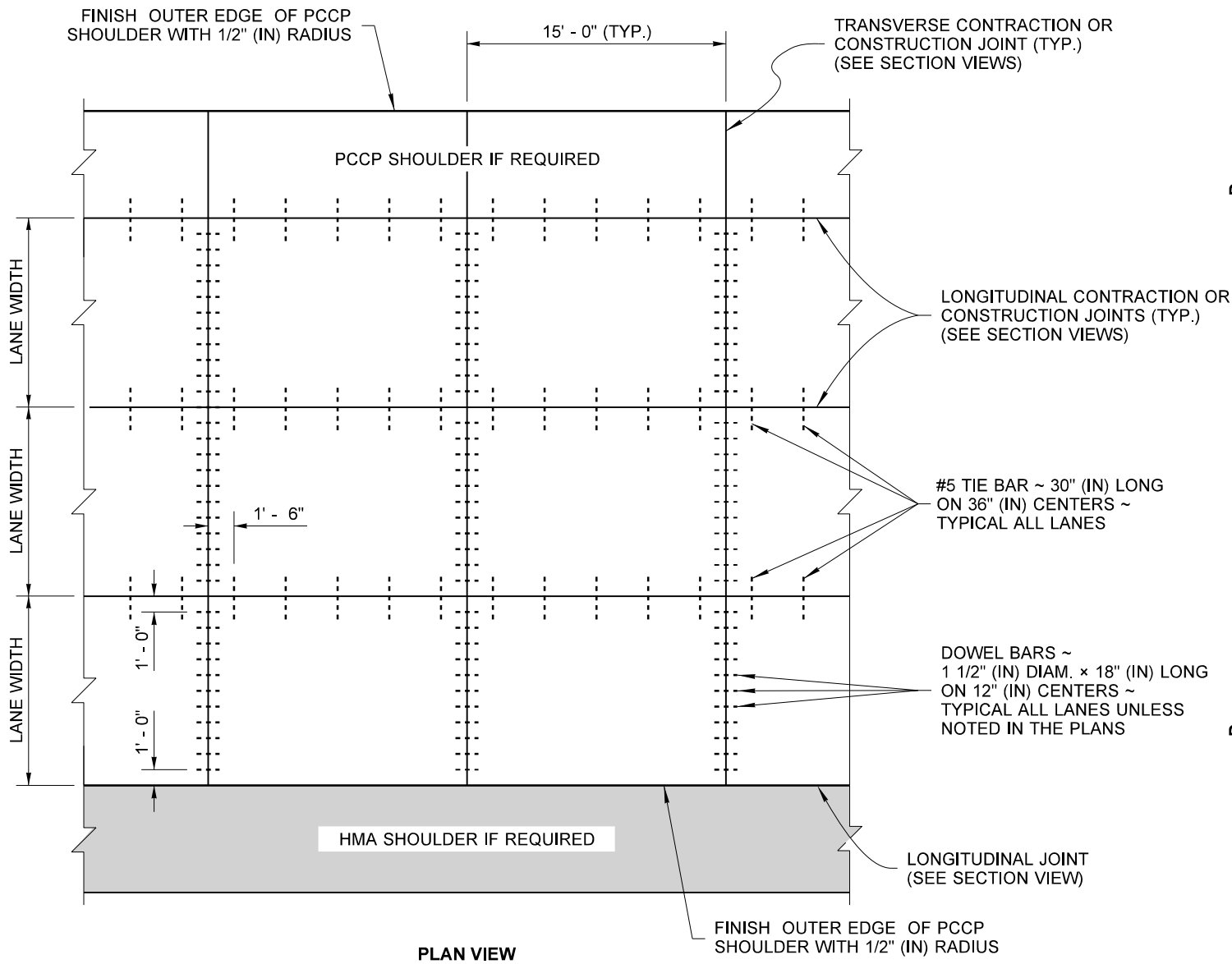
Based on the bid submittal date for this project, the applicable date for prevailing wages for this project is October 13, 2022. A copy of the applicable prevailing wage rates are also available for viewing at the City of Mercer Island, Maintenance Department located at 9601 SE 36th Street.



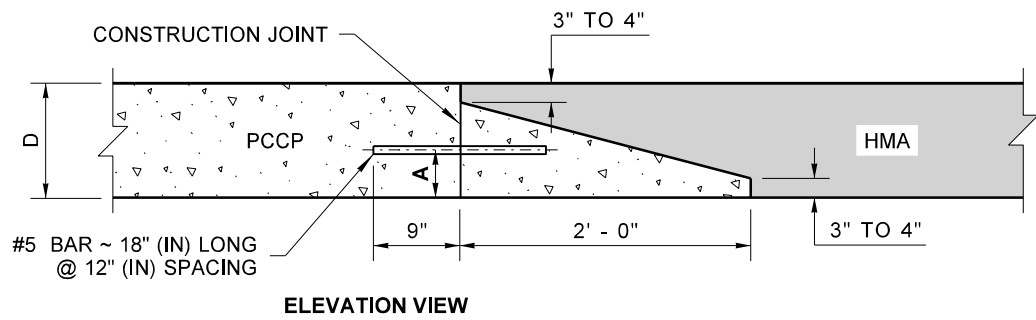
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## APPENDIX B

DRAWN BY: FERN LIDDELL

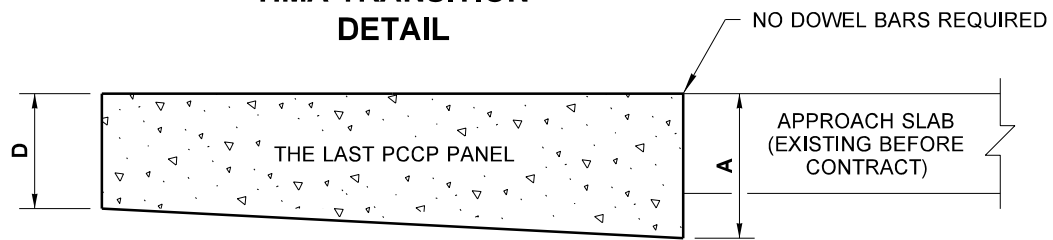


SLAB THICKNESS (D)	A
12"	5"
D	D/2 - 1"



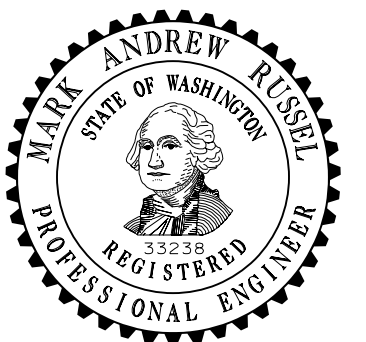
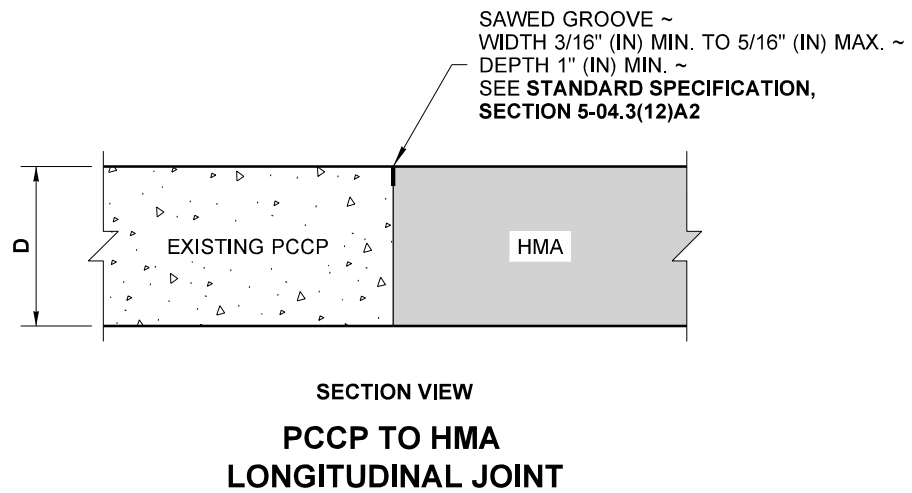
HMA TRANSITION  
DETAIL

DEPTH OF PCCP (D)	A
12"	15"
D	1.25 x D



EXISTING APPROACH SLAB TRANSITION  
DETAIL

USE ON GRANULAR BASES ONLY ~  
NO TAPER REQUIRED ON ASPHALT BASES



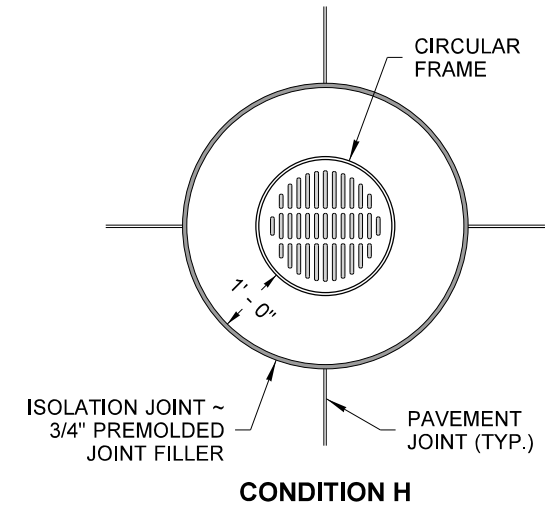
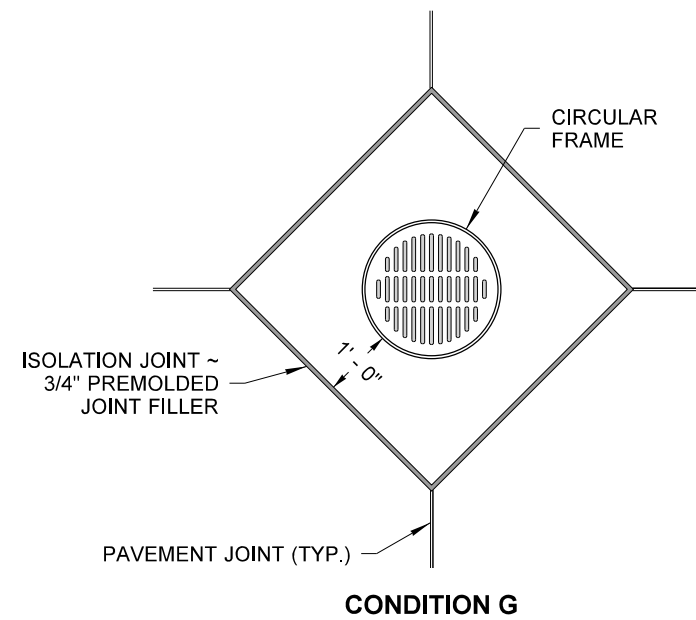
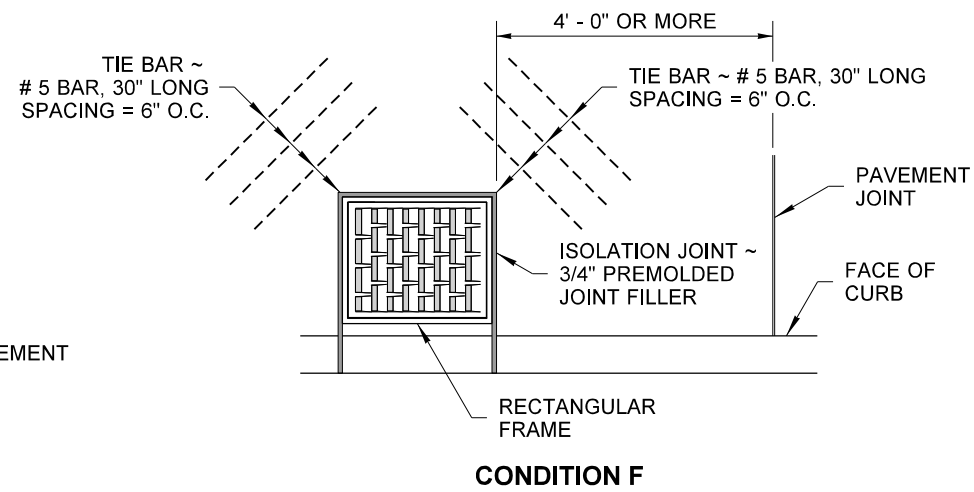
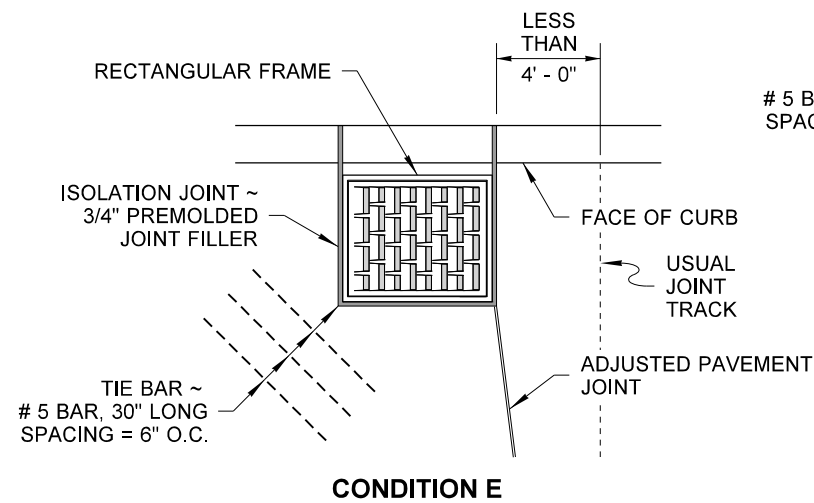
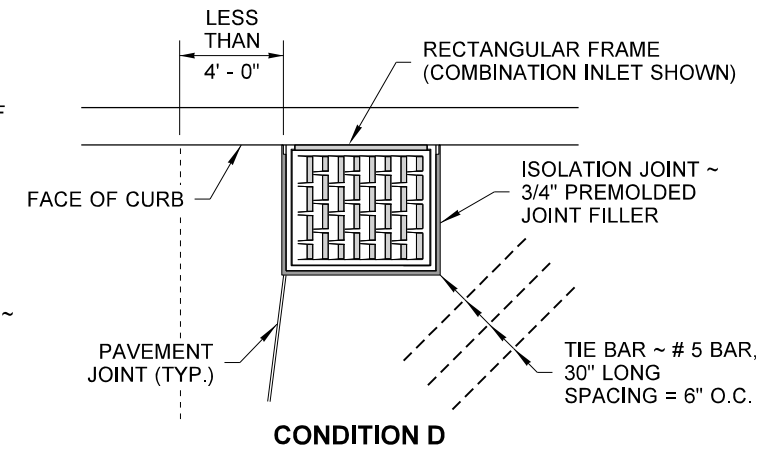
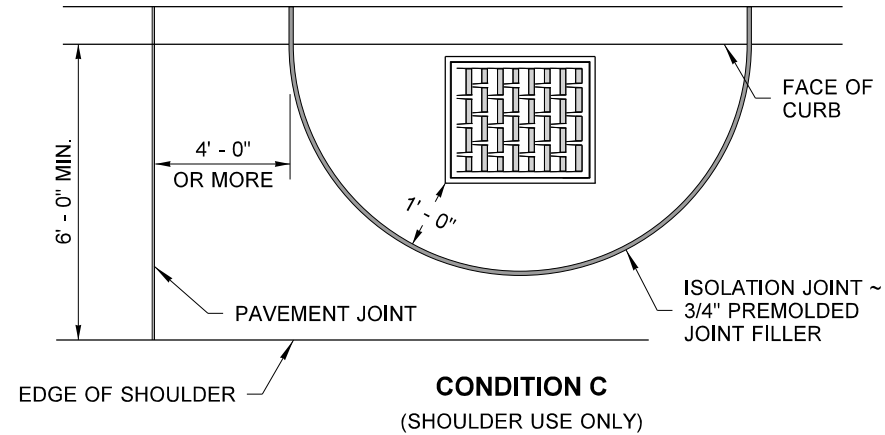
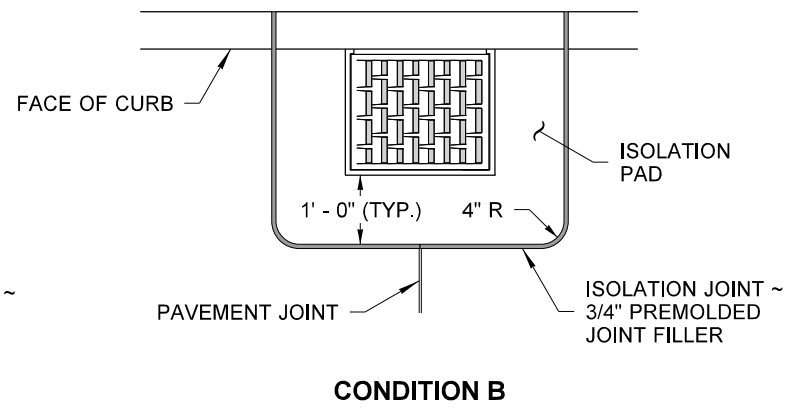
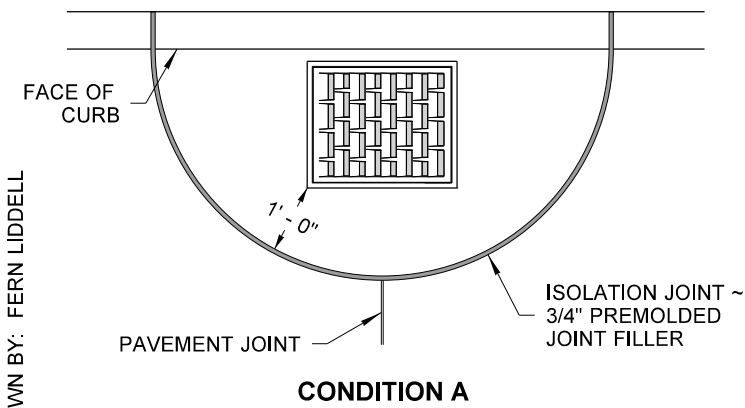
**CEMENT CONCRETE  
PAVEMENT JOINTS**

**STANDARD PLAN A-40.10-04**

SHEET 1 OF 1 SHEET

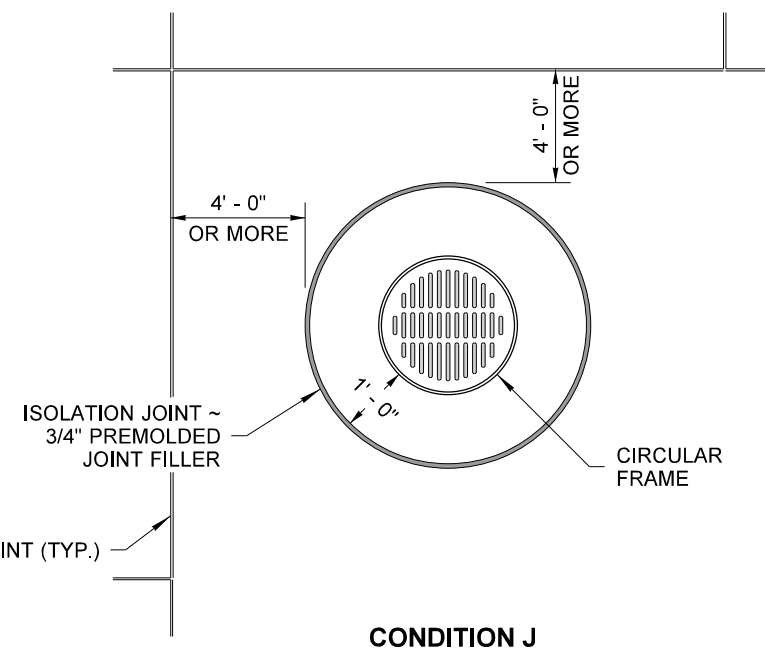
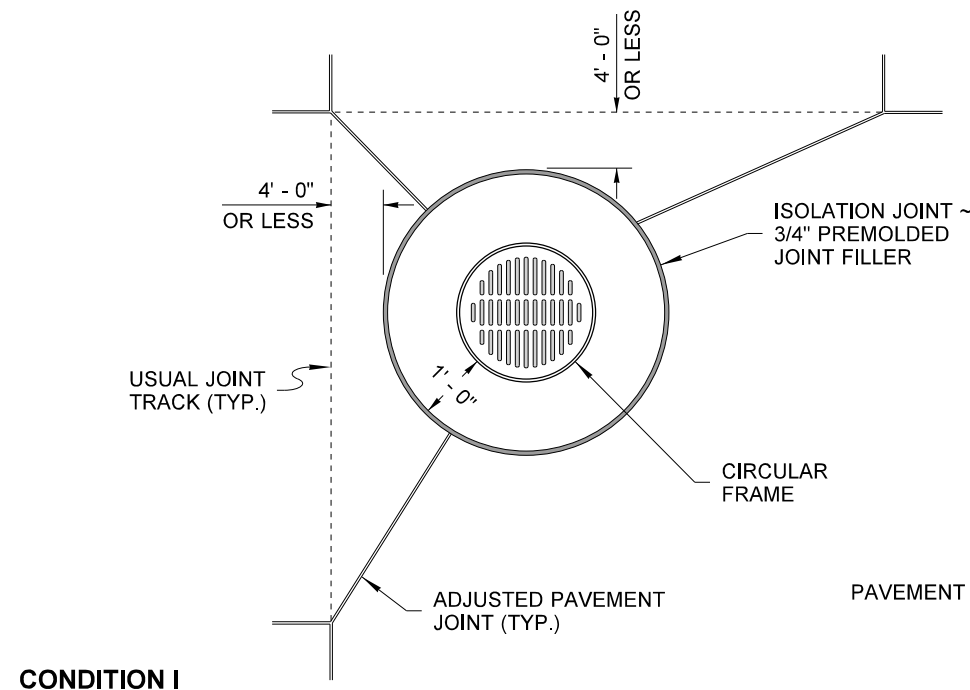
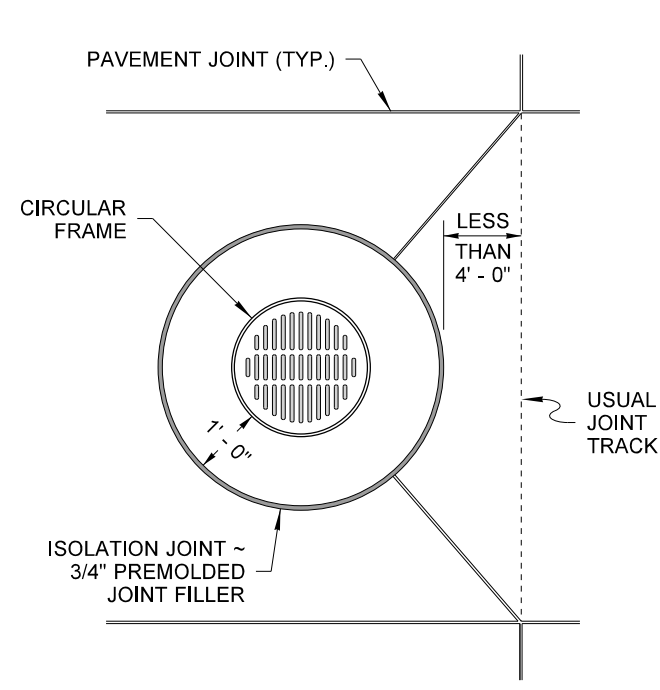
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DRAWN BY: FERN LIDDELL



#### NOTE

ALL CONDITIONS ARE SHOWN IN PLAN VIEW.



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## PCC PAVEMENT ISOLATION JOINTS

### STANDARD PLAN A-40.15-00

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

**Pasco Bakotich III** 08-11-09

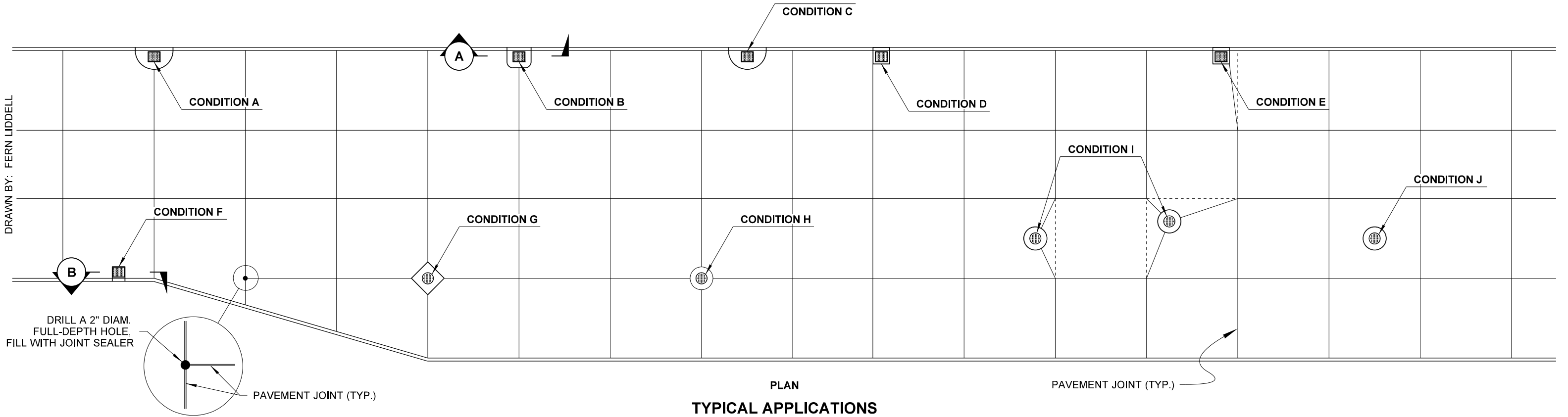
STATE DESIGN ENGINEER

DATE



Washington State Department of Transportation

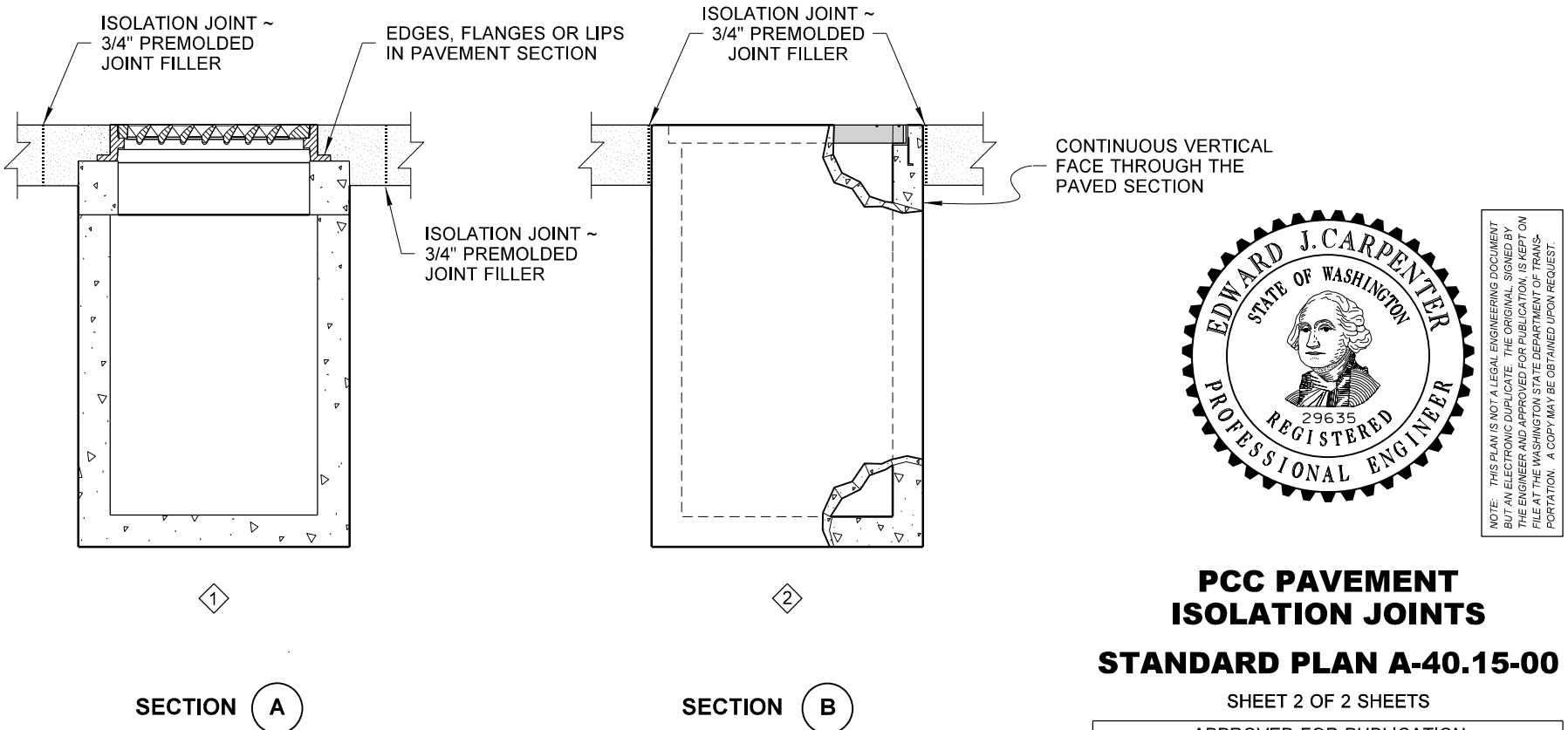
DRAWN BY: FERN LIDDELL



PLAN  
TYPICAL APPLICATIONS

TYPICAL ISOLATION JOINT GUIDELINES				
CONDITION	FEATURE	EDGES, FLANGES OR LIPS IN THE PAVEMENT SECTION ①	CONTINUOUS VERTICAL FACE THROUGH THE PAVEMENT SECTION ②	DISTANCE FROM NEAREST TRANSVERSE JOINT
A	CATCH BASIN OR COMBINATION GRATE	USE	----	----
B	CATCH BASIN OR COMBINATION GRATE	USE	----	----
C	CATCH BASIN OR COMBINATION GRATE	USE	----	> 4 FT FROM JOINT
D	GRATE INLET, CATCH BASIN OR CONCRETE INLET ★	----	USE	< 4 FT FROM JOINT
E	GRATE INLET, CATCH BASIN OR CONCRETE INLET ★	----	USE	< 4 FT FROM JOINT
F	GRATE INLET, CATCH BASIN OR CONCRETE INLET ★	----	USE	> 4 FT FROM JOINT
G	MANHOLE OR CATCH BASIN TYPE 2	USE	----	----
H	MANHOLE OR CATCH BASIN TYPE 2	USE	----	----
I	MANHOLE OR CATCH BASIN TYPE 2	USE	----	< 4 FT FROM JOINT
J	MANHOLE OR CATCH BASIN TYPE 2	USE	----	> 4 FT FROM JOINT

★ WITH RECTANGULAR GRATE CAST INTO ADJUSTMENT SECTION.



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**PCC PAVEMENT  
ISOLATION JOINTS**  
**STANDARD PLAN A-40.15-00**

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

**Pasco Bakotich III**

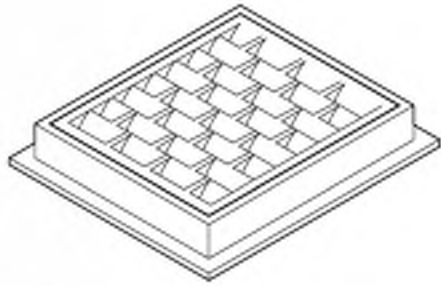
STATE DESIGN ENGINEER

**08-11-09**

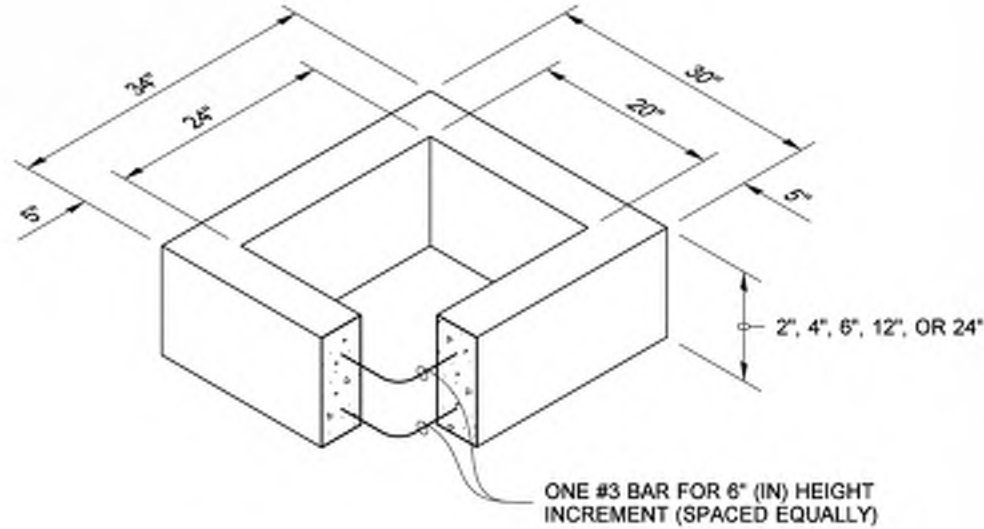
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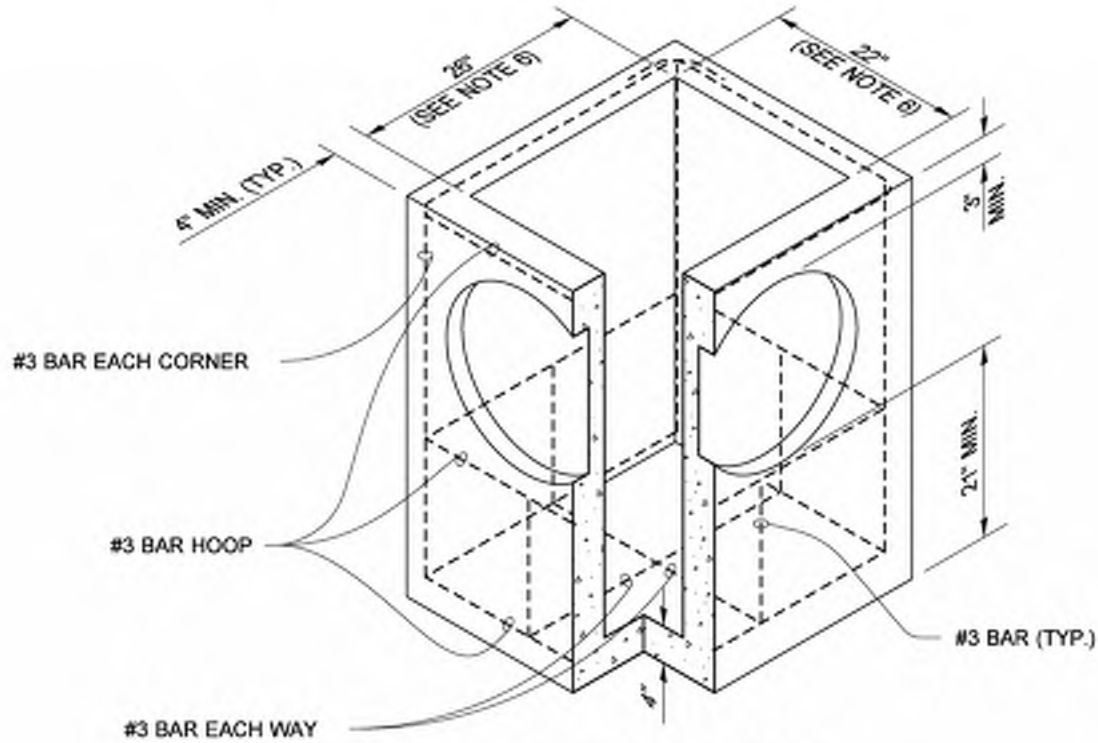
Washington State Department of Transportation



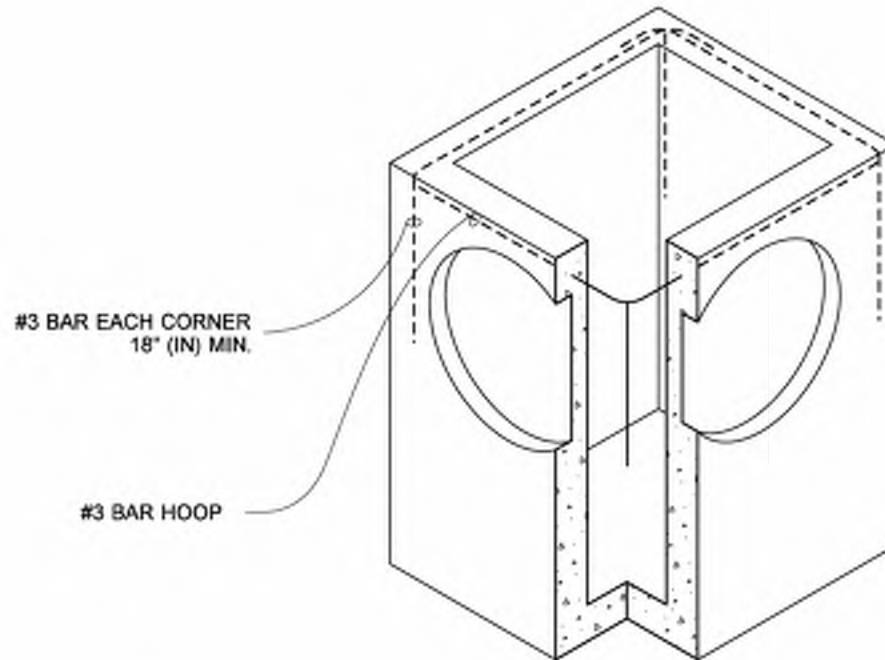
FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION



ALTERNATIVE PRECAST BASE SECTION

## PIPE ALLOWANCES

PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP ★ (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

★ CORRUGATED POLYETHYLENE STORM SEWER PIPE

## NOTES

- As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
- The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
- The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
- The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
- The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
- The opening shall be measured at the top of the **Precast Base Section**.
- All pickup holes shall be grouted full after the basin has been placed.



Julie Heilman  
2020.09.01 07:52:50 -07'00'

## CATCH BASIN TYPE 1

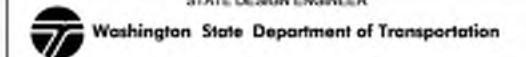
## STANDARD PLAN B-5.20-03

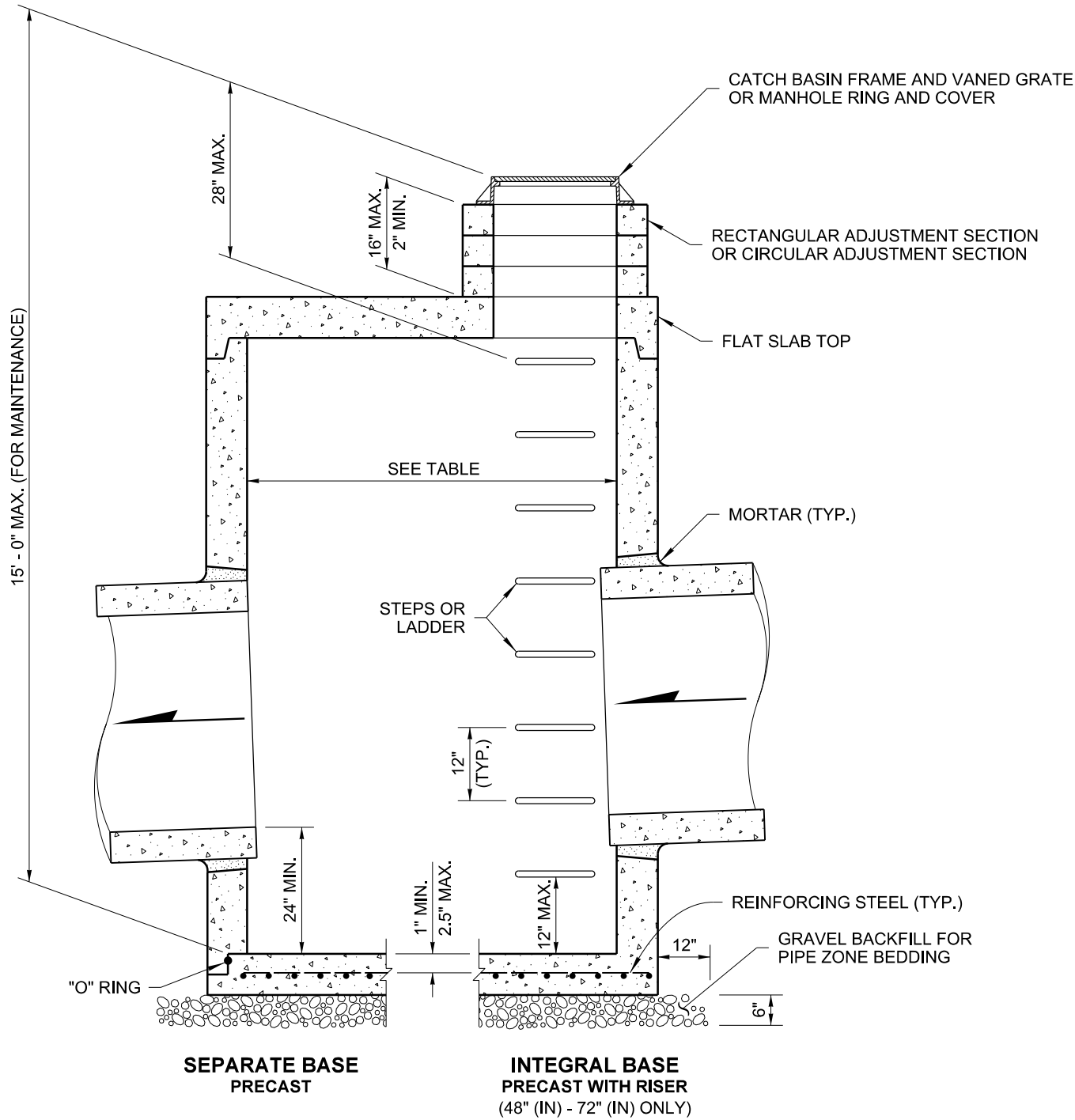
SHEET 1 OF 1 SHEET

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Roark, Steve  
Digitally signed by Roark, Steve  
Date: 2020.09.09 09:45:23 -07'00'

STATE DESIGN ENGINEER





NOTES

1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
4. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.

CATCH BASIN DIMENSIONS				
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

PIPE ALLOWANCES					
CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER				
	CONCRETE	ALL METAL	CPSSP ① PP ④	SOLID WALL PVC ②	PROFILE WALL PVC ③
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72"	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

- ① Corrugated Polyethylene Storm Sewer Pipe (See **Standard Specification Section 9-05.20**)
- ② (See **Standard Specification Section 9-05.12(1)**)
- ③ (See **Standard Specification Section 9-05.12(2)**)
- ④ Polypropylene Pipe (See **Standard Specification Section 9-05.24**)



**CATCH BASIN TYPE 2**

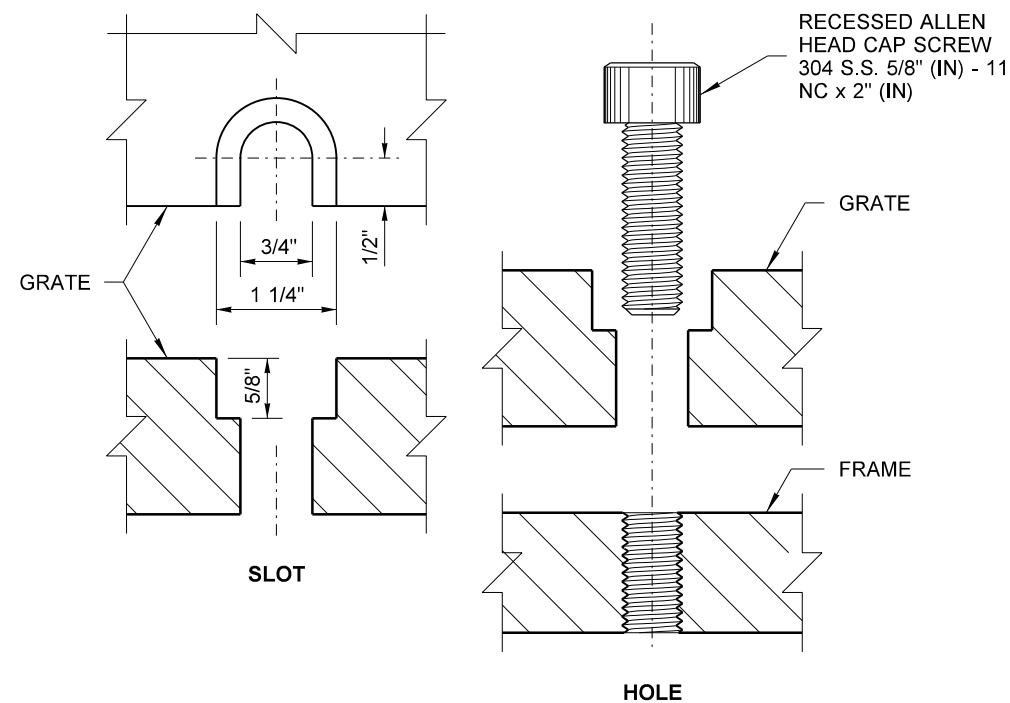
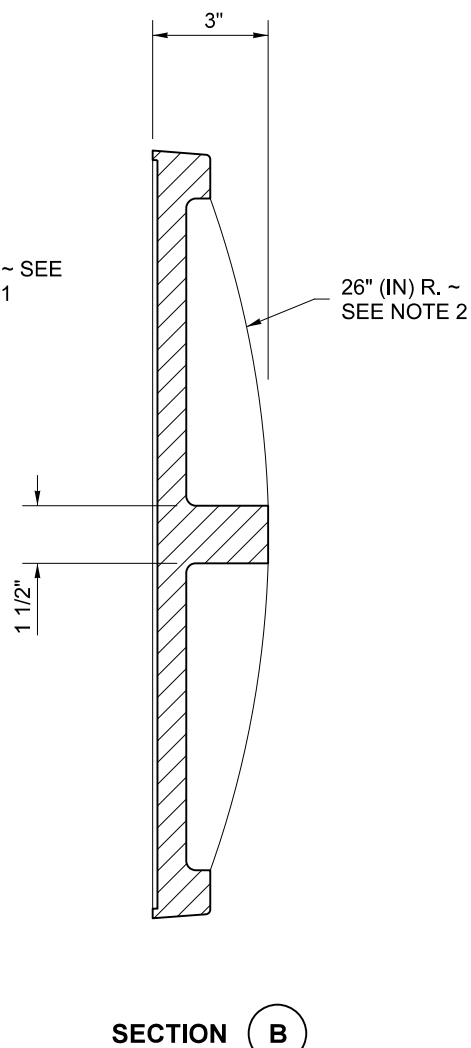
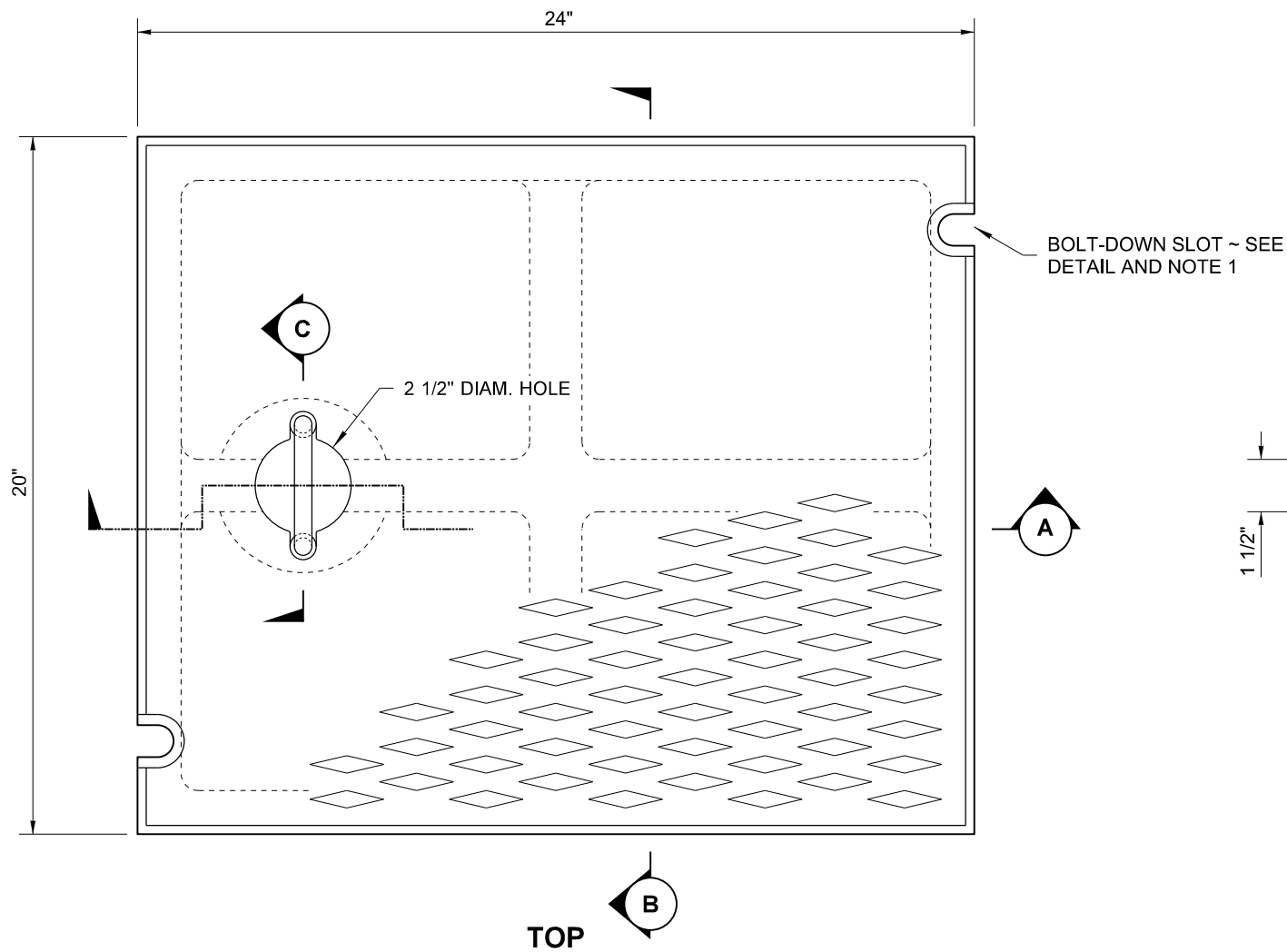
**STANDARD PLAN B-10.20-02**

SHEET 1 OF 1 SHEET

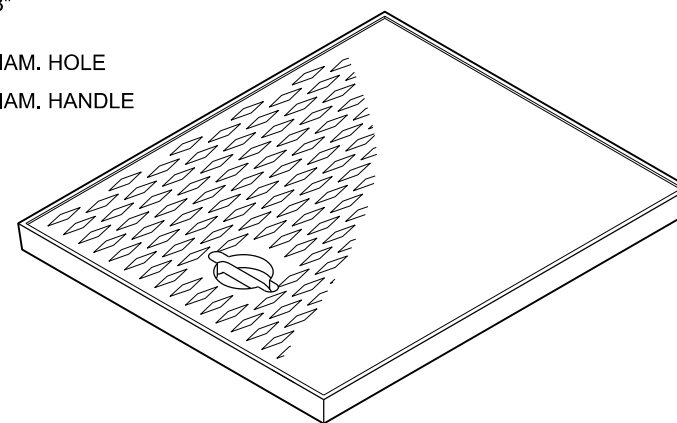
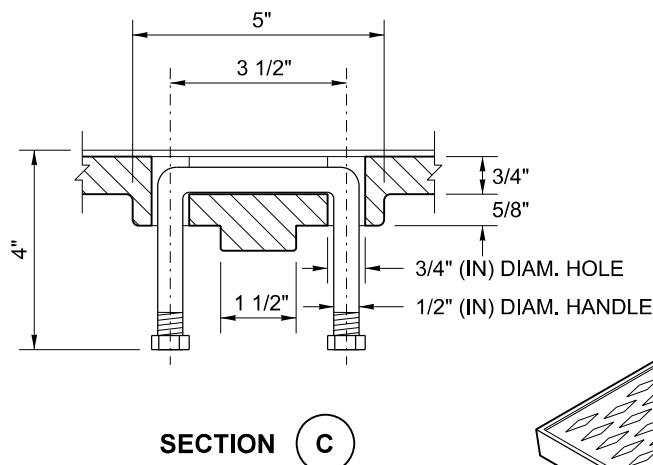
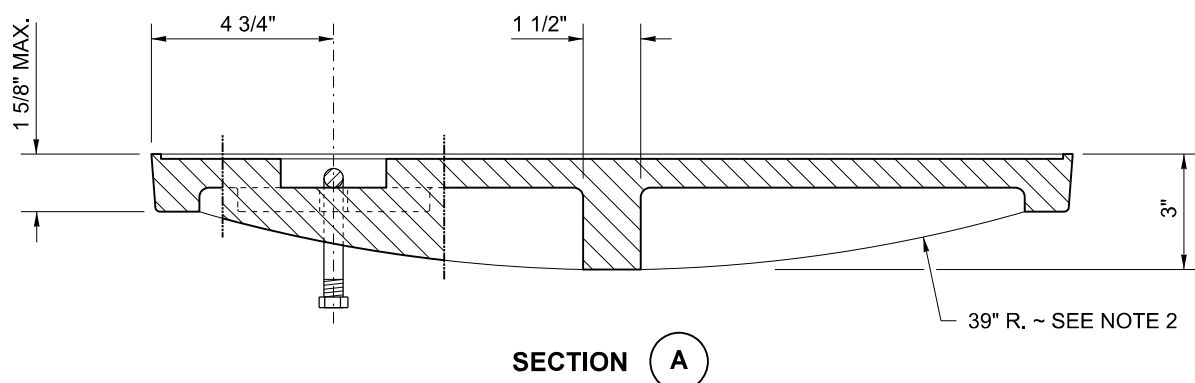
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Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



BOLT-DOWN DETAILS  
SEE NOTE 1



**RECTANGULAR SOLID  
METAL COVER**

**STANDARD PLAN B-30.20-04**

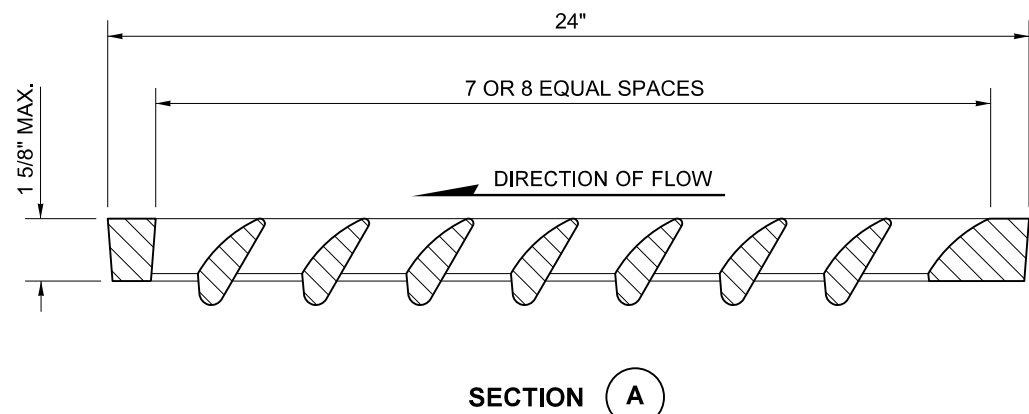
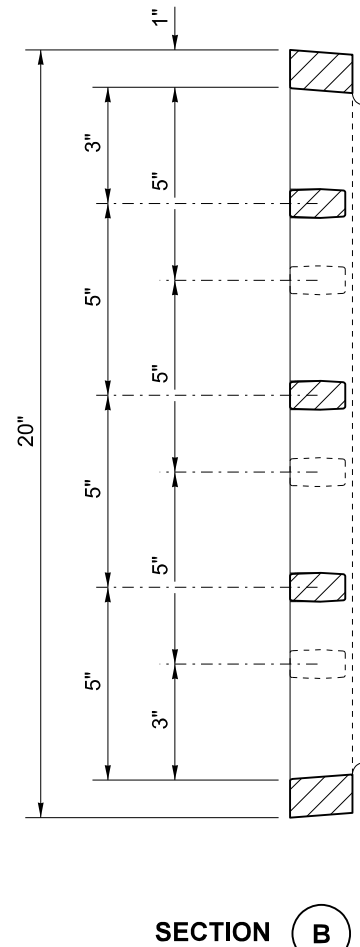
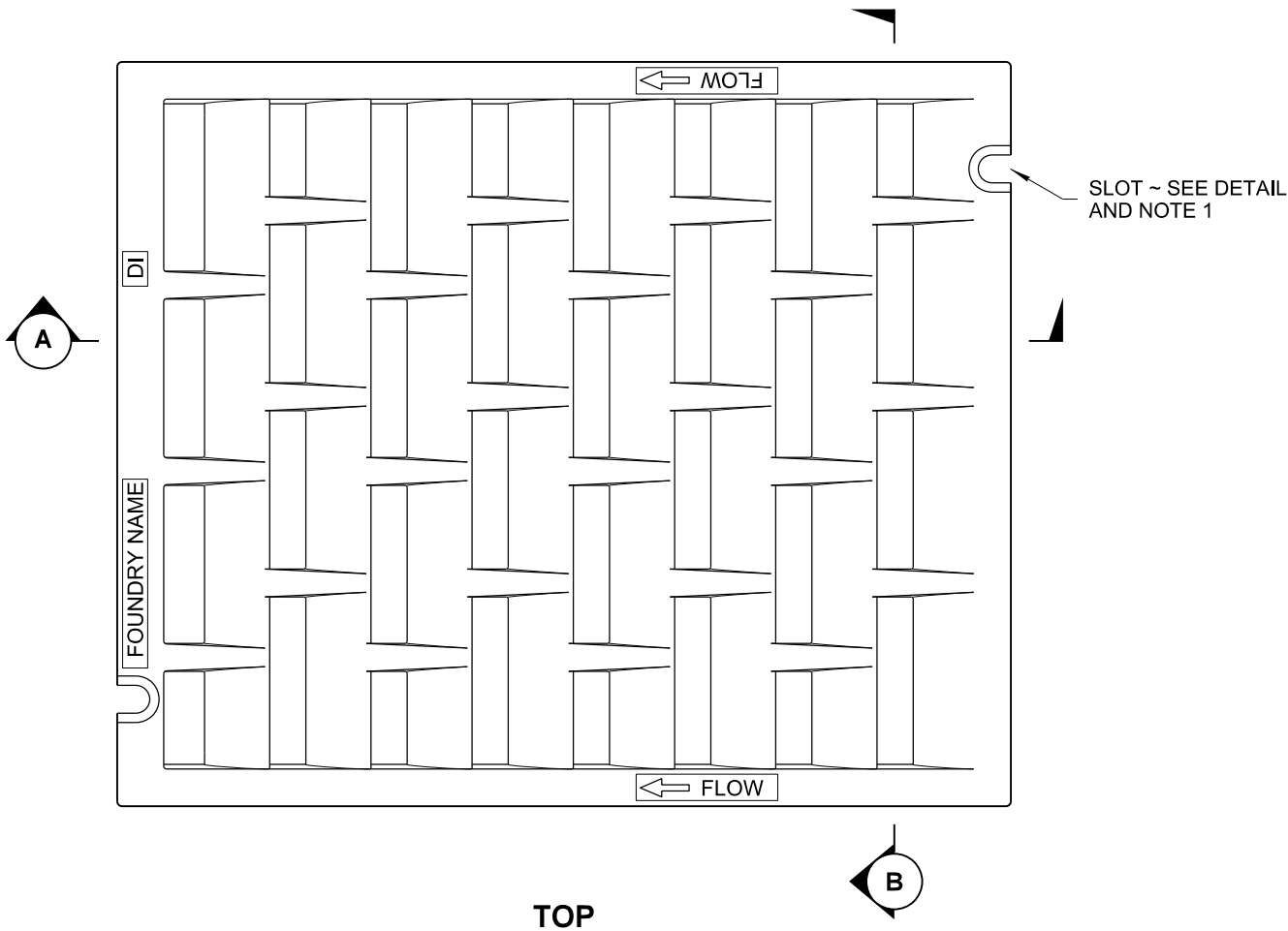
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Washington State Department of Transportation

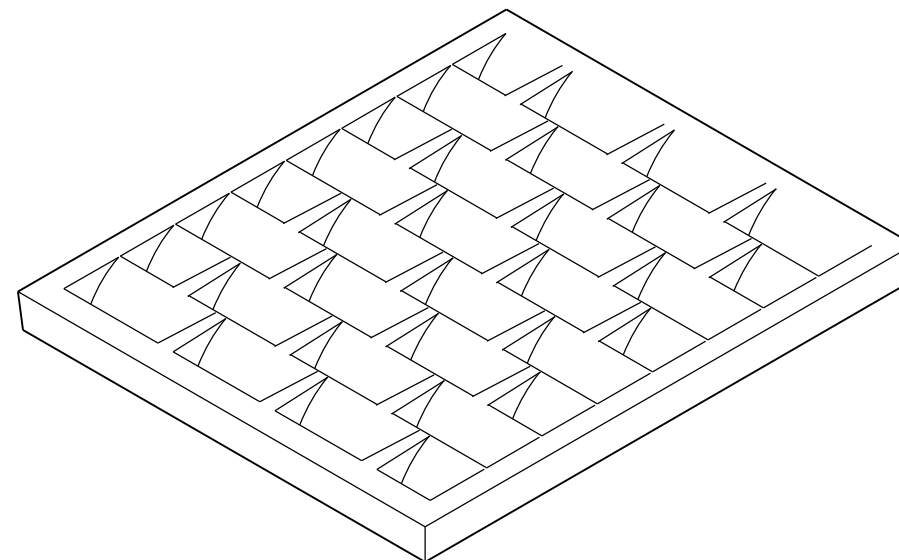
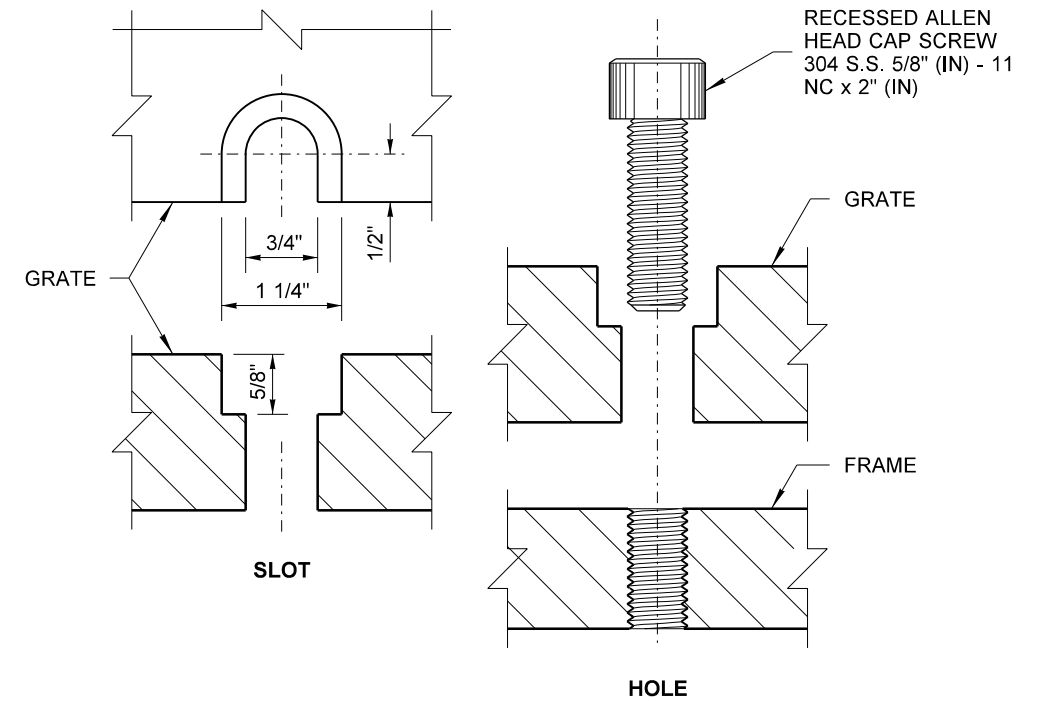


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## NOTES

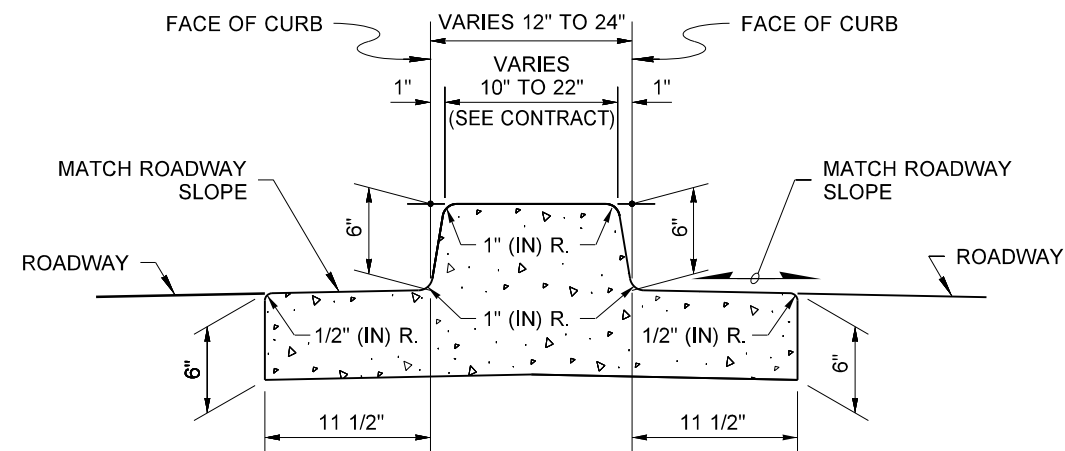
1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
2. Refer to **Standard Specification Section 9-05.15** and **9-05.15(2)** for additional requirements.
3. For frame details, see **Standard Plan B-30.10**.



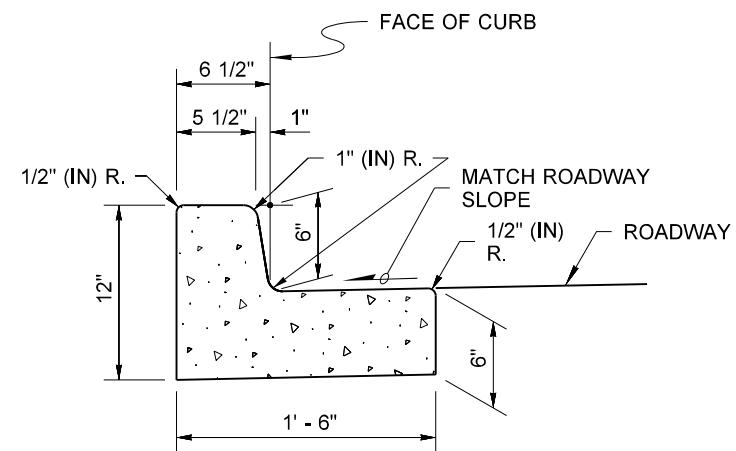
## RECTANGULAR VANED GRATE STANDARD PLAN B-30.30-03

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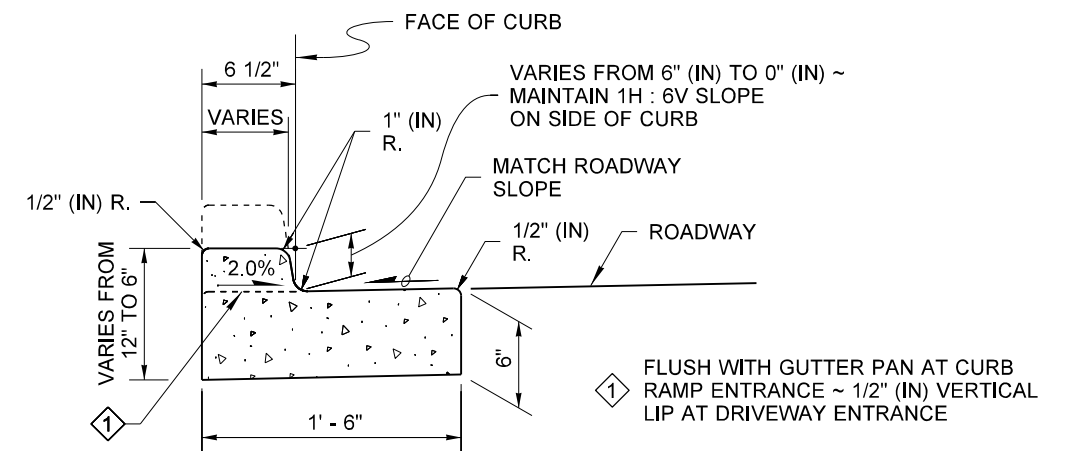
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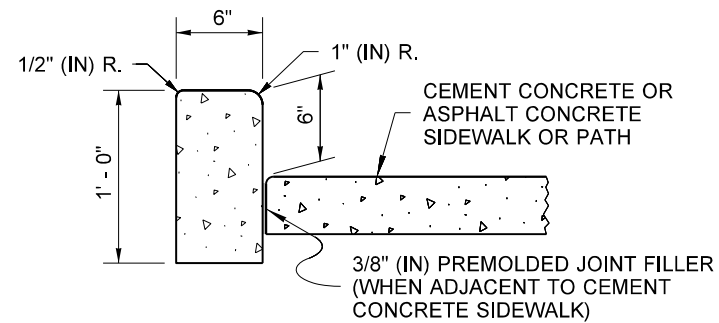
## DUAL-FACED CEMENT CONCRETE TRAFFIC CURB AND GUTTER



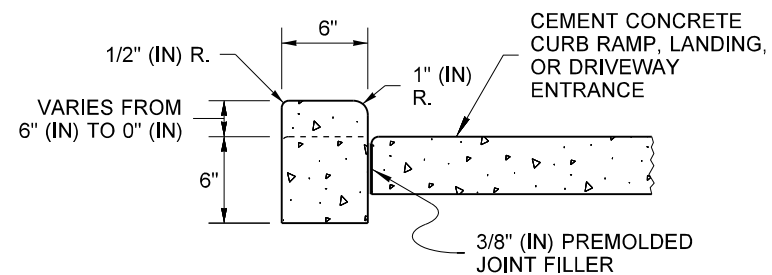
## CEMENT CONCRETE TRAFFIC CURB AND GUTTER



**DEPRESSED CURB AND GUTTER SECTION  
AT CURB RAMPS AND  
DRIVEWAY ENTRANCES**



## CEMENT CONCRETE PEDESTRIAN CURB

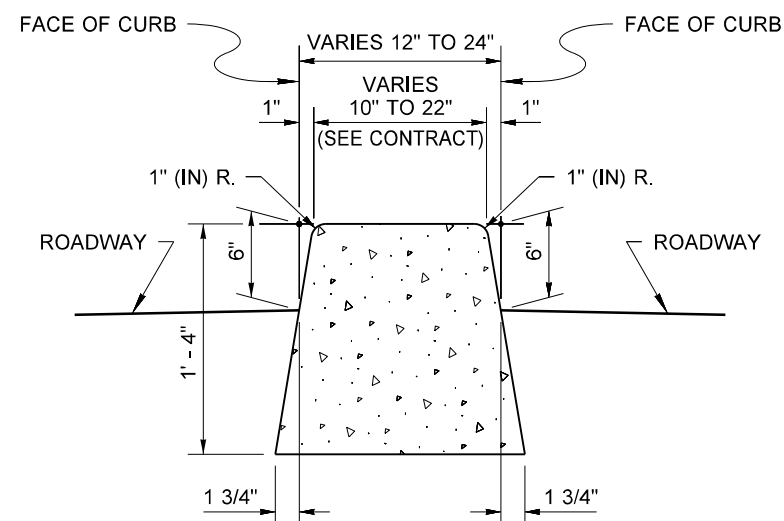


## CEMENT CONCRETE PEDESTRIAN CURB

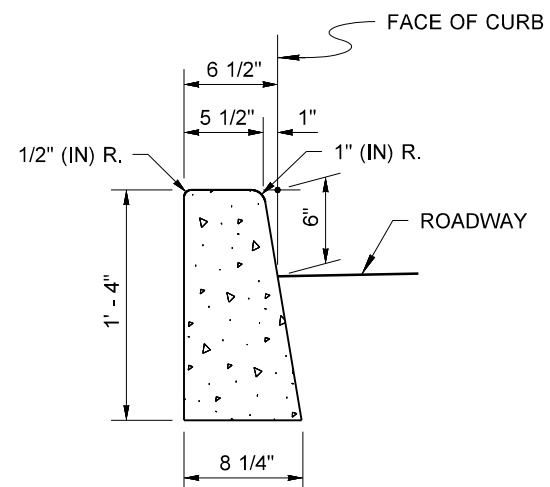
### AT CURB RAMPS, LANDINGS, AND DRIVEWAY ENTRANCES

### NOTE

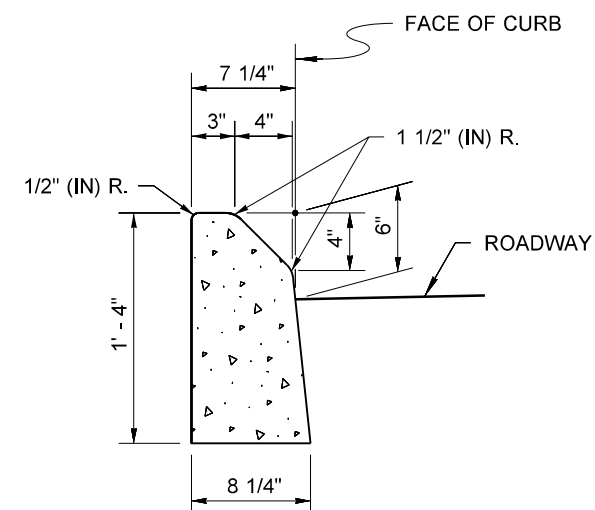
1. See **Standard Plan F-30.10** for Curb Expansion and Contraction Joint spacing. See **Standard Specification, Sections 8-04 and 9-04** for additional requirements.



## DUAL-FACED CEMENT CONCRETE TRAFFIC CURB



## CEMENT CONCRETE TRAFFIC CURB



**MOUNTABLE CEMENT  
CONCRETE TRAFFIC CURB**



Michael S  
Fleming  
**CEMENT CONCRETE CURBS**

## STANDARD PLAN F-10.12-04

SHEET 1 OF 1 SHEET

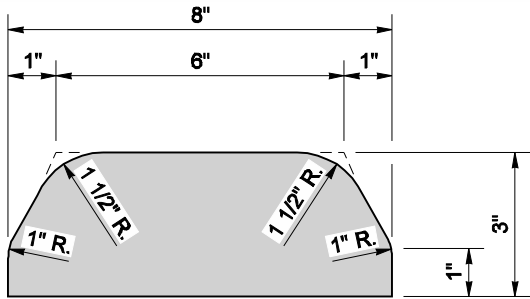
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STATE DESIGN ENGINEER

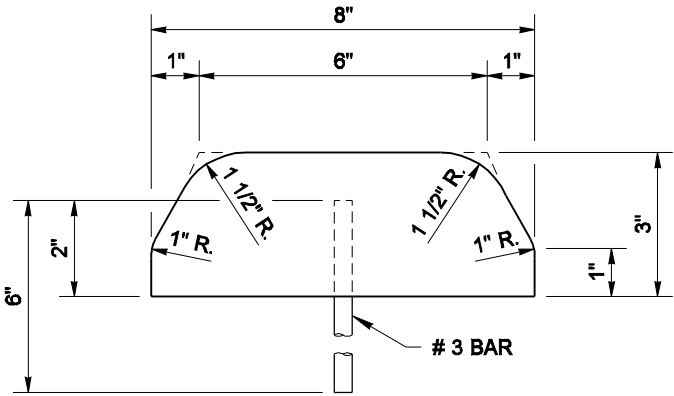


Washington State Department of Transportation

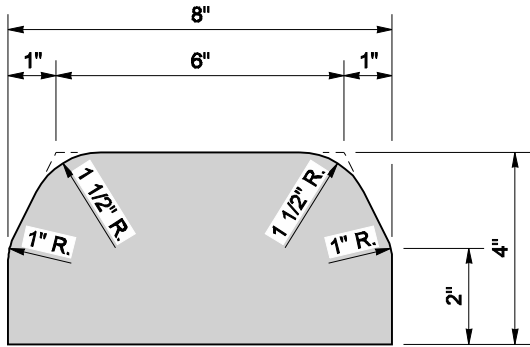
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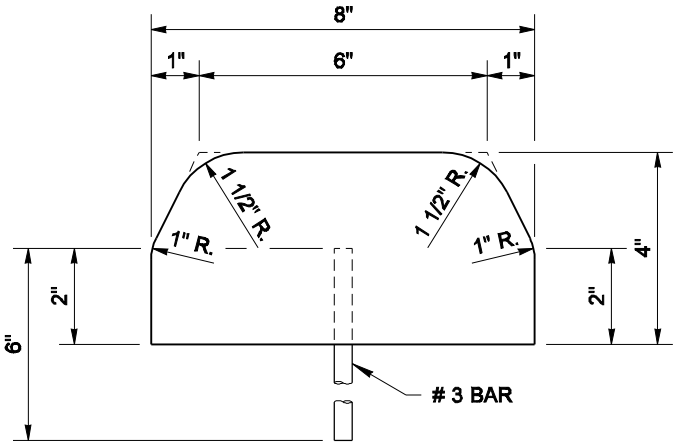
**TYPE 1**  
(HOT MIX ASPHALT)



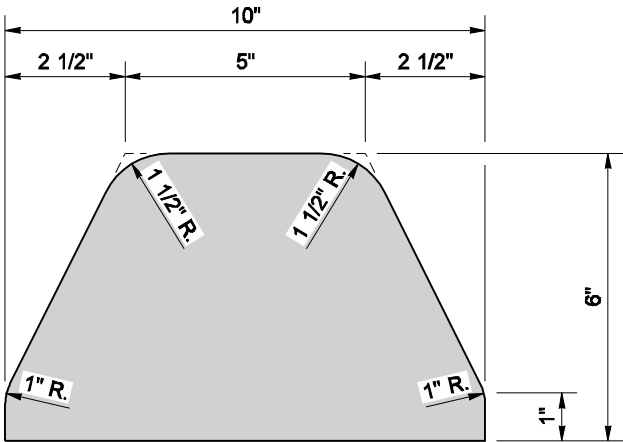
**TYPE 4**  
(CEMENT CONCRETE)



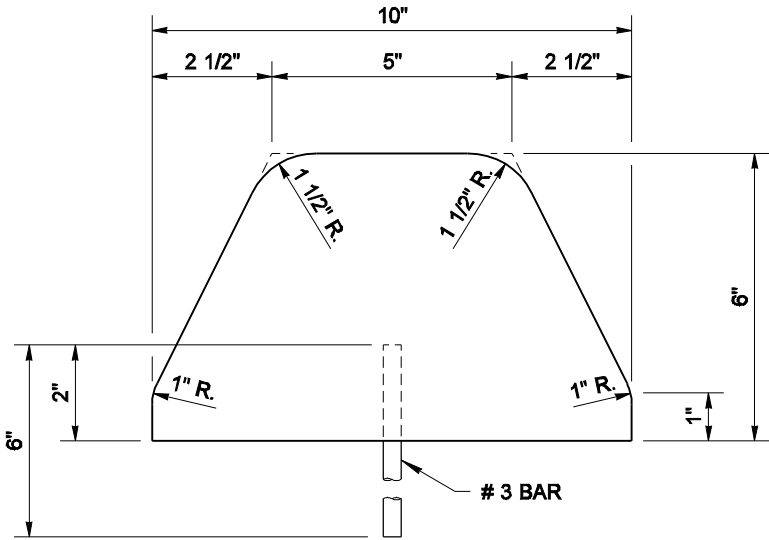
**TYPE 2**  
(HOT MIX ASPHALT)



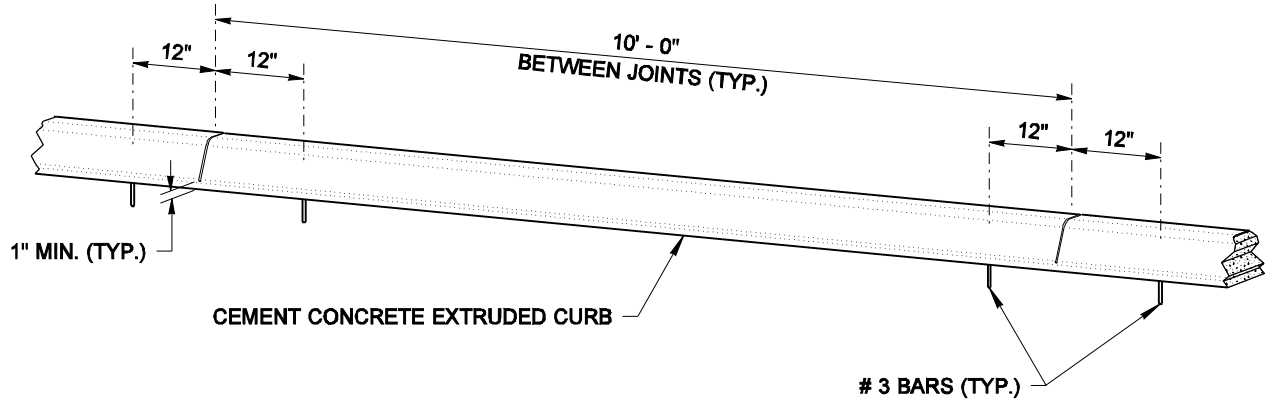
**TYPE 5**  
(CEMENT CONCRETE)



**TYPE 3**  
(HOT MIX ASPHALT)



**TYPE 6**  
(CEMENT CONCRETE)



**SPACING OF ANCHOR BARS**  
(FOR TYPES 4, 5, AND 6)

**NOTE**  
JOINTS MAY BE FORMED DURING INSTALLATION USING  
A RIGID DIVIDER OR SAWCUT AFTER CONCRETE CURES  
TO MINIMUM STRENGTH.



EXPIRES AUGUST 26, 2007

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT  
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THE ENGINEER AND ARCHITECT OR DESIGNER IS RESPONSIBLE FOR  
FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

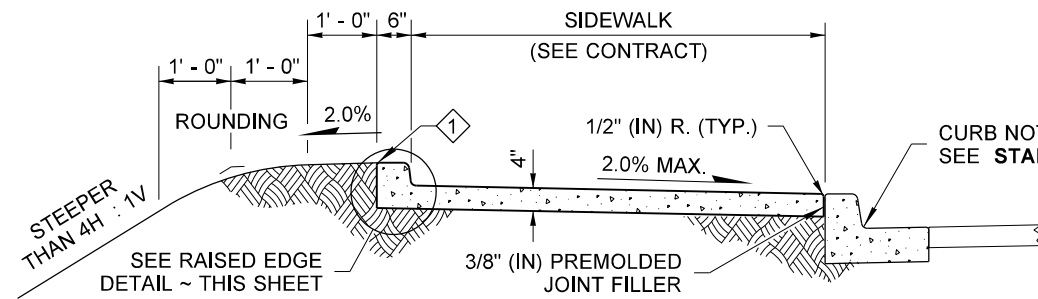
**EXTRUDED CURB**

**STANDARD PLAN F-10.42-00**

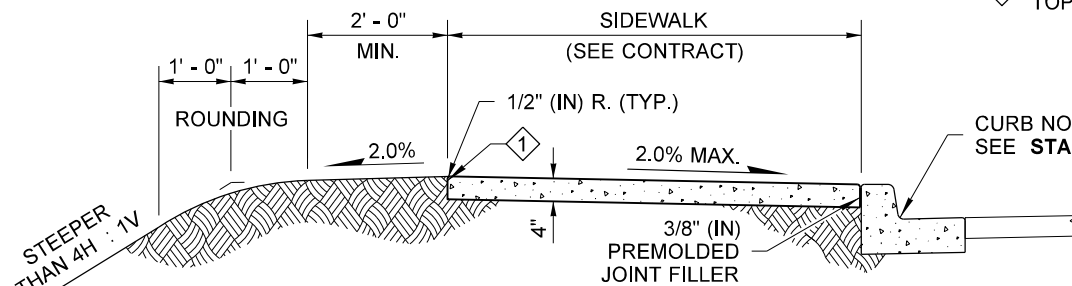
SHEET 1 OF 1 SHEET

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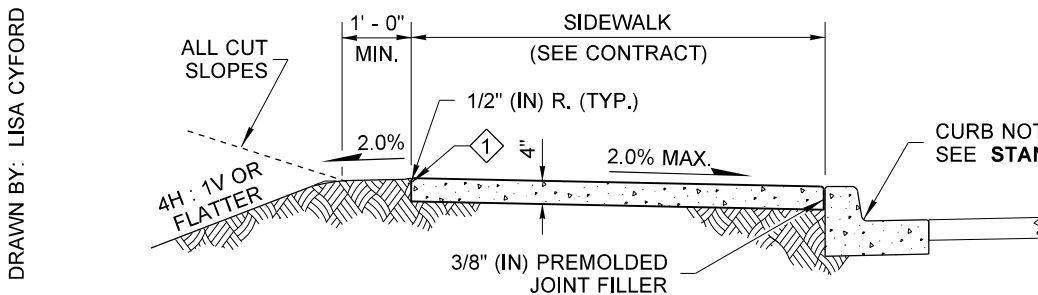
**Ken L. Smith** 01-23-07  
STATE DESIGN ENGINEER DATE  
Washington State Department of Transportation



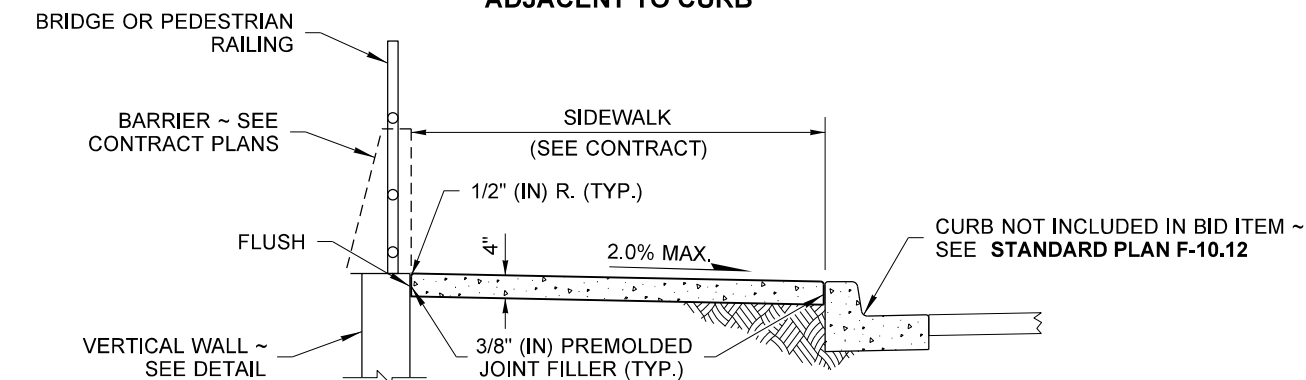
**WITH RAISED EDGE**



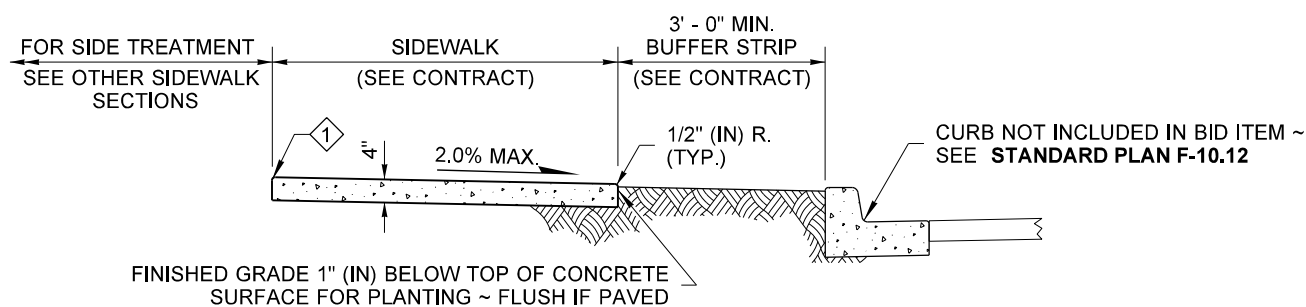
**ADJACENT TO CURB  
(STEEP FILL SLOPES)**



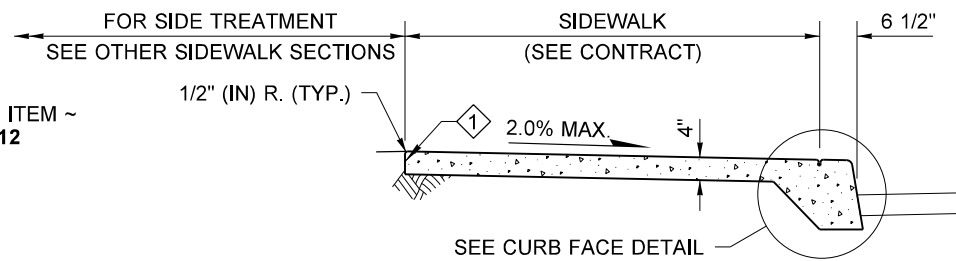
**ADJACENT TO CURB**



**ADJACENT TO CURB AND RAILING OR WALL**



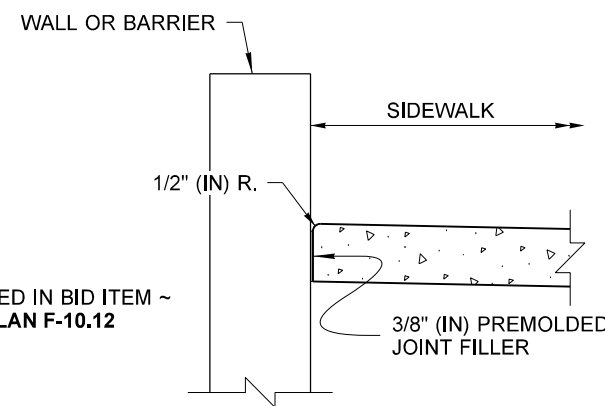
**ADJACENT TO BUFFER STRIP**



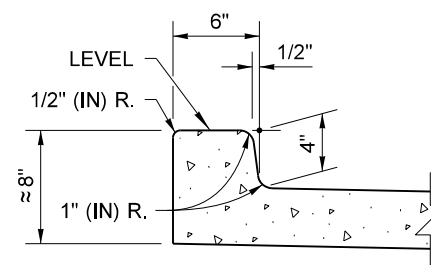
**MONOLITHIC CEMENT CONCRETE  
CURB AND SIDEWALK**

**NOTE**

1. Gratings, Access Covers, Junction Boxes, Cable Vaults, Pull Boxes and other appurtenances within the sidewalk must have slip resistant surfaces, be flush with surface, and match grade of the sidewalk.

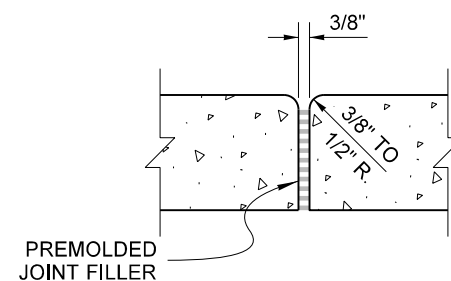


**SIDEWALK ADJACENT TO WALL DETAIL**

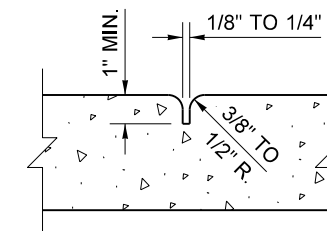


**RAISED EDGE DETAIL**

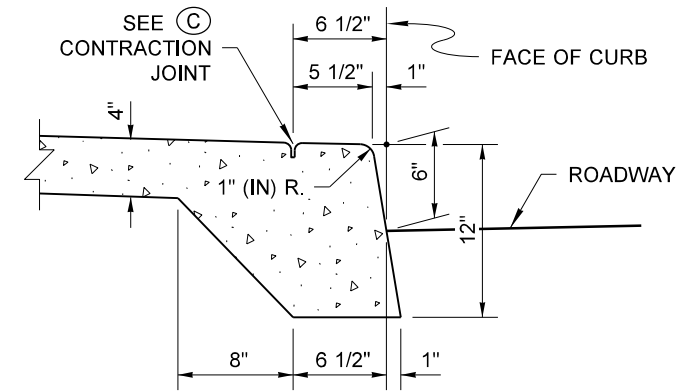
EXTEND SIDEWALK TRANSVERSE JOINTS TO INCLUDE RAISED EDGE



**EXPANSION JOINT**

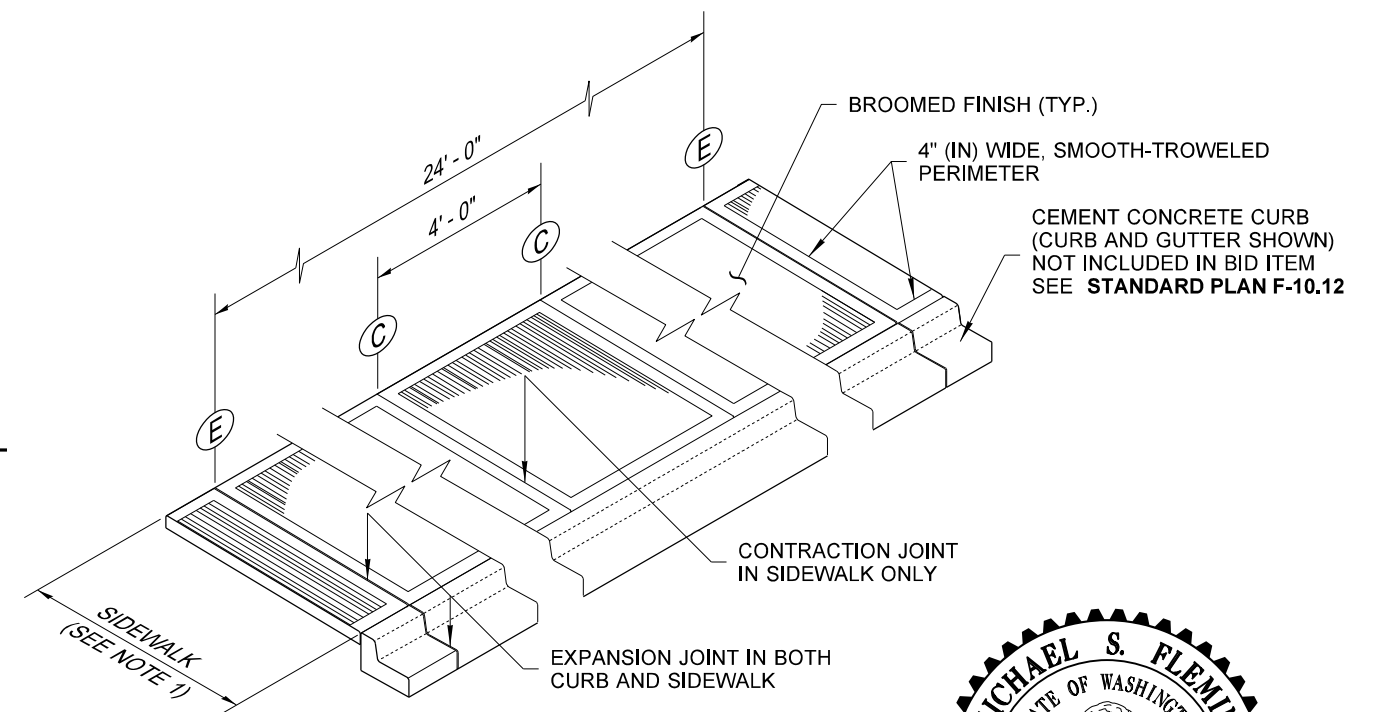


**CONTRACTION JOINT**



**CURB FACE DETAIL**

EXTEND SIDEWALK TRANSVERSE EXPANSION JOINTS TO INCLUDE CURB (FULL DEPTH)



**ISOMETRIC VIEW  
JOINT AND FINISH  
DETAIL**



Michael S  
Fleming

Digitally signed by Michael S  
Fleming  
Date: 2020.09.24 07:40:16 -07'00'

**CEMENT CONCRETE  
SIDEWALK**

**STANDARD PLAN F-30.10-04**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Date: 2020.09.25

15:43:50 -07'00'

STATE DESIGN ENGINEER

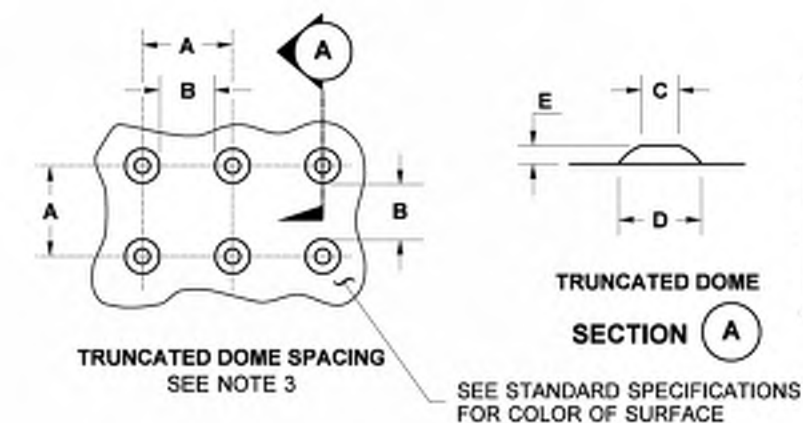


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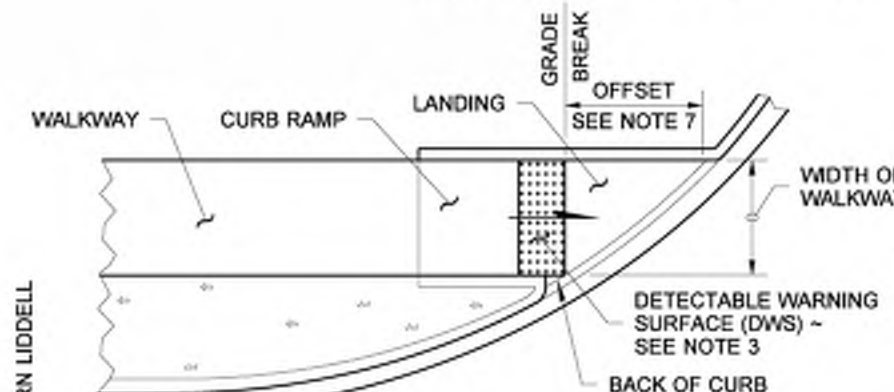
DRAWN BY: LISA CYFORD



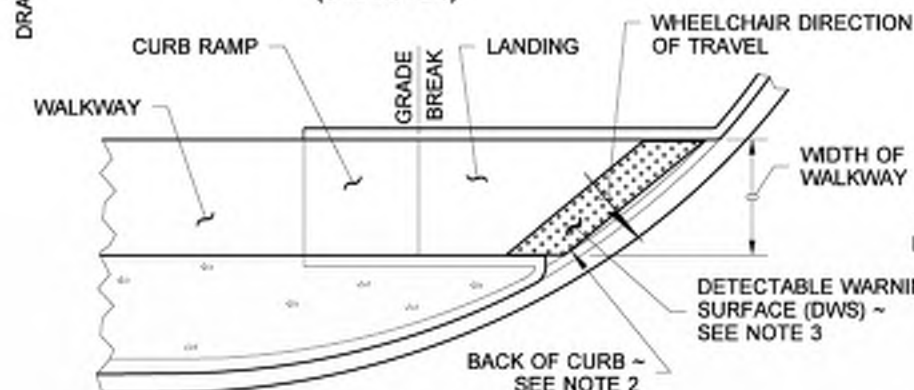
DRAWN BY: FERN LIDDELL



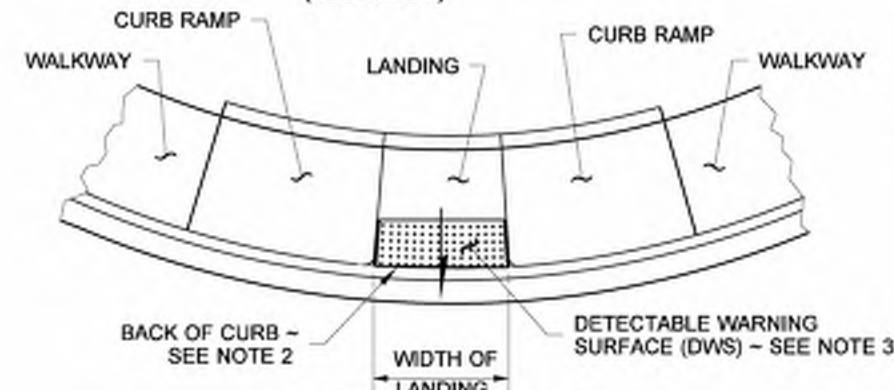
### TRUNCATED DOME DETAILS



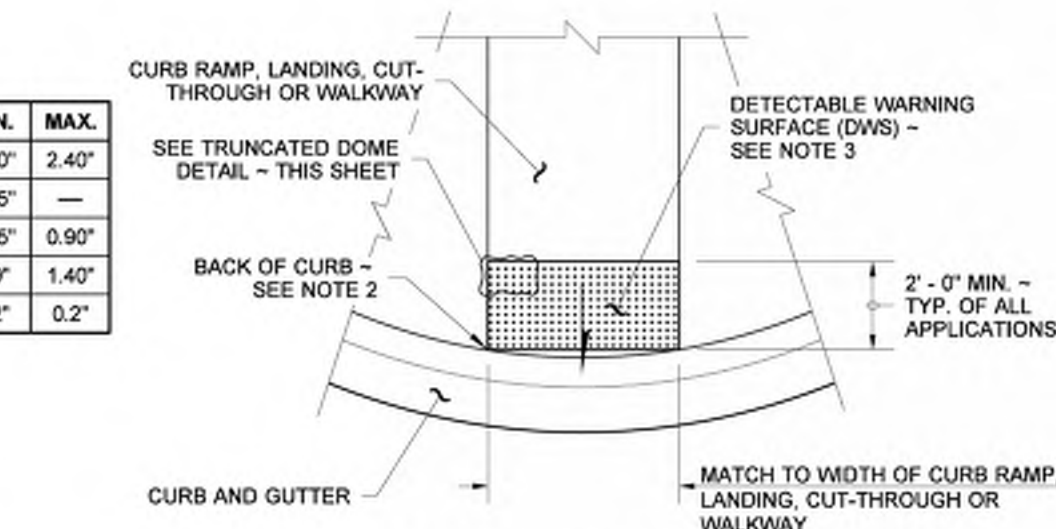
**SINGLE DIRECTION CURB RAMP**  
(GRADE BREAK BETWEEN CURB AND LANDING ≤ 5 FT. FROM BACK OF CURB)  
(SEE NOTE 5)



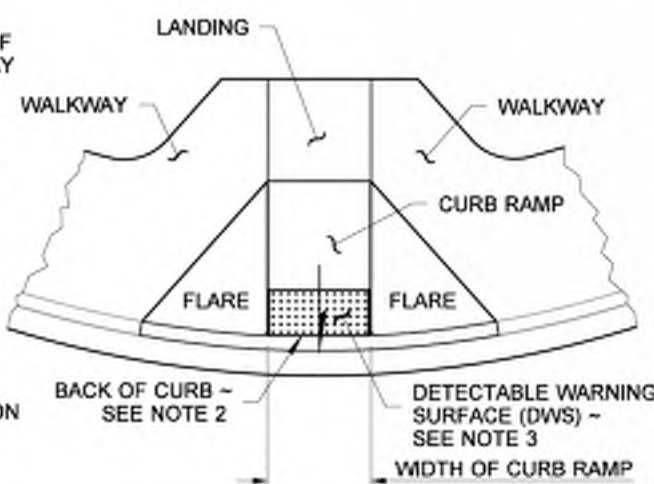
**SINGLE DIRECTION CURB RAMP**  
(GRADE BREAK BETWEEN CURB AND LANDING > 5 FT. FROM BACK OF CURB)  
(SEE NOTE 5)



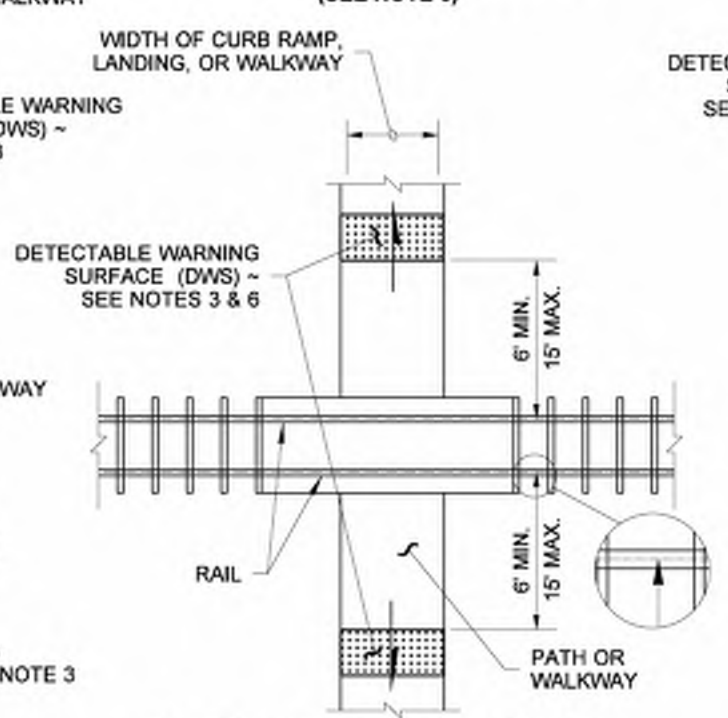
**PARALLEL CURB RAMP**  
(SEE NOTE 6)



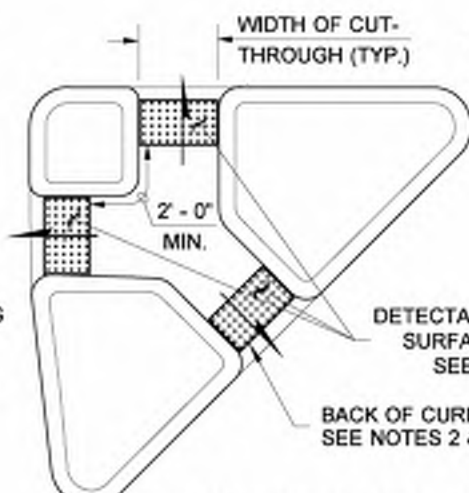
### DETECTABLE WARNING SURFACE DETAIL



**PERPENDICULAR CURB RAMP**  
(SEE NOTE 6)



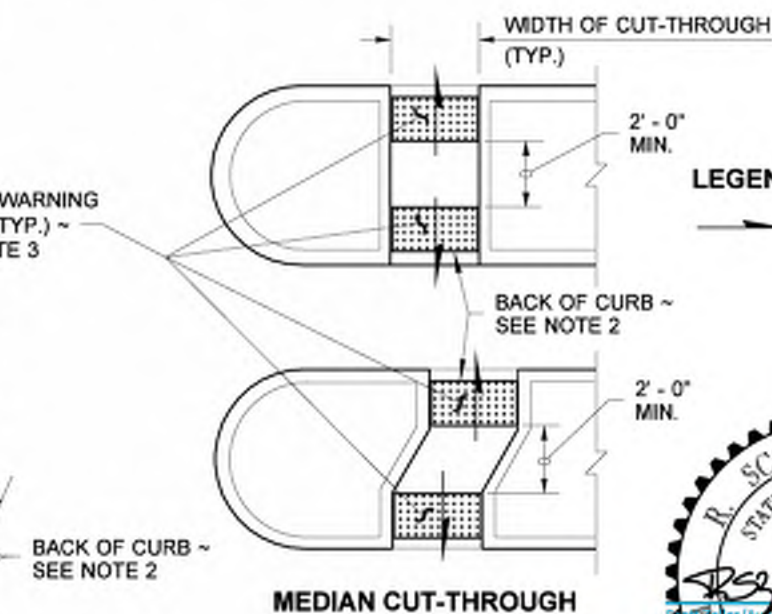
**PEDESTRIAN RAILROAD CROSSING**



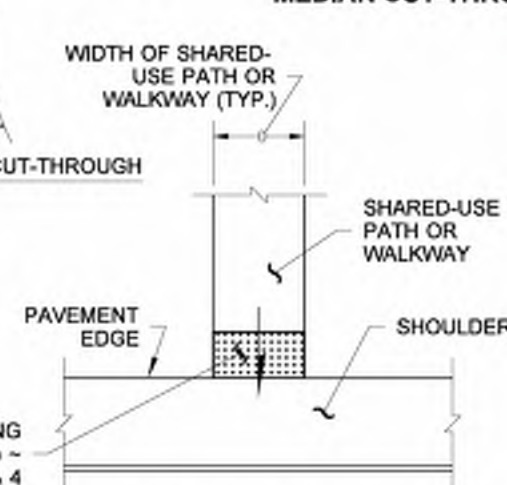
**ISLAND CUT-THROUGH**



**ROUNDABOUT SPLITTER ISLAND**



**MEDIAN CUT-THROUGH**



**SHARED-USE PATH CONNECTION**

### NOTES

1. Permanent Detectable Warning Surfaces (DWS) shall extend the full width of the curb ramp, landing, or other roadway entrance as applicable. Exception: If the Manufacturer of the DWS requires a concrete border around the DWS, a variance of up to 2" (in) on each side of the DWS is permitted.
2. Permanent Detectable Warning Surfaces (DWS) shall be placed on a minimum 4" (in) thick concrete pad. The DWS panel shall be placed adjacent to the back of the curb and with no more than a 2" (in) gap between the DWS and the back of the curb measured at the center of the DWS panel. Exception: If the Manufacturer of the selected DWS requires a concrete border around the DWS, a variance of up to 2" (in) from the back of the curb is permitted (measured at the leading corners of the DWS panel).
3. The rows of truncated domes shall be aligned to be parallel to the direction of travel, and perpendicular to the grade break at the back of curb.
4. If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
5. See **Standard Plans** for sidewalk and curb ramp details.
6. If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail crossing.
7. When the grade break between the curb ramp and the landing is less than or equal to 5 ft. from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp directly above the grade break.
8. Glued or stick down Detectable Warning Surfaces are allowed only for temporary work zone applications.

### LEGEND

→ DIRECTION OF TRAVEL



Aug 30, 2021

### DETECTABLE WARNING SURFACE

### STANDARD PLAN F-45.10-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

*[Signature]*

Aug 31, 2021

STATE DESIGN ENGINEER

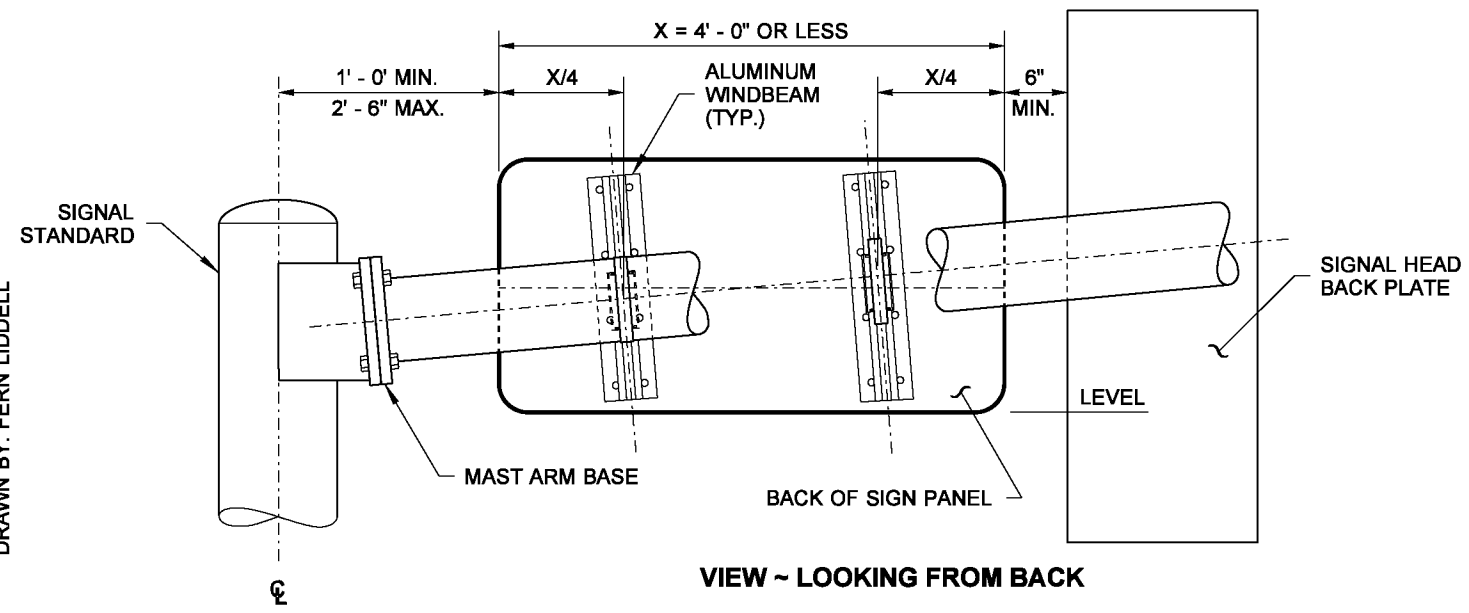


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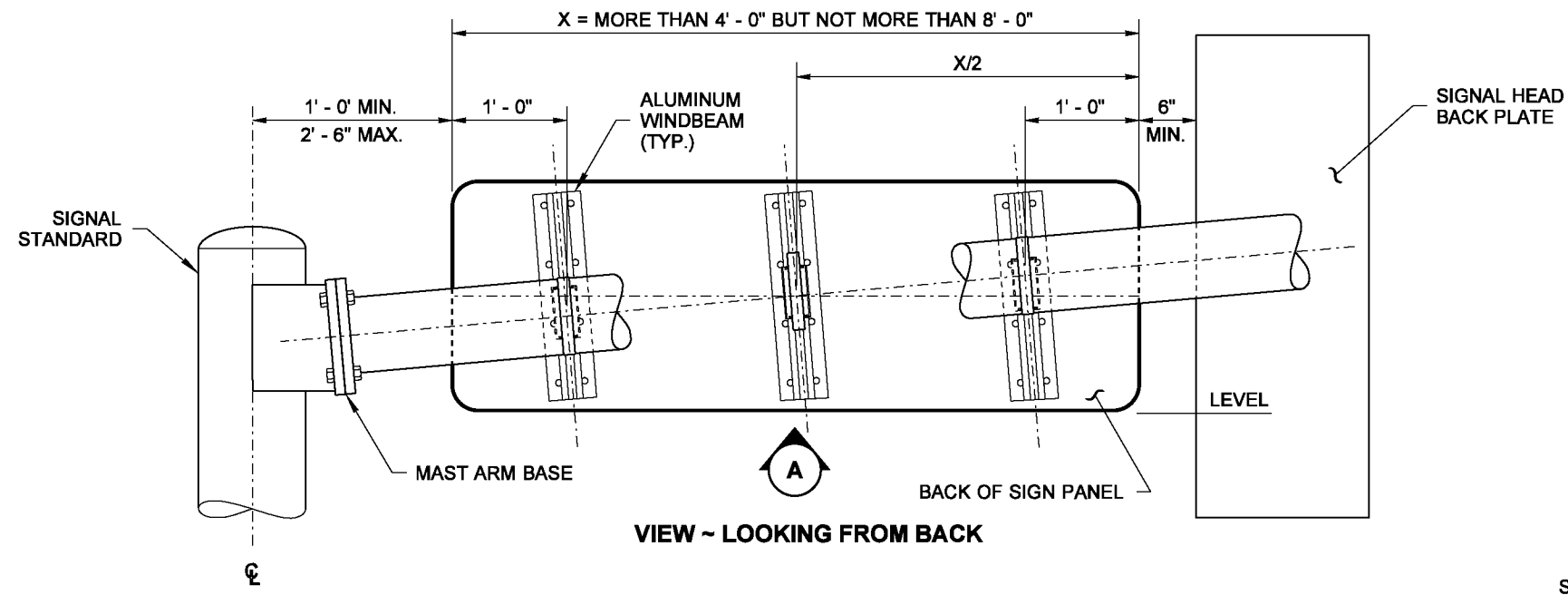
### PLACEMENT GUIDELINES



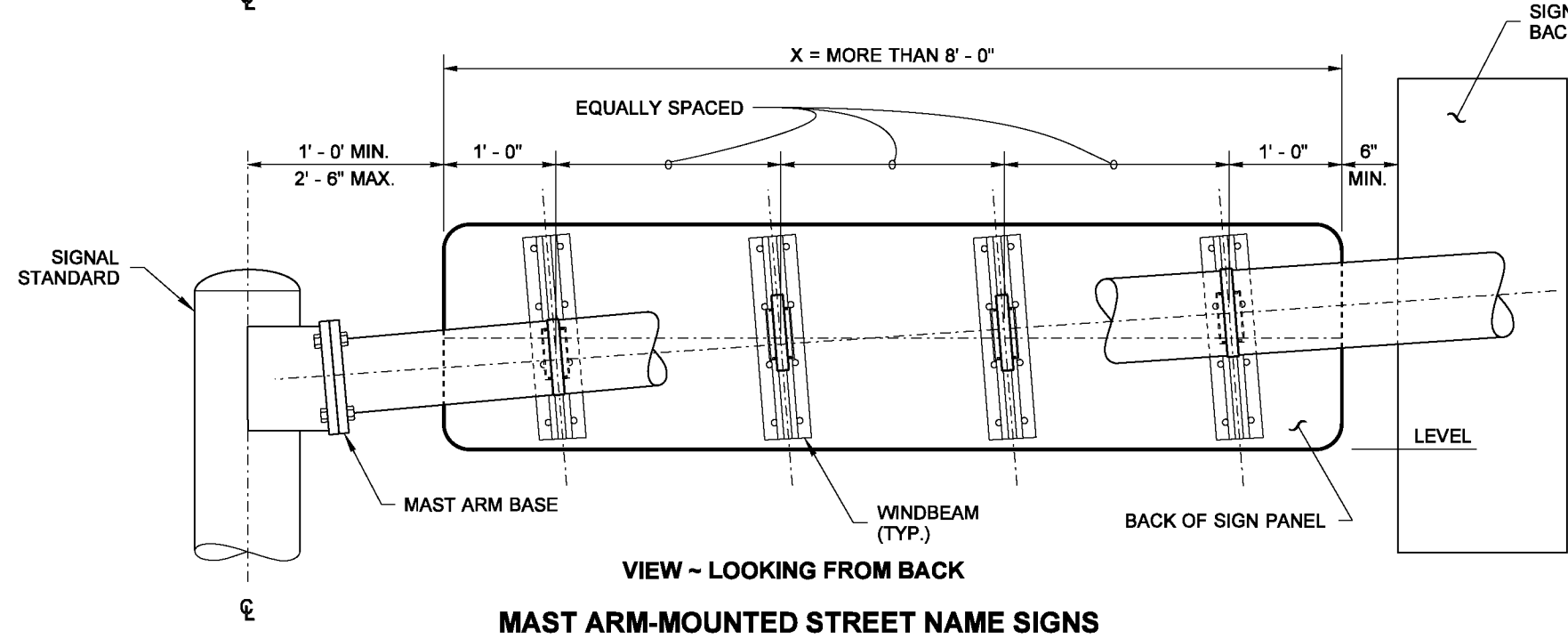
DRAWN BY: FERN LIDDELL



VIEW ~ LOOKING FROM BACK

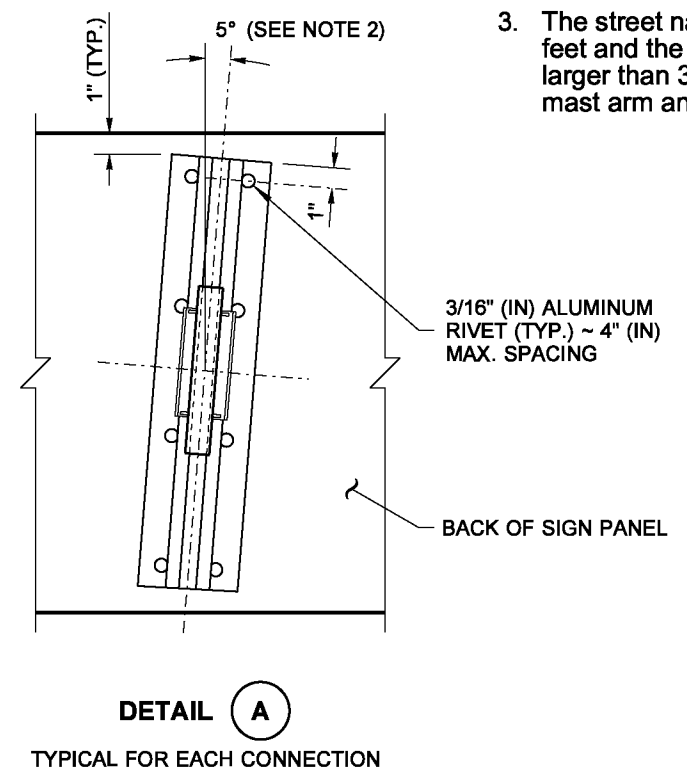


VIEW ~ LOOKING FROM BACK



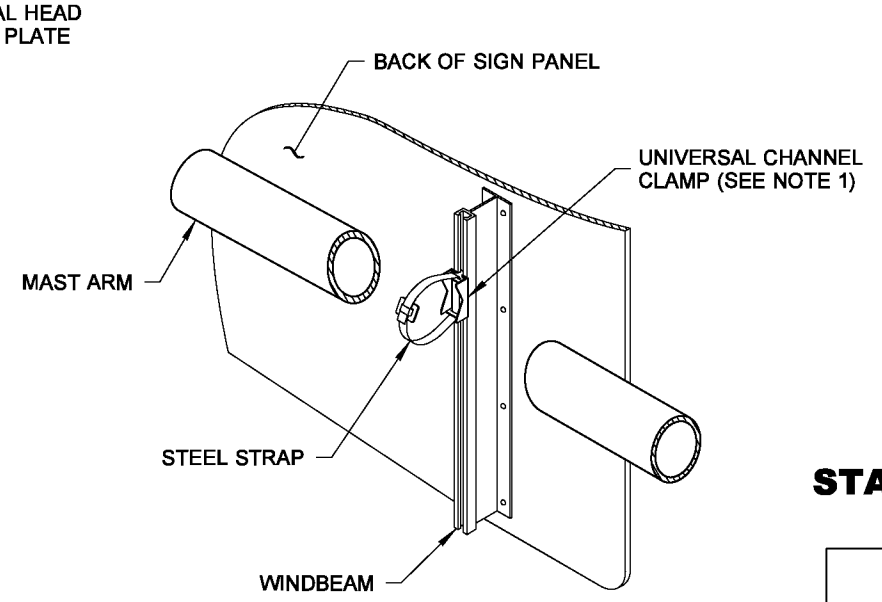
VIEW ~ LOOKING FROM BACK

MAST ARM-MOUNTED STREET NAME SIGNS



DETAIL A

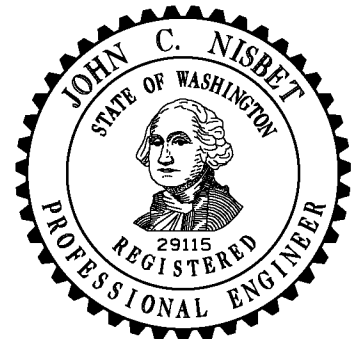
TYPICAL FOR EACH CONNECTION



TYPICAL MAST ARM INSTALLATION

NOTES

1. Mounting brackets with steel straps shall be a stainless steel band and buckle system product or an approved equal. Mounting brackets shall be universal channel clamps; steel straps shall be 3/4" (in) wide and 0.030" (in) thick.
2. All signs installed on mast arms or standards (poles) require windbeams. All signs shall be installed with horizontal edges level. A skewed windbeam is required only when the sign is mounted within 12" (in) of the mast arm base (see Detail "A").
3. The street name sign shall be a maximum of 36 square feet and the sign height is a maximum of 3' (ft); signs larger than 36 square feet require a special design mast arm and signal pole.

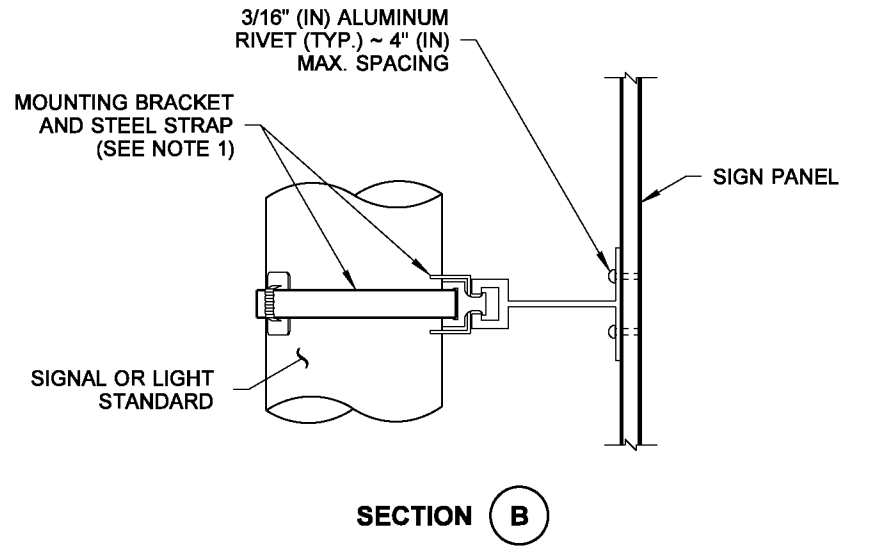
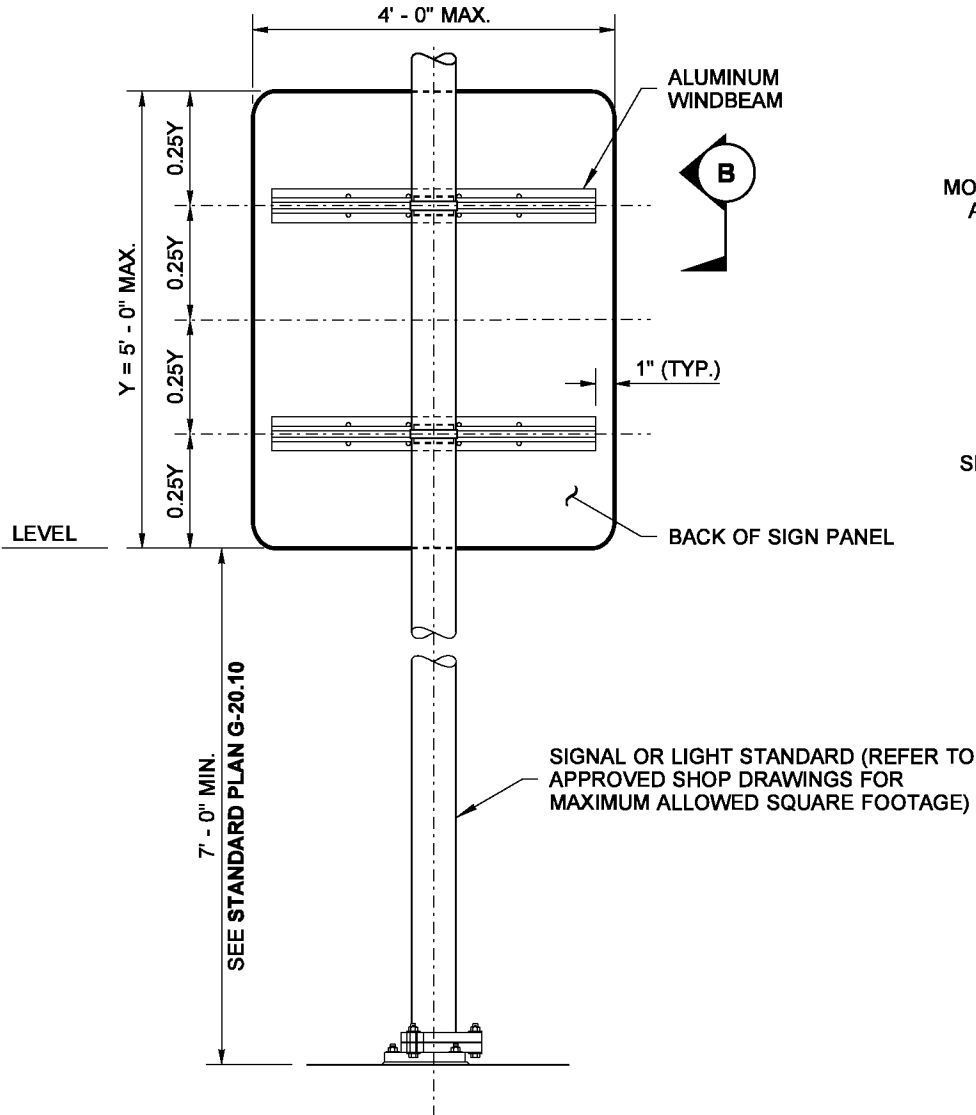
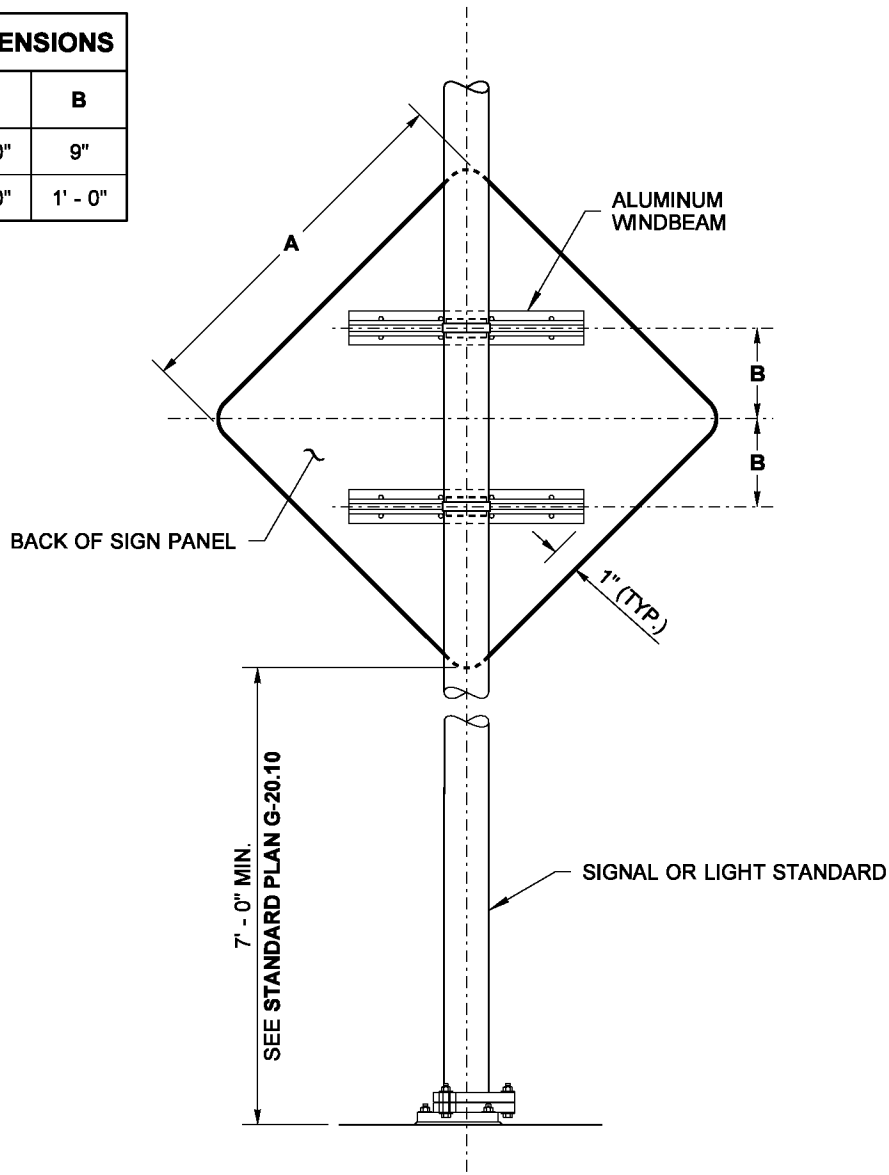


**SIGN INSTALLATION  
ON SIGNAL AND  
LIGHT STANDARDS  
STANDARD PLAN G-30.10-04**

SHEET 1 OF 2 SHEETS

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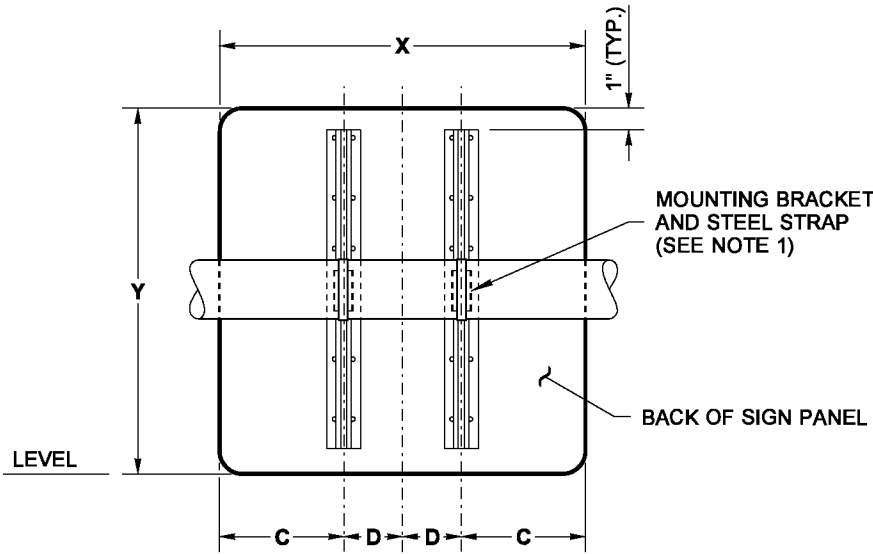
DIMENSIONS	
A	B
3' - 0"	9"
4' - 0"	1' - 0"



SIGN INSTALLATION ON SIGNAL OR LIGHT STANDARD

DIMENSIONS			
X	Y	C	D
3' - 0"	2' - 6"	1' - 0"	6"
3' - 0"	3' - 0"	1' - 0"	6"
3' - 0"	4' - 0"	1' - 3"	9"
4' - 0"	2' - 6"	1' - 3"	9"

**NOTE:**  
Any Lane Use Sign greater than 7.5 sq ft. requires a Special Design Mast Arm and Signal Pole.



MAST ARM-MOUNTED LANE USE SIGNS

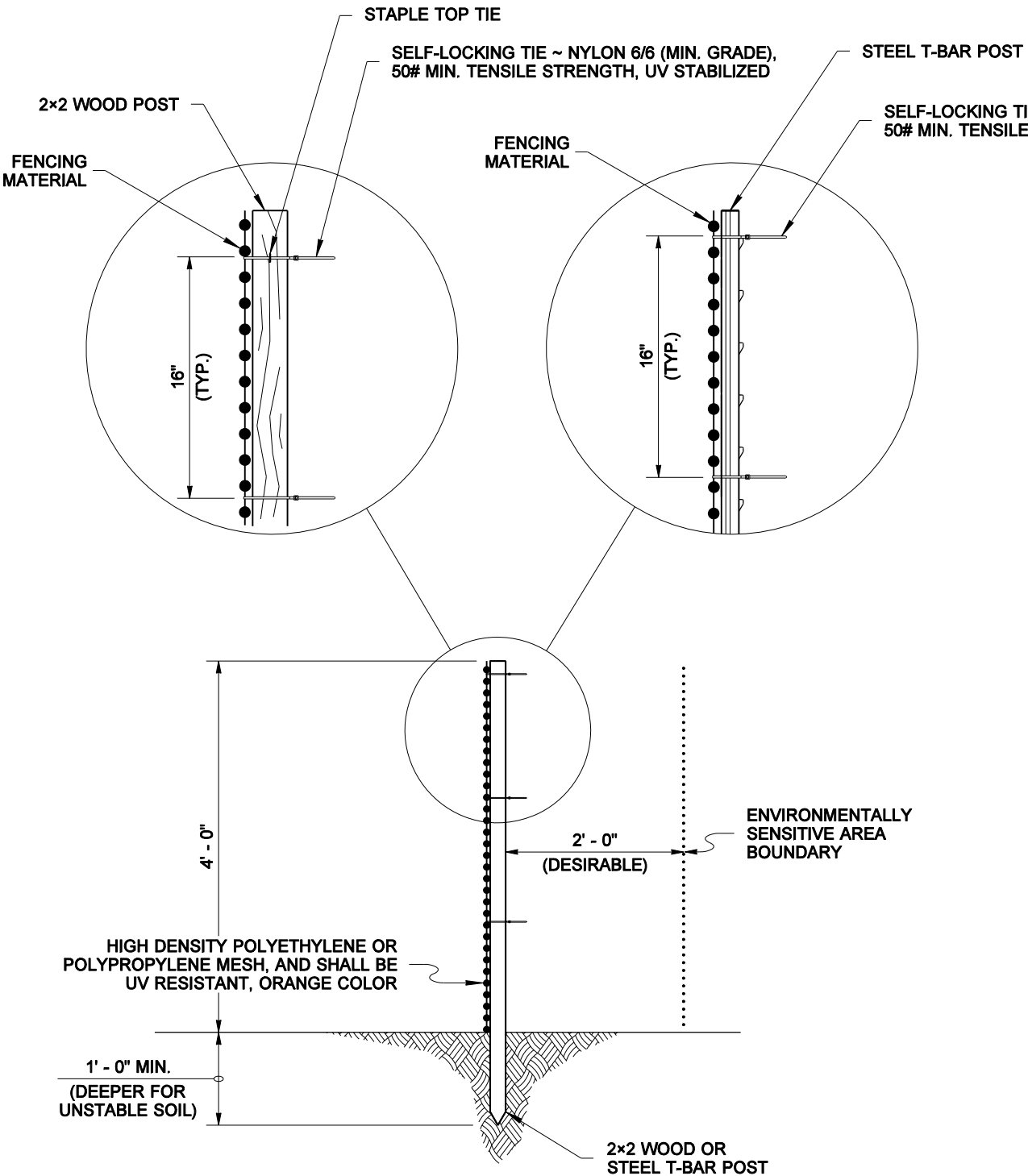


**SIGN INSTALLATION  
ON SIGNAL AND  
LIGHT STANDARDS  
STANDARD PLAN G-30.10-04**

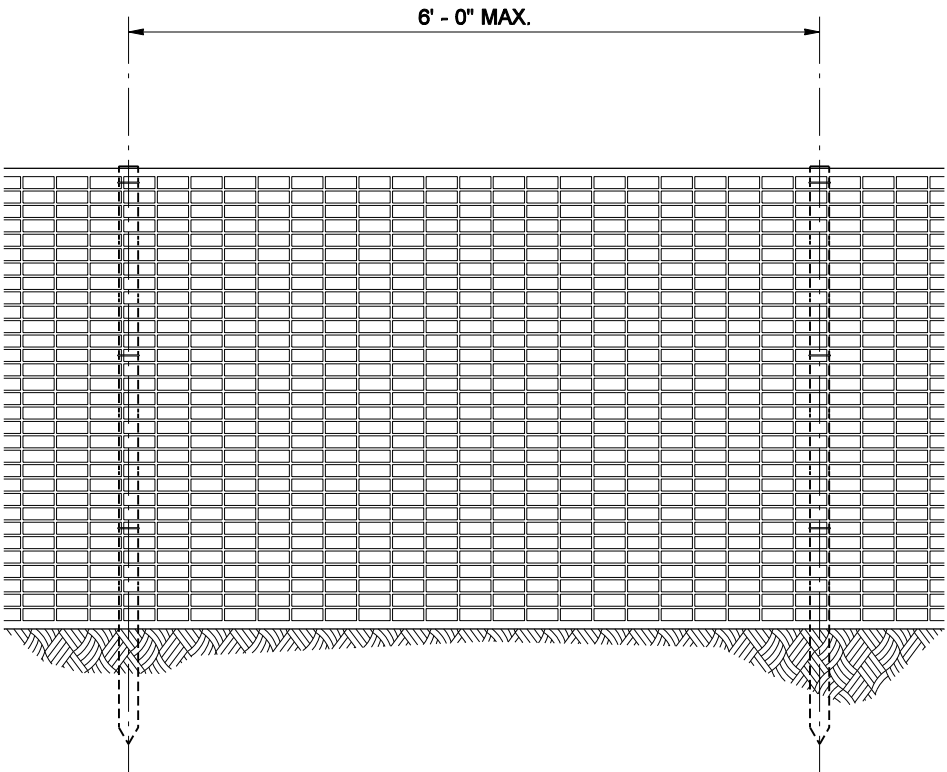
SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

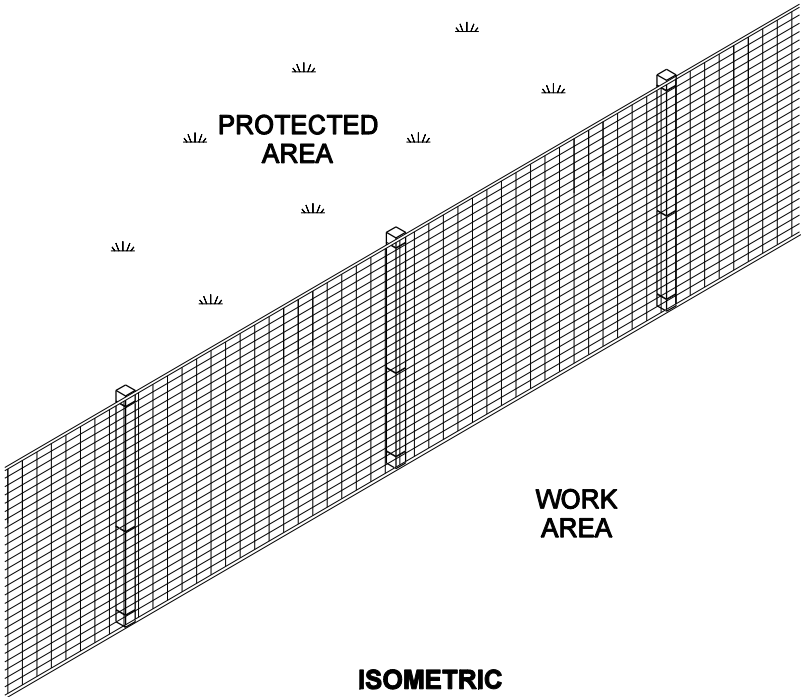
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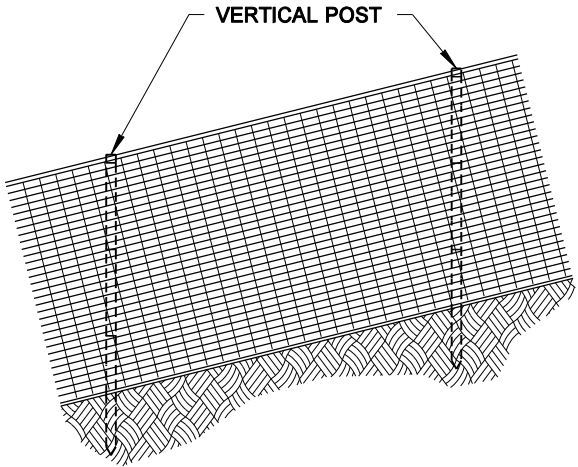
TYPICAL SECTION



ELEVATION



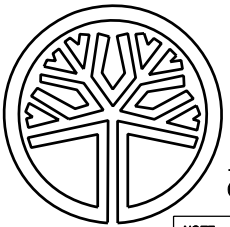
ISOMETRIC



ELEVATION  
FENCE ON SLOPE

NOTE

1. Post shall have sufficient strength and durability to support the fence through the life of the project.



STATE OF  
WASHINGTON  
REGISTERED  
LANDSCAPE ARCHITECT

MARK W. MAURER  
CERTIFICATE NO. 000598

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HIGH VISIBILITY FENCE

STANDARD PLAN I-10.10-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III

STATE DESIGN ENGINEER

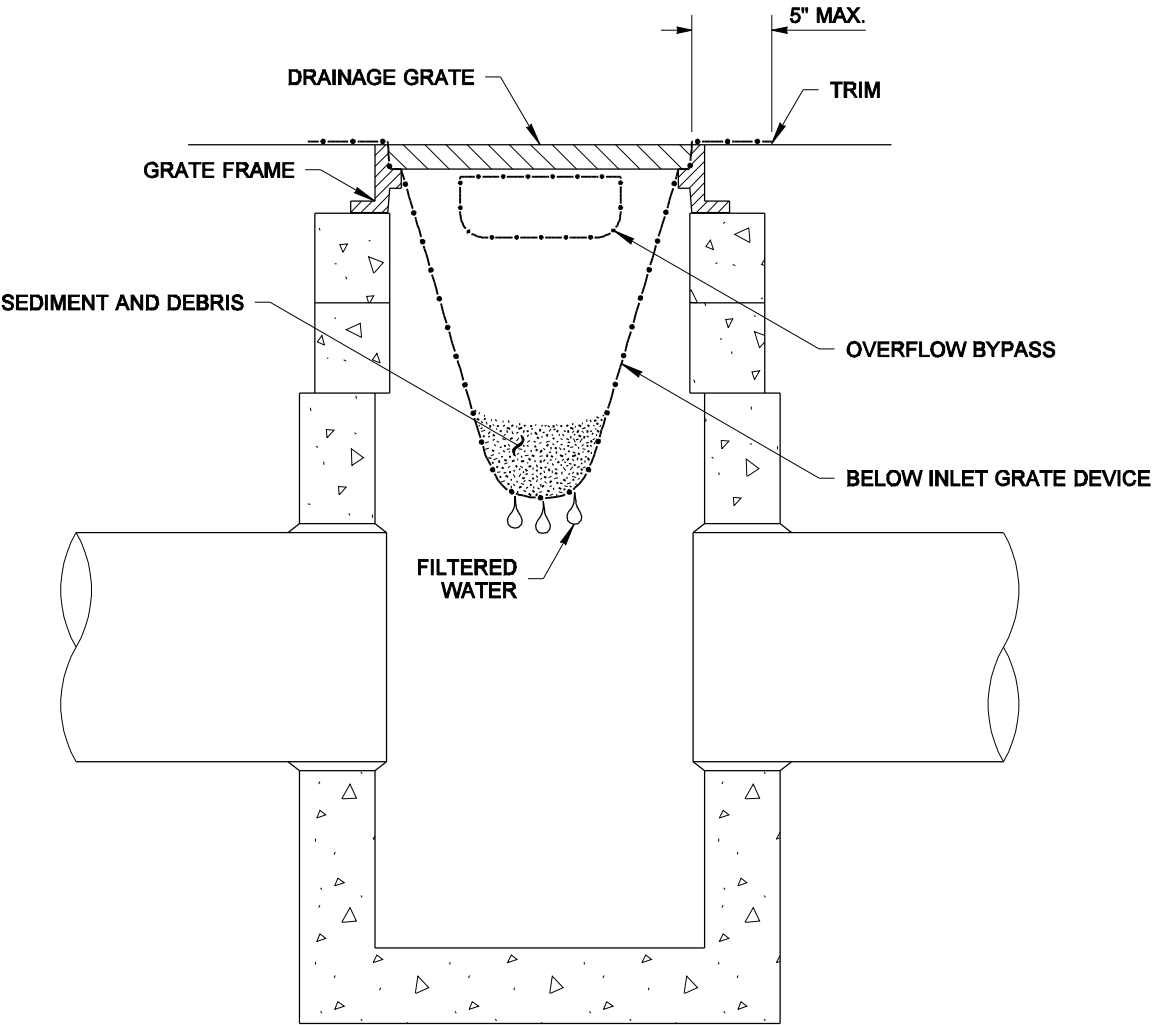
08-11-09

DATE

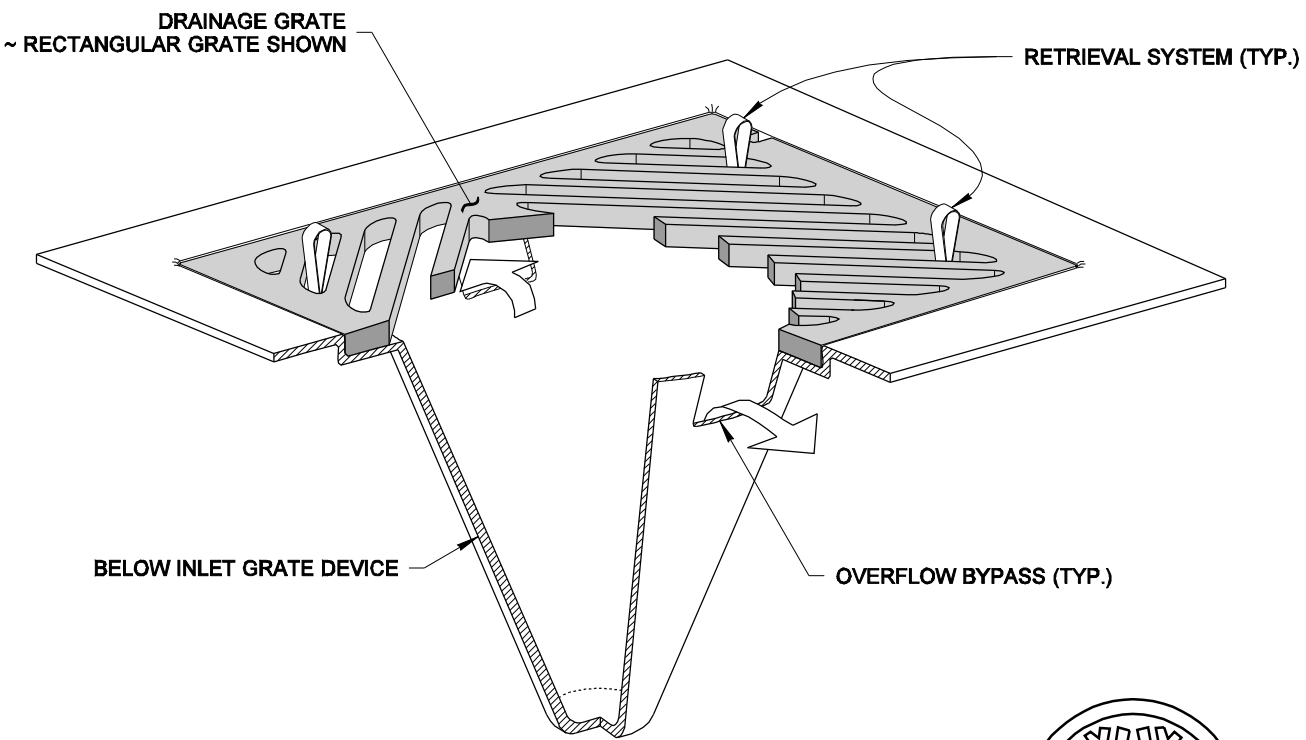


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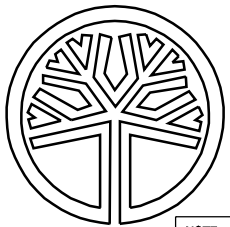
**SECTION VIEW**  
NOT TO SCALE



**ISOMETRIC VIEW**

**NOTES**

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



STATE OF  
WASHINGTON  
REGISTERED  
LANDSCAPE ARCHITECT

MARK W. MAURER  
CERTIFICATE NO. 000598

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**STORM DRAIN  
INLET PROTECTION  
STANDARD PLAN I-40.20-00**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

**Pasco Bakotich III**

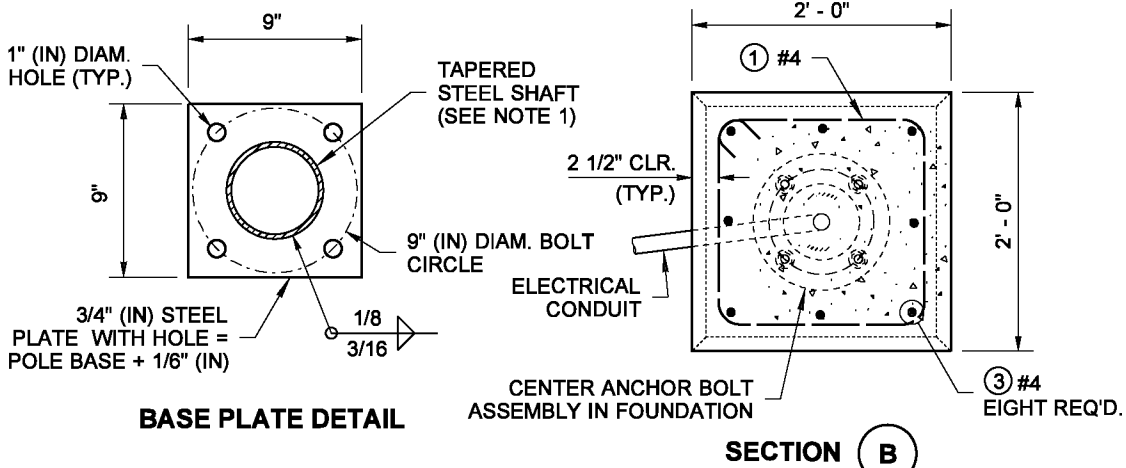
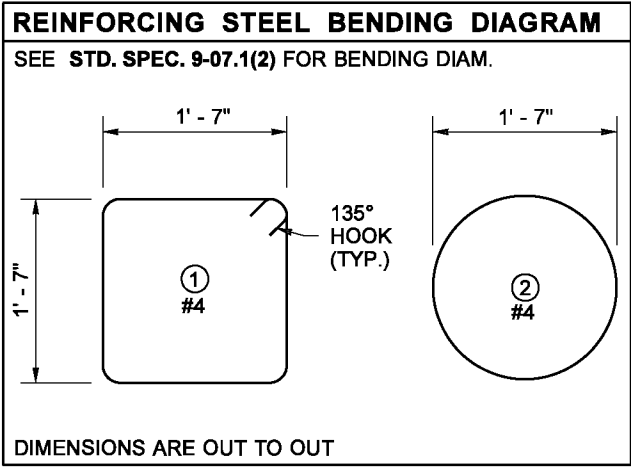
STATE DESIGN ENGINEER

**09-20-07**

DATE

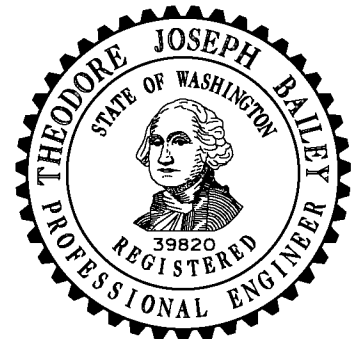
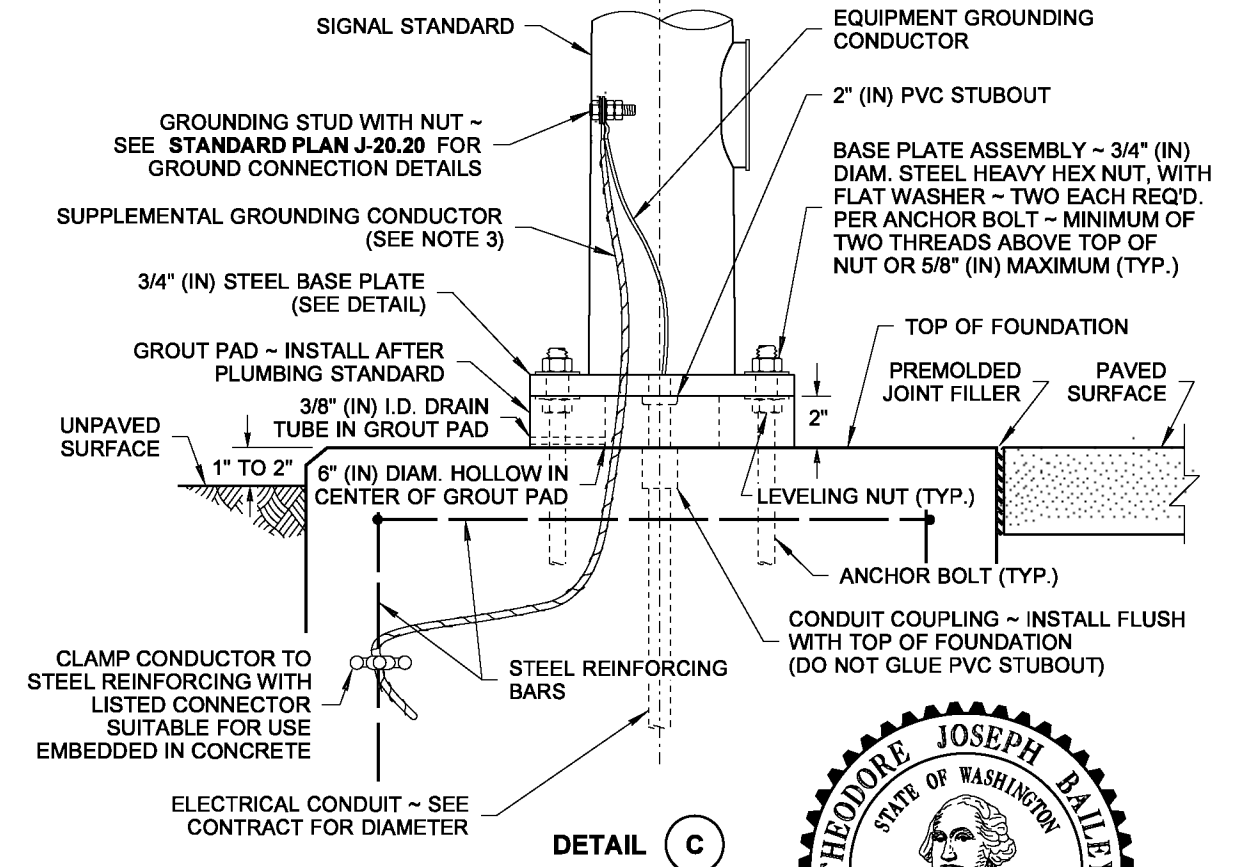
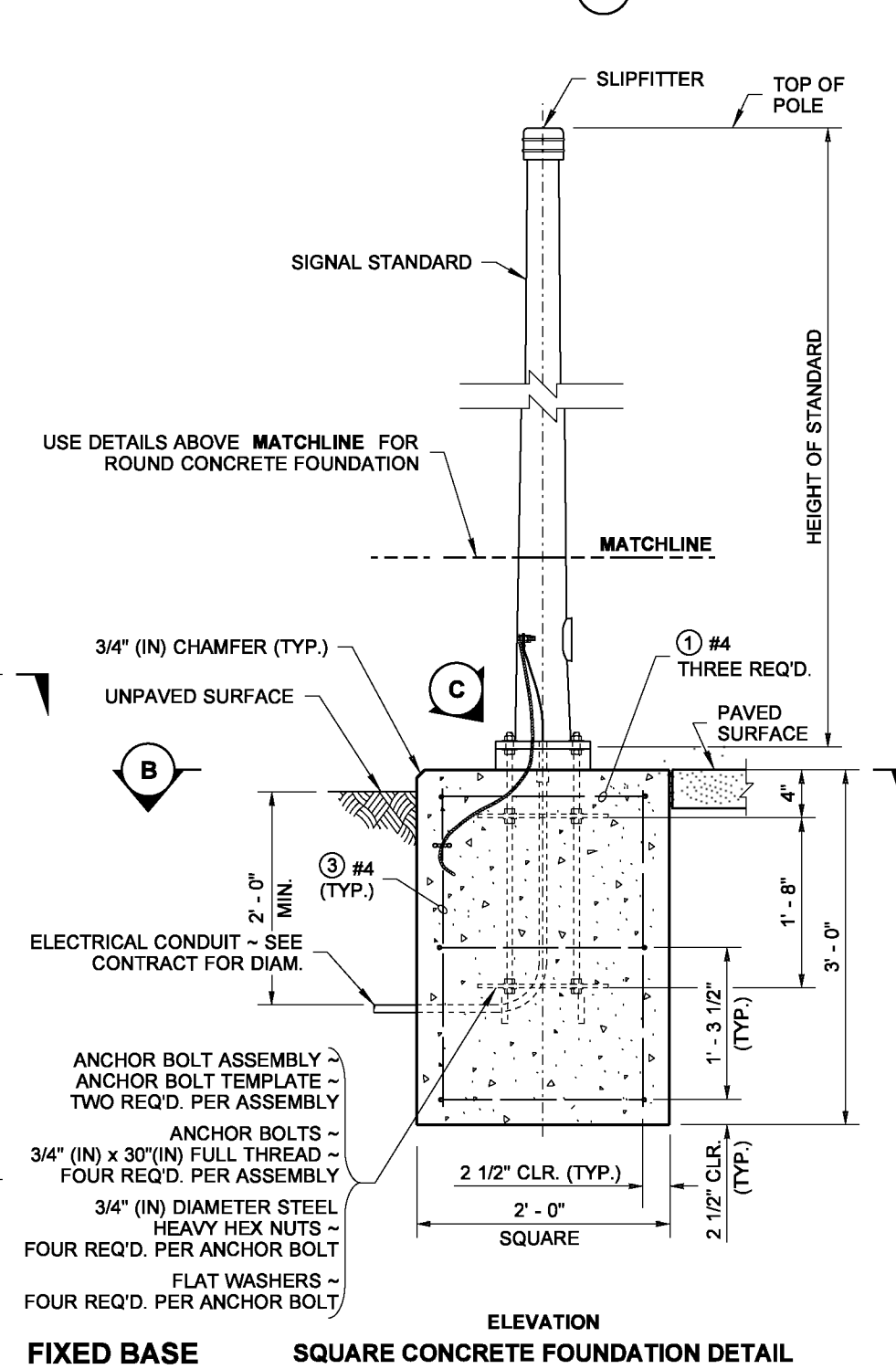
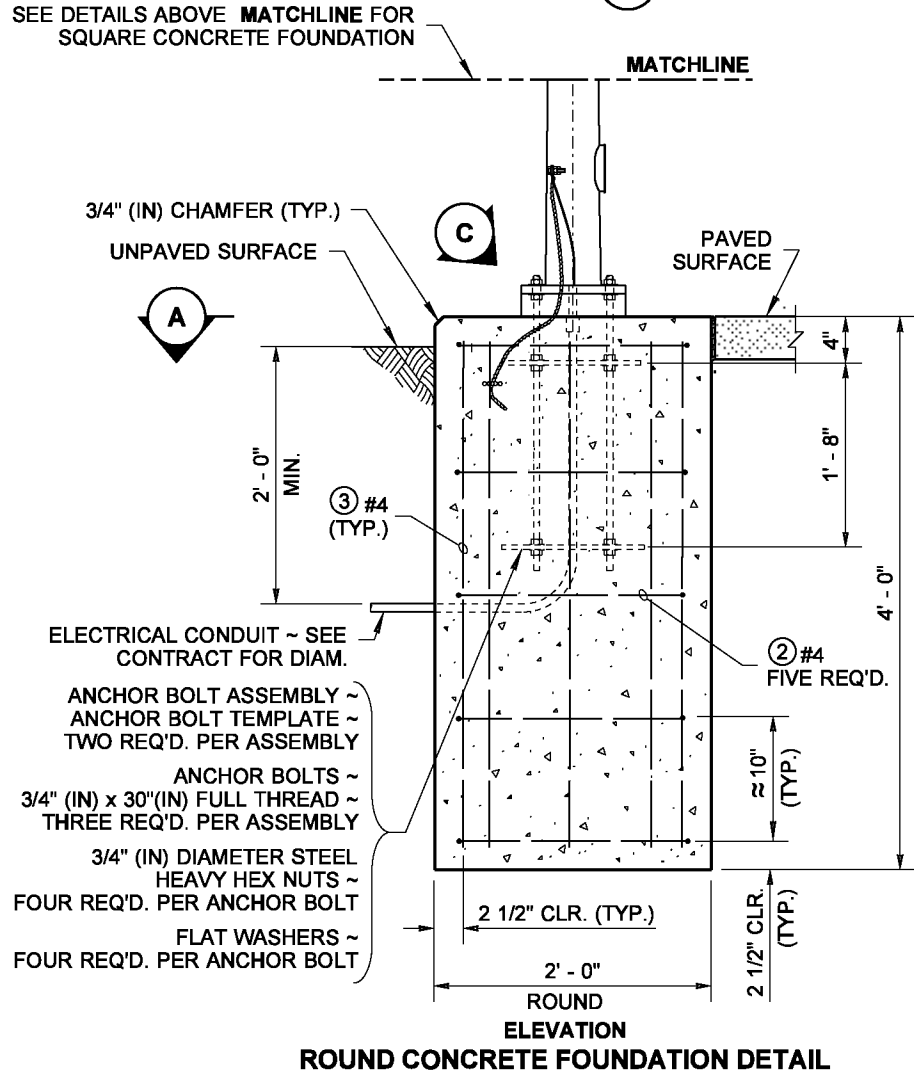
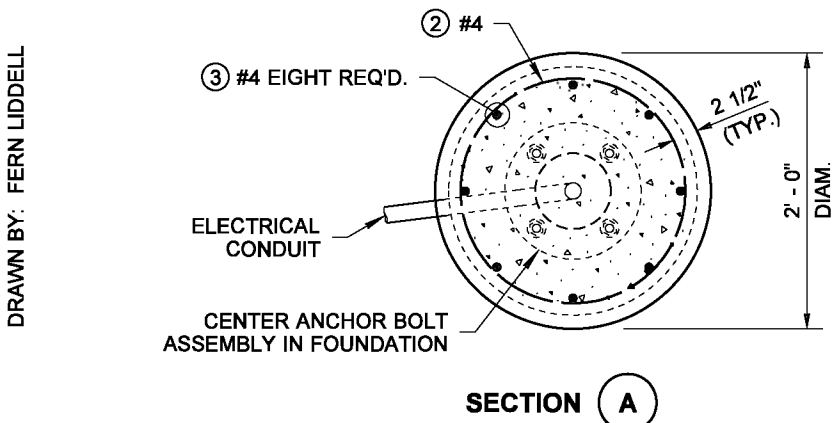


Washington State Department of Transportation



- NOTES**
- Clamping bolts shall be tightened to 50 ft-lbs max. torque. After state inspection, burr threads to prevent nut rotation. **DO NOT OVERTIGHTEN.**
  - The final height of the Anchor Bolts shall be below the top of the slip plate assembly to ensure proper function of the slip base.
  - Supplemental grounding conductor shall be non-insulated #4 AWG stranded copper and shall be clamped to vertical rebar with a connector suitable for use embedded in concrete. Provide 3' - 0" min. slack. Attach to pole grounding stud with a full circle crimp-on connector (crimped with a manufacturer recommended crimper).
  - Junction box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.
  - Provide cable tie at wiring entering the junction box (for slip base installations only) ~ See **Detail A**, **Standard Plan J-28.70**.
  - Keeper Plate shall not extend beyond the edges of the pole base plate.

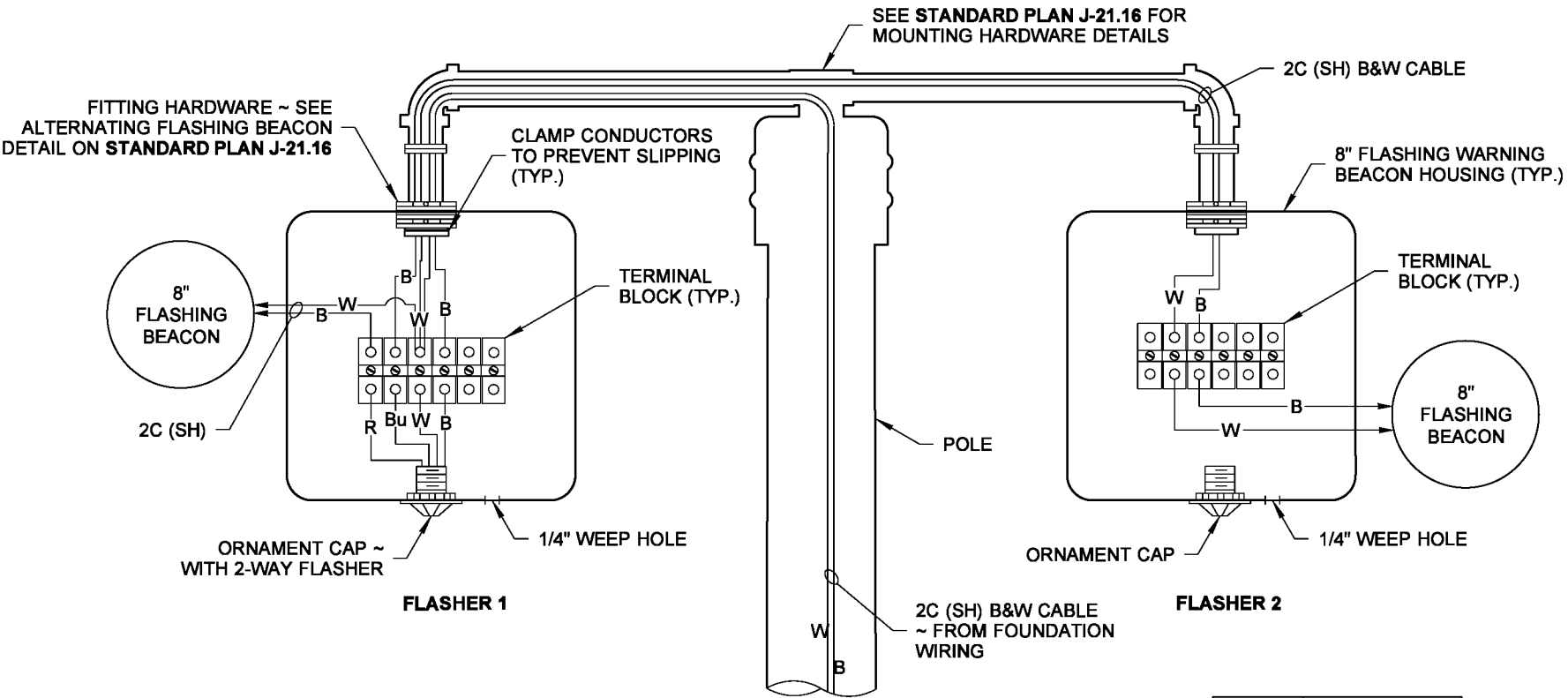
DRAWN BY: FERN LIDDELL



**TYPE PS, TYPE 1, RM & FB SIGNAL STANDARD FOUNDATION DETAILS**  
**STANDARD PLAN J-21.10-04**

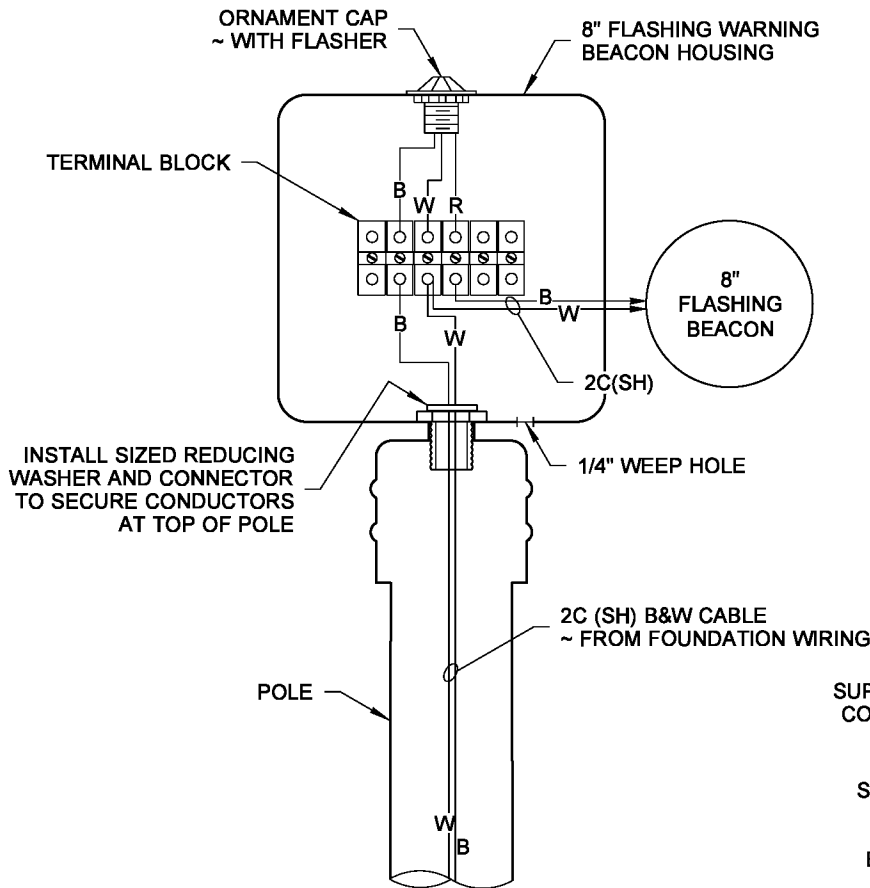


DRAWN BY: FERN LIDDELL

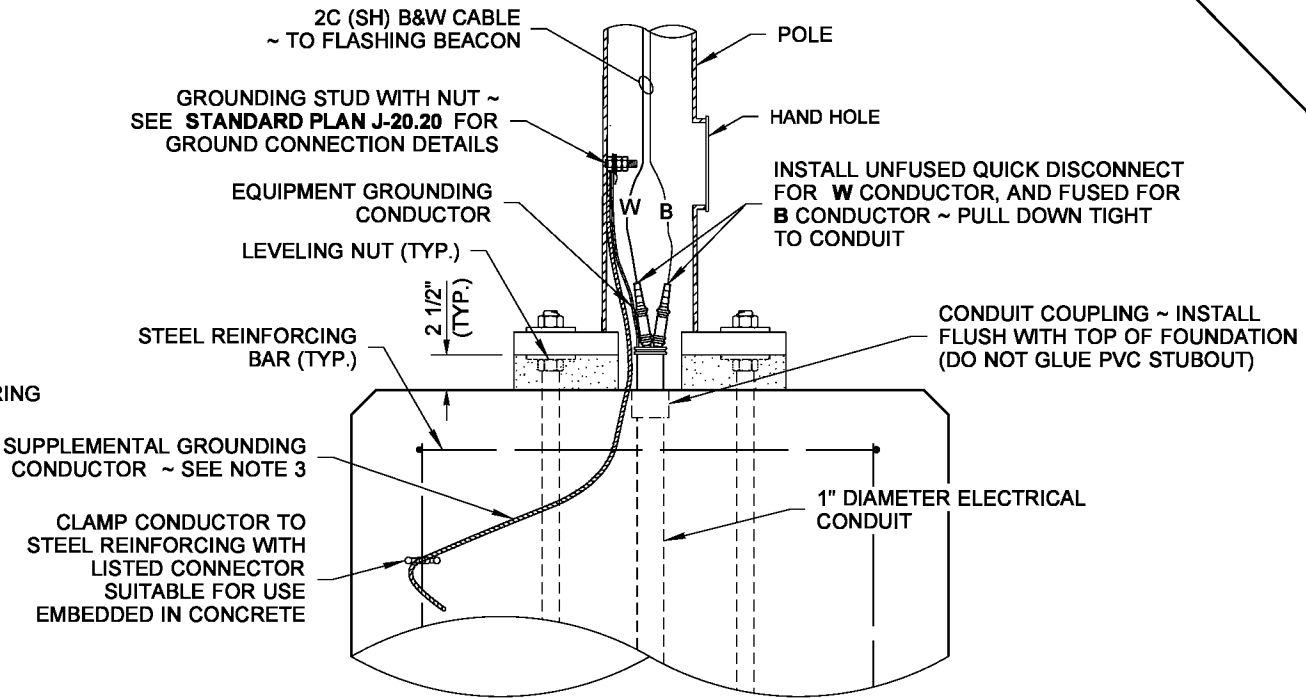


**DETAIL A**  
**FLASHING BEACON WIRING**  
ALTERNATING FLASH WIRING SHOWN

COLOR CODE	USE
B	POWER
W	NEUTRAL
R	FLASHER 1
Bu	FLASHER 2



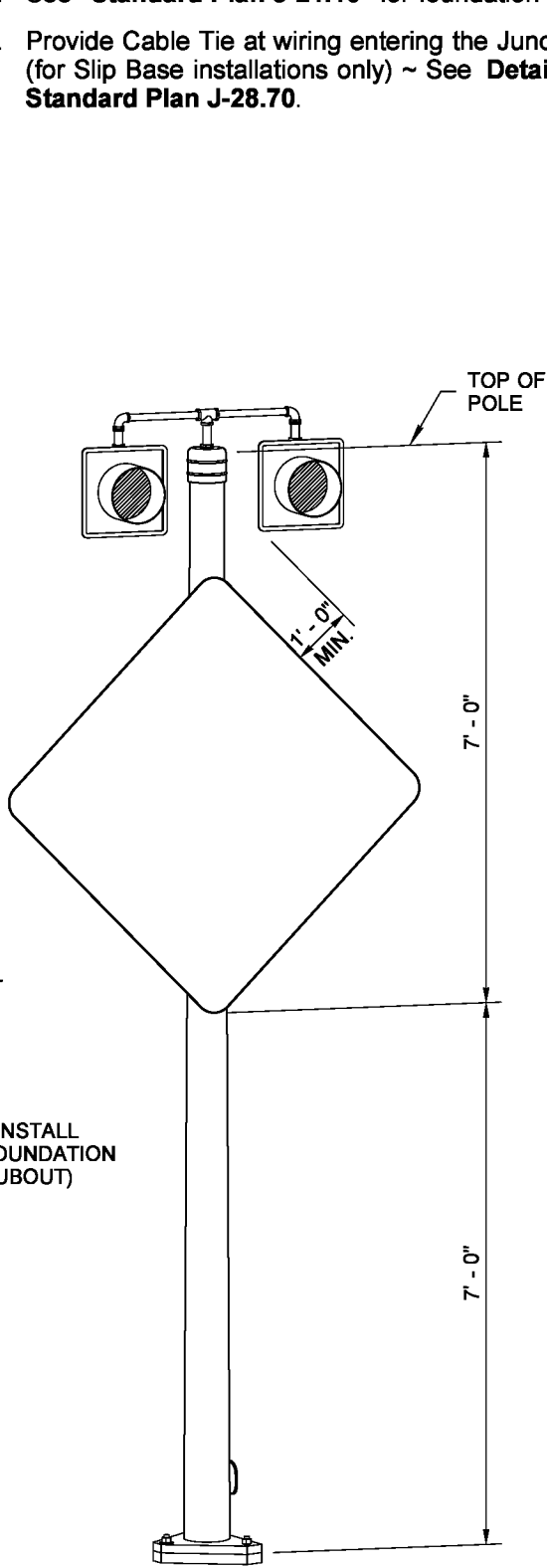
**DETAIL B**  
**FLASHING BEACON WIRING**  
SINGLE FLASH WIRING SHOWN



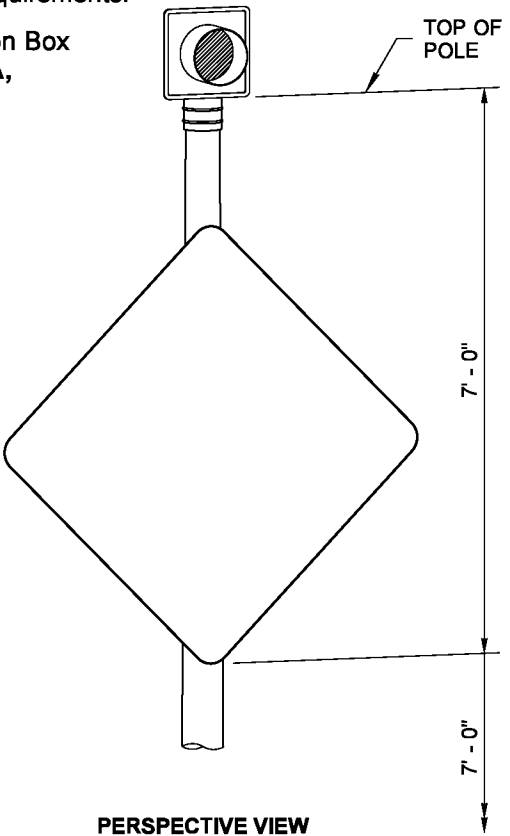
**DETAIL C**  
**FOUNDATION WIRING**  
FIXED BASE SHOWN

**NOTES**

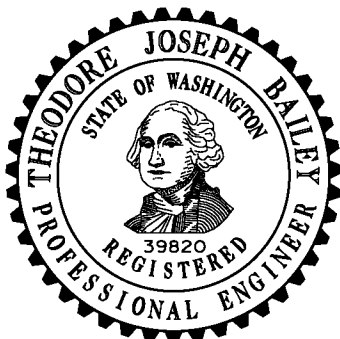
1. See **Standard Specification 9-29.3** for Cable Conductor requirements.
2. See **Standard Plan J-21.16** for Flashing Beacon Type 1 Signal Standard details.
3. Supplemental Grounding Conductor shall be non-insulated #4 AWG stranded copper, provide 3' - 0" min. slack. Clamp to vertical steel reinforcing bar with listed connector suitable for use embedded in concrete.
4. See **Standard Plan J-21.10** for foundation requirements.
5. Provide Cable Tie at wiring entering the Junction Box (for Slip Base installations only) ~ See **Detail A**, **Standard Plan J-28.70**.



**PERSPECTIVE VIEW**  
**FLASHING BEACON TYPE 1**  
ALTERNATING FLASH BEACON SHOWN



**PERSPECTIVE VIEW**  
**FLASHING BEACON TYPE 1**  
SINGLE FLASH BEACON SHOWN



**FLASHING BEACON**  
**TYPE 1 SIGNAL STANDARD**  
**ELECTRICAL DETAILS**

**STANDARD PLAN J-21.17-01**

SHEET 1 OF 1 SHEET

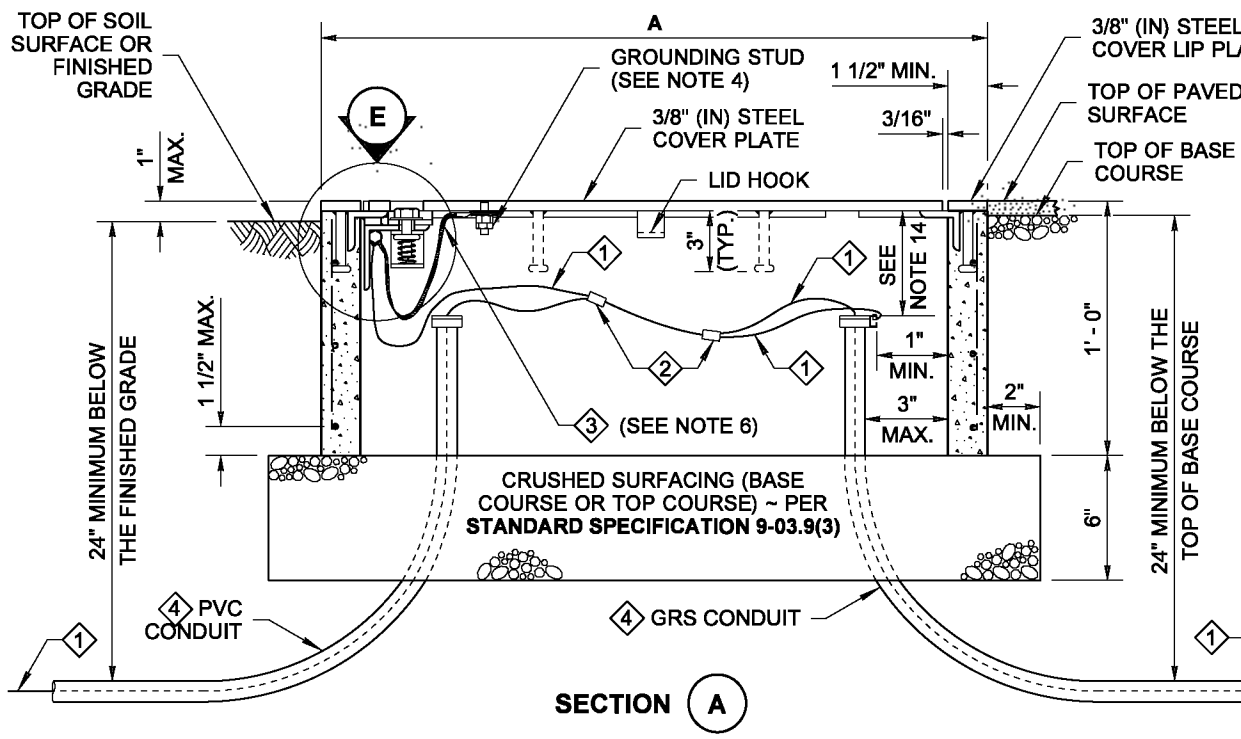
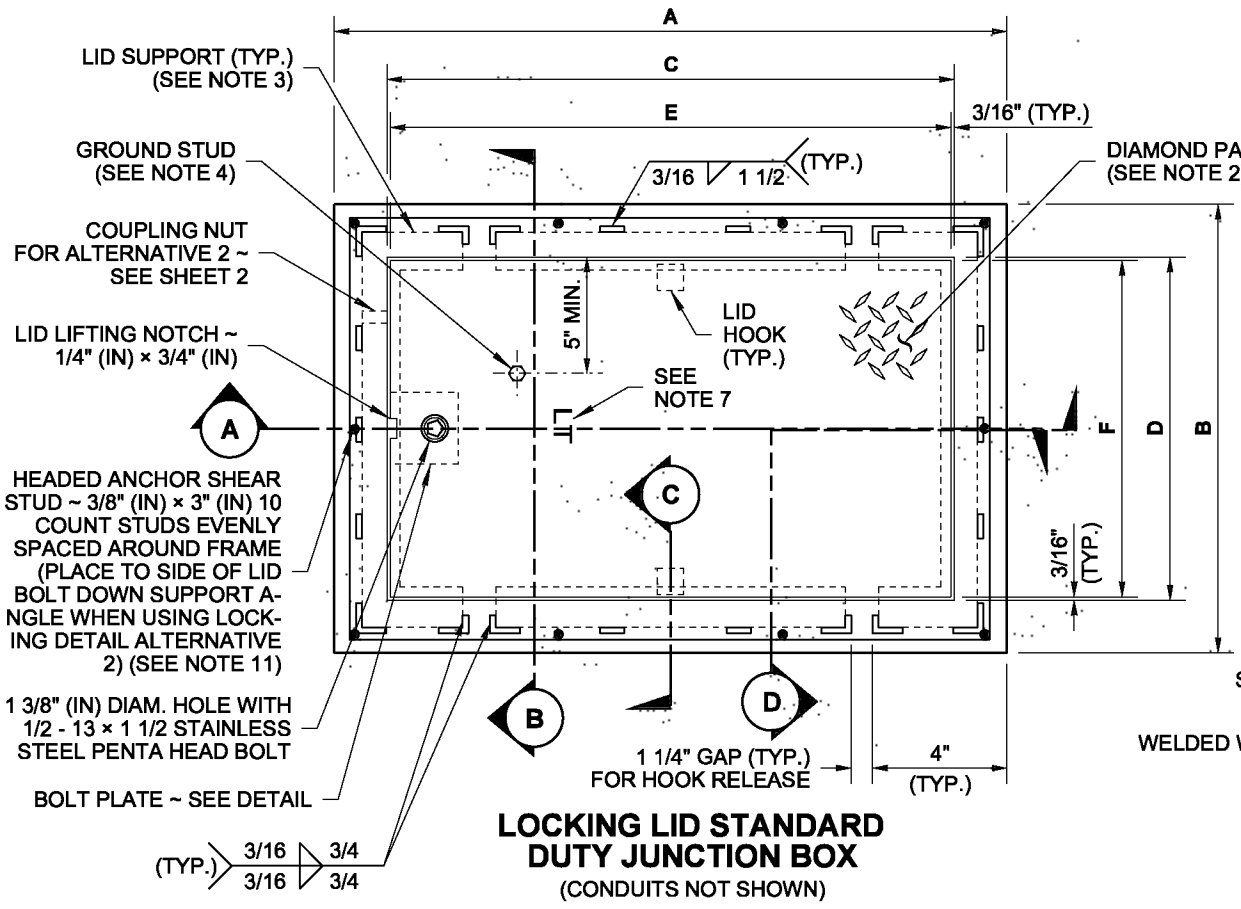
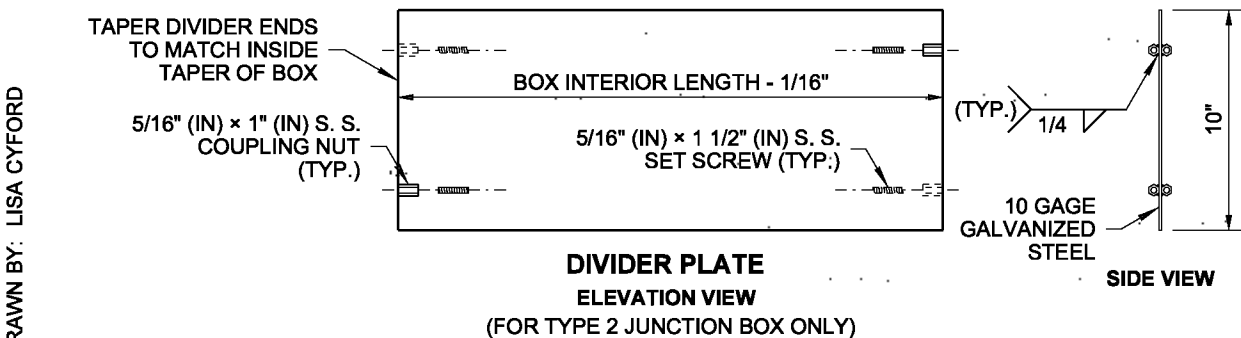
APPROVED FOR PUBLICATION

**Pasco Bakotich III** 6/10/13  
STATE DESIGN ENGINEER DATE

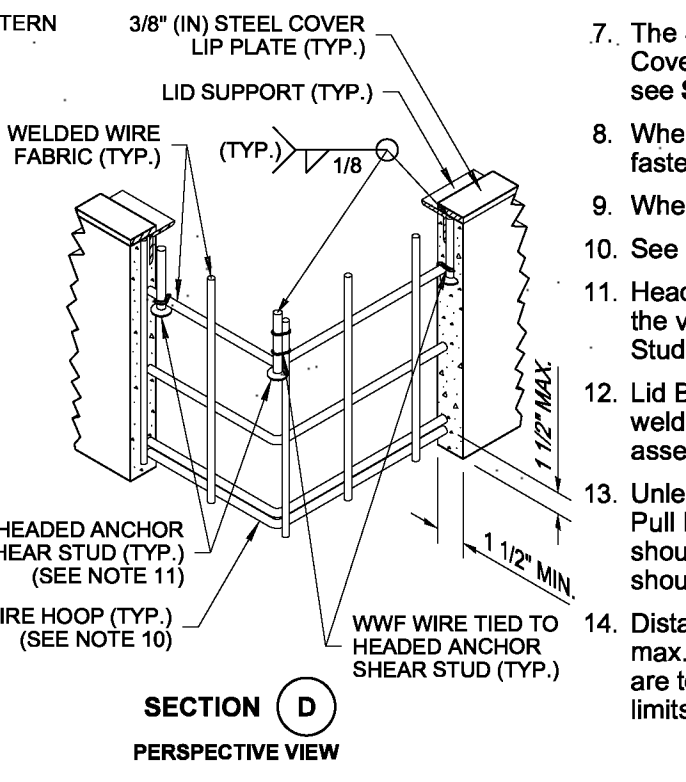
Washington State Department of Transportation

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

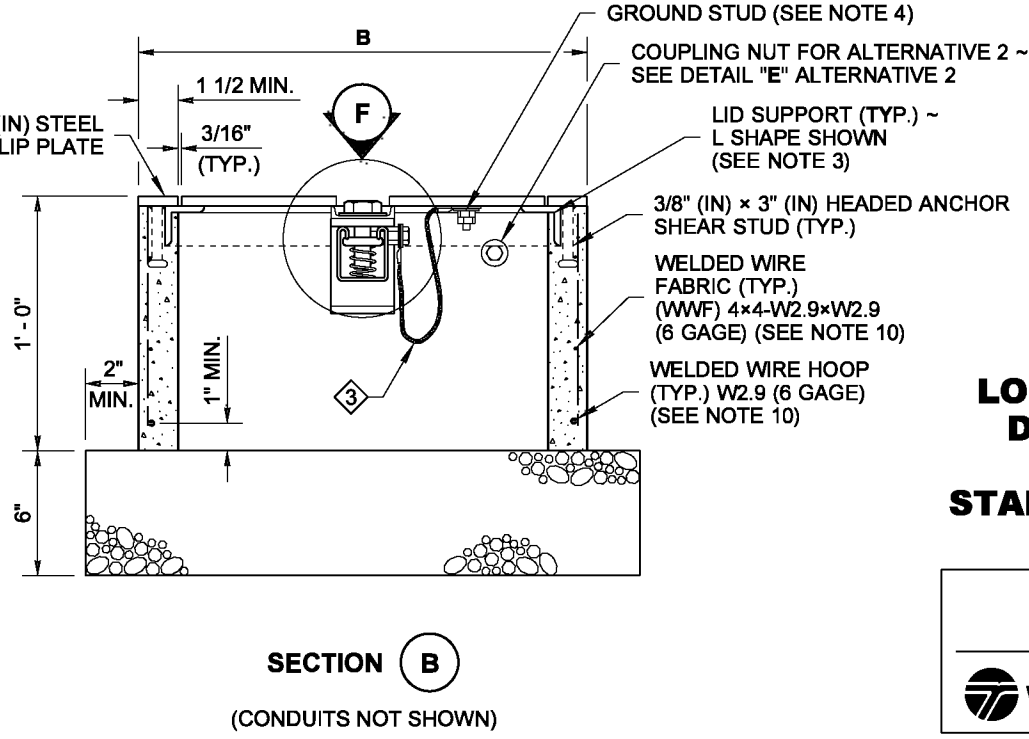
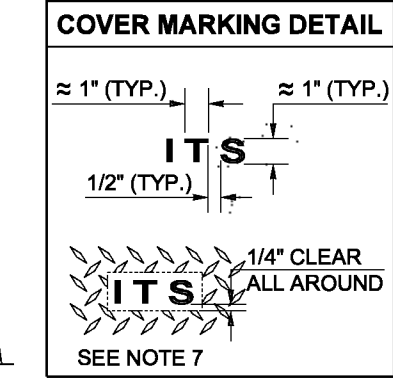
DRAWN BY: LISA CYFORD



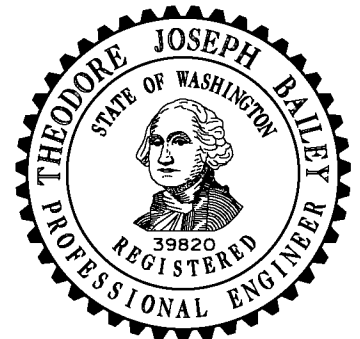
JUNCTION BOX DIMENSION TABLE			
MARK	ITEM	BOX TYPE	
		TYPE 1	TYPE 2
A	OUTSIDE LENGTH OF JUNCTION BOX	22"	33"
B	OUTSIDE WIDTH OF JUNCTION BOX	17"	22 1/2"
C	INSIDE LENGTH OF JUNCTION BOX	18" ~ 19"	28" ~ 29"
D	INSIDE WIDTH OF JUNCTION BOX	13" ~ 14"	17" ~ 18"
E	LID LENGTH	17 5/8"	28 5/8"
F	LID WIDTH	12 5/8"	18 1/8"
CAPACITY ~ CONDUIT DIAMETER		6"	12"



- 1 Equipment Grounding Conductor
- 2 Copper Solderless Crimp Connector
- 3 Equipment Bonding Jumper (See Note 6)
- 4 See Contract for conduit size and number



- NOTES**
- All box dimensions are approximate. Exact configurations vary among manufacturers.
  - Minimum lid thickness shown. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate, and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, or shared-use path. The non-slip lid shall be identified with permanent markings on the underside, indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" (in) line thickness formed with a mild steel weld bead and shall be placed prior to hot-dip galvanizing.
  - Lid support members shall be 3/16" (in) minimum thick steel C, L, or T shape, welded to the frame.
  - A 1/4-20 NC x 3/4" (in) stainless steel ground stud shall be welded to the bottom of the lid; include (2) stainless steel nuts and (2) stainless steel flat washers.
  - Bolts and nuts shall be liberally coated with anti-seize compound.
  - Equipment Bonding Jumper shall be # 8 AWG min. x 4' (ft) of tinned braided copper.
  - The System Identification letters shall be 1/8" (in) line thickness formed with a mild steel weld bead. See Cover Marking detail. Grind off diamond pattern before forming letters. For System Identification details, see **Standard Specification 9-29.2(4)**.
  - When required in the Contract, provide a 10" (in) x 27 1/2" (in), 10 gage divider plate, complete, with fasteners, in each Type 2 Junction Box where specified.
  - When required in Contract, provide a 12" (in) deep extension for each Type 2 Junction Box where specified.
  - See the **Standard Specifications** for alternative reinforcement and class of concrete.
  - Headed Anchor Shear Studs must be welded to the Steel Cover Lip Plate and wire tied in two places to the vertical Welded Wire Fabric when in contact with each other. Wire tie all other Headed Anchor Shear Studs to the horizontal Welded Wire Fabric.
  - Lid Bolt Down Attachment Tab provides a method of retrofitting by using a mechanical process in lieu of welding. Attachment Tab shown depicts a typical component arrangement; actual configurations of assembly will vary among manufacturers. See approved manufacturers' shop drawings for specifics.
  - Unless otherwise noted in the plans or approved by the Engineer, Junction Boxes, Cable Vaults, and Pull Boxes shall not be placed within the sidewalks, walkways, shared use paths, traveled ways or paved shoulders. All Junction Boxes, Cable Vaults, and Pull Boxes placed within the traveled way or paved shoulders shall be Heavy-Duty.
  - Distance between the top of the conduit and the bottom of the Junction Box lid shall be 6" (in) min. to 8" (in) max. for final grade of new construction only. See **Standard Specification 8-20.3(5)**. Where adjustments are to be made to existing Junction Boxes, or for interim construction stages during the contract, the limits shall be from 6" (in) min. to 10" (in) max. See **Standard Specification 8-20.3(6)**.



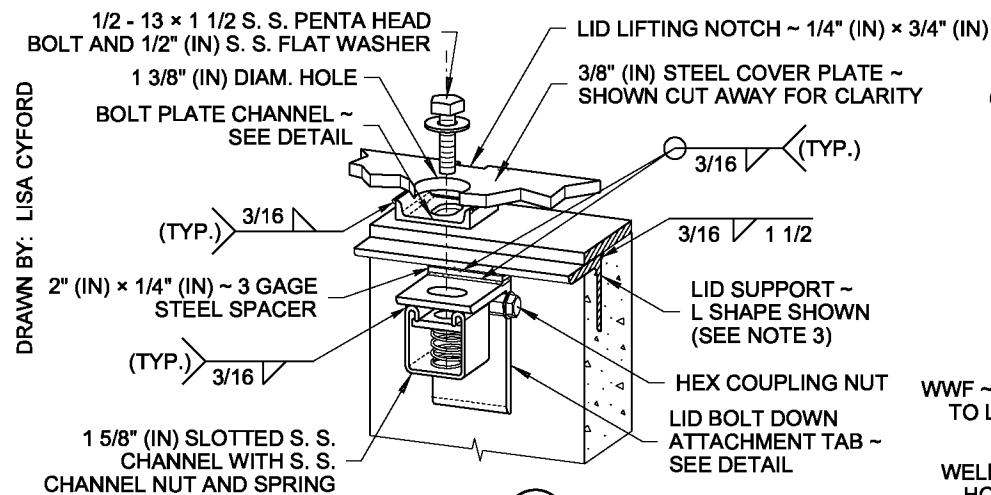
**LOCKING LID STANDARD  
DUTY JUNCTION BOX  
TYPES 1 & 2  
STANDARD PLAN J-40.10-04**

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

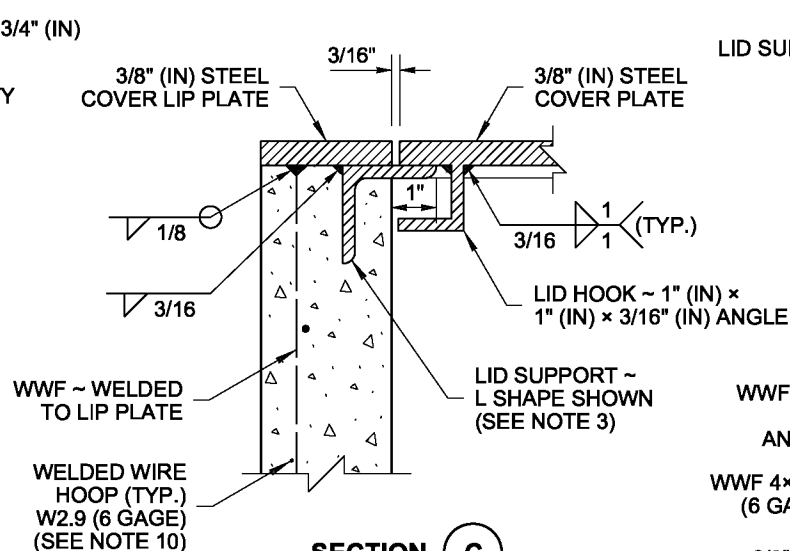


DRAWN BY: LISA CYFORD

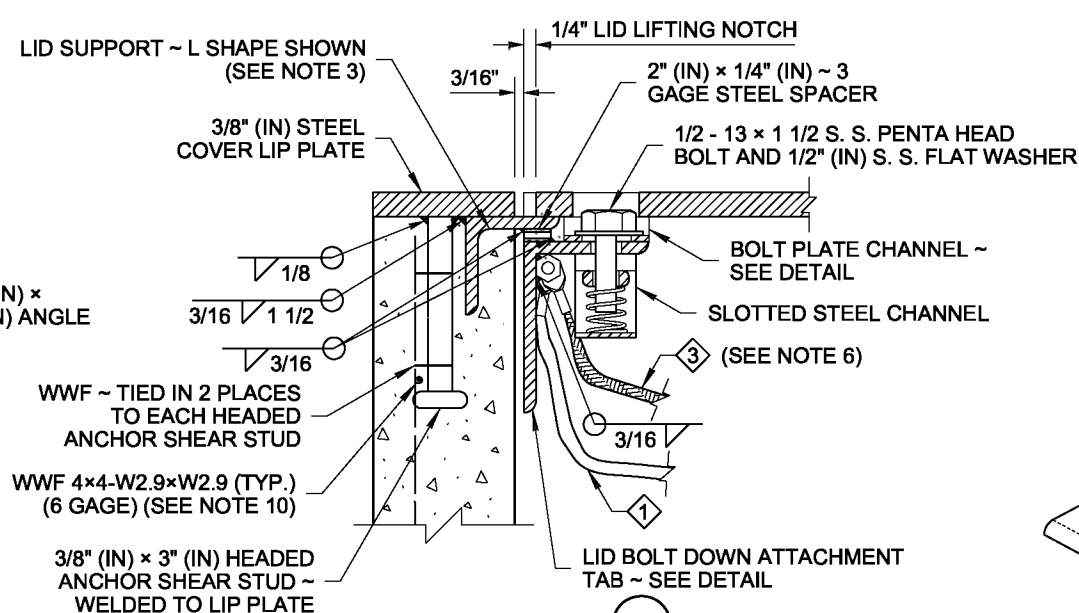


**DETAIL (F)**

**ALTERNATIVE 1 SHOWN  
PERSPECTIVE VIEW**

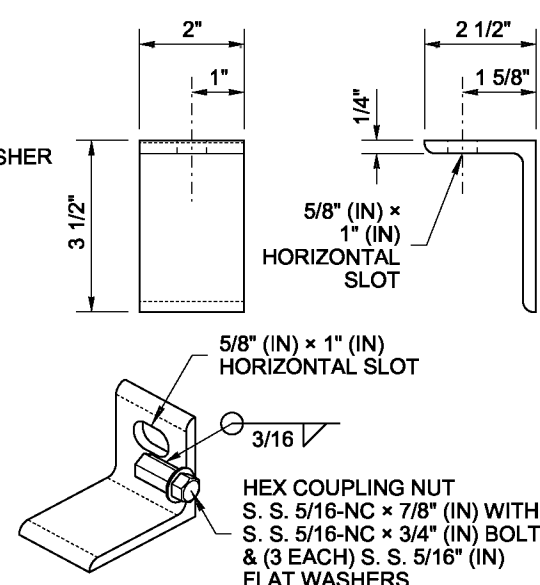


**SECTION C**

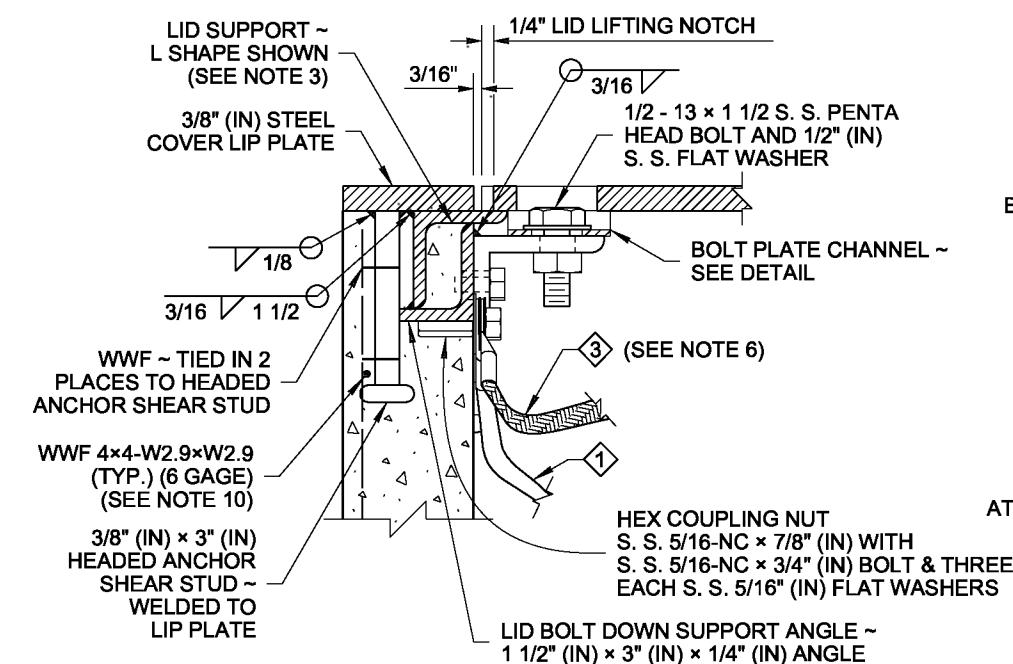


**DETAIL (E)**

**ALTERNATIVE 1 SHOWN**

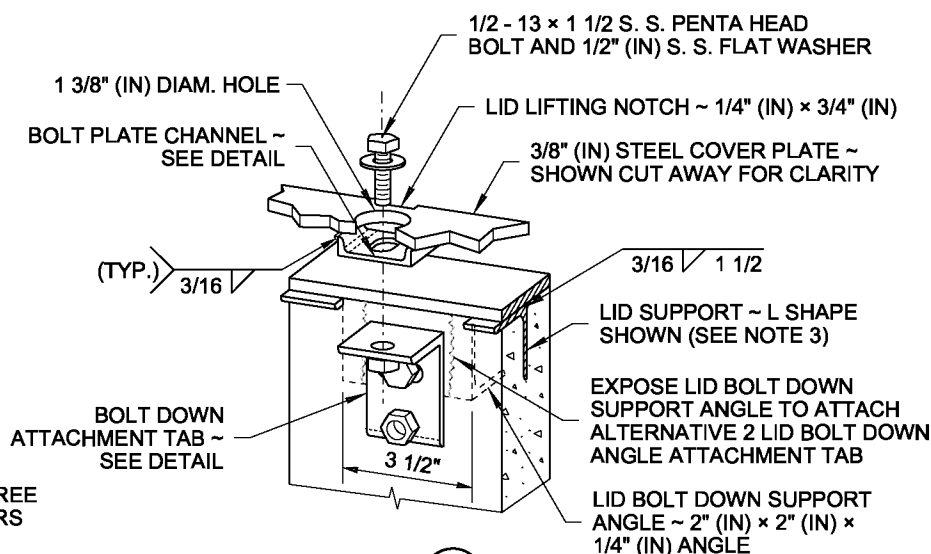


**ALTERNATIVE 1**  
**LID BOLT DOWN ATTACHMENT TAB**  
(SEE NOTE 12)



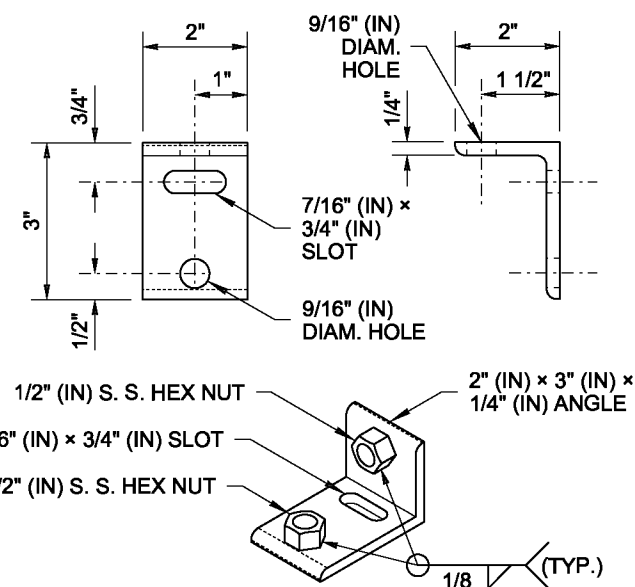
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**ALTERNATIVE 2 SHOWN**



**DETAIL (F)**

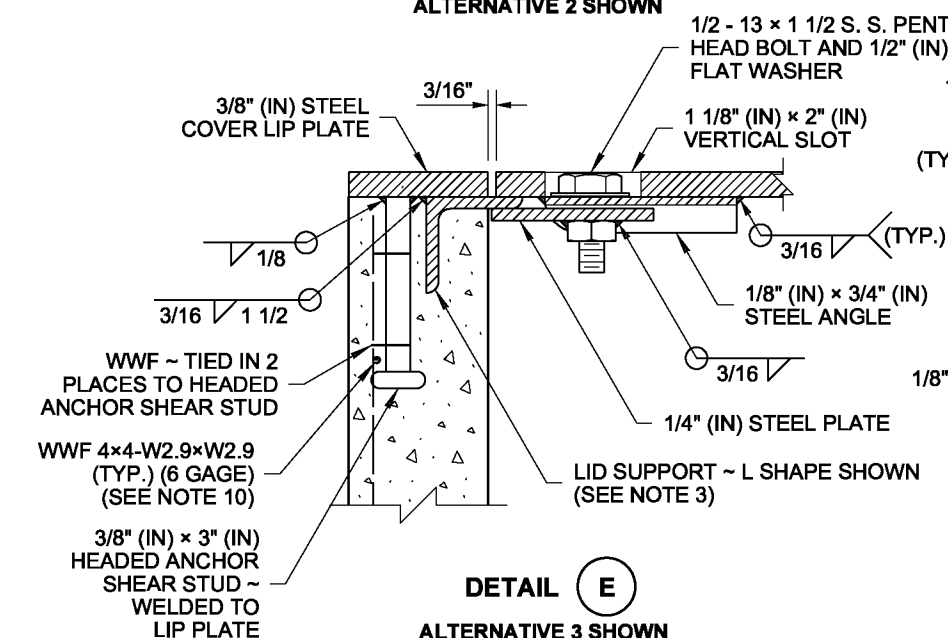
**ALTERNATIVE 2 SHOWN  
PERSPECTIVE VIEW**



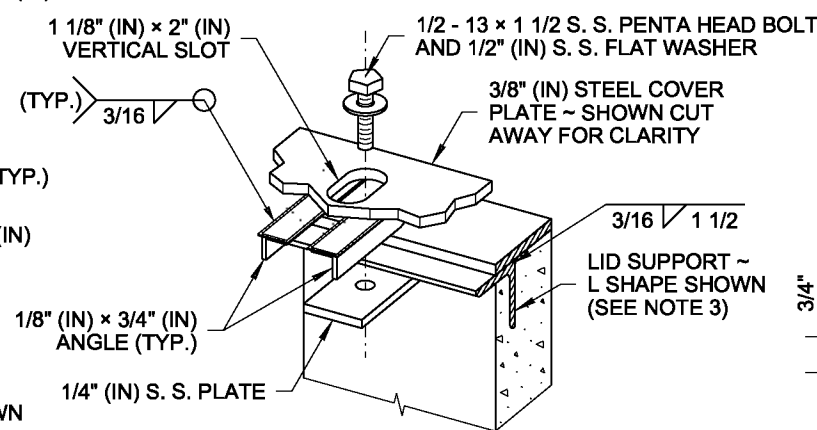
## ALTERNATIVE 2

### LID BOLT DOWN ATTACHMENT TAB

(SEE NOTE 12)

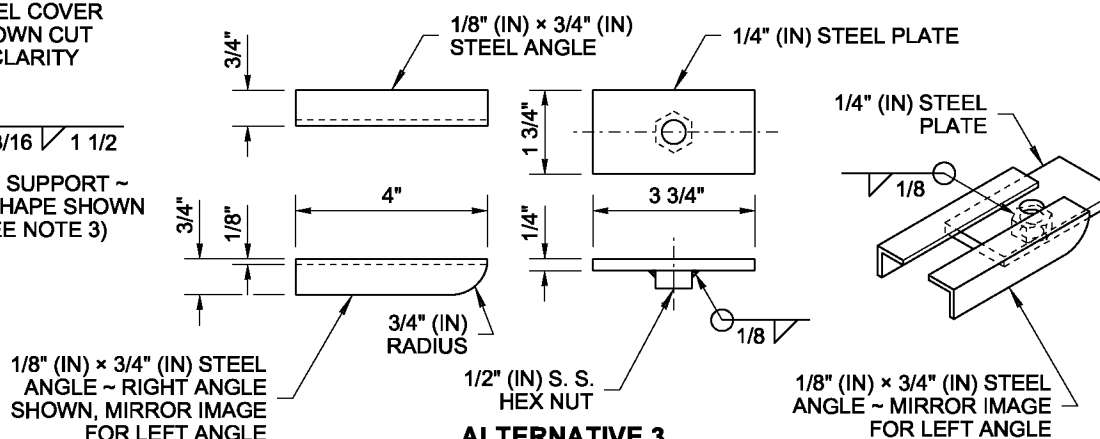


**DETAIL (E)**

**ALTERNATIVE 3 SHOWN**

**DETAIL (F)**

**ALTERNATIVE 3 SHOWN  
PERSPECTIVE VIEW**



### ALTERNATIVE 3 LID BOLT DOWN ATTACHMENT TAB

(SEE NOTE 12)



**LOCKING LID STANDARD  
DUTY JUNCTION BOX  
TYPES 1 & 2  
STANDARD PLAN J-40.10-04**

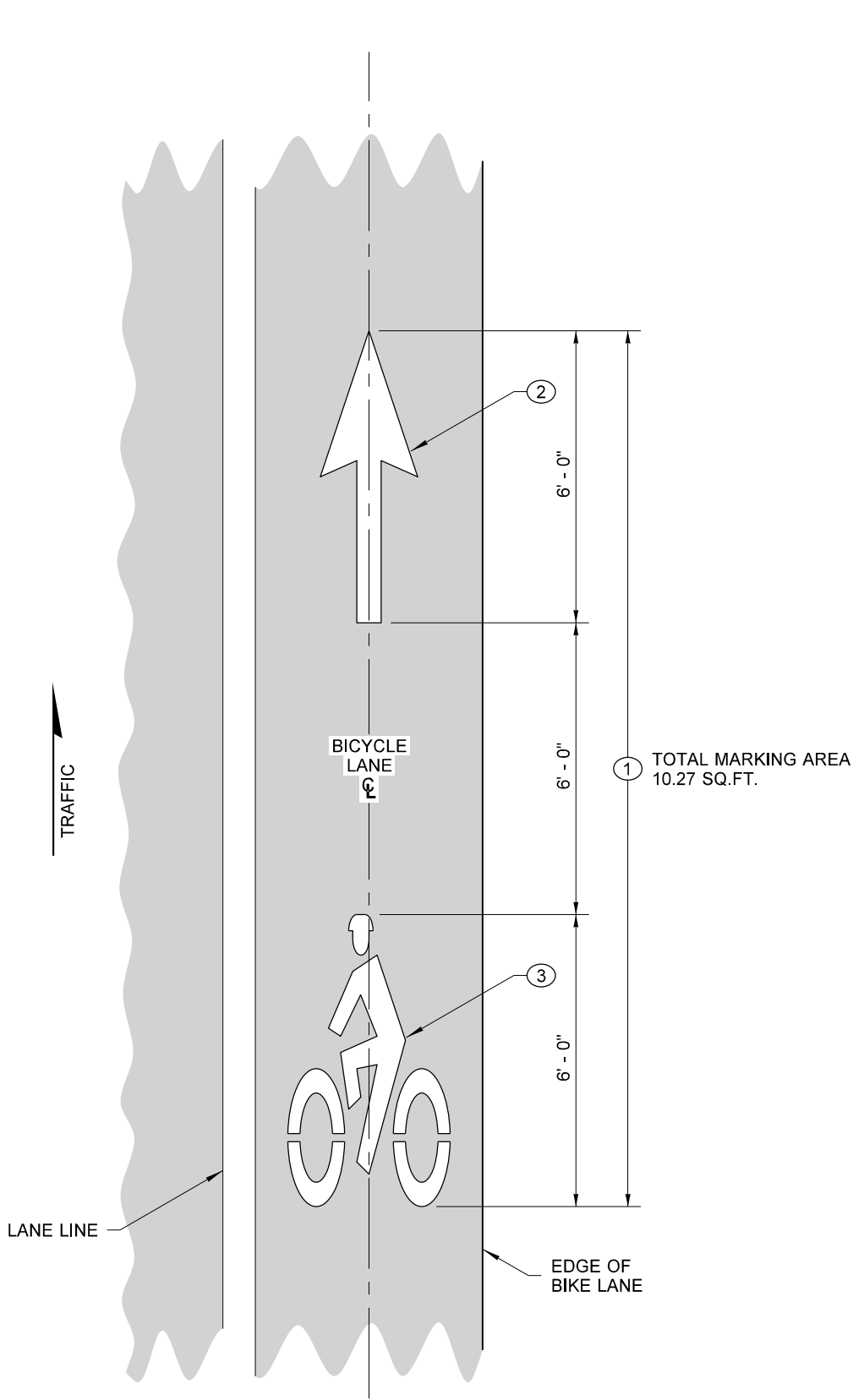
SHEET 2 OF 2 SHEETS

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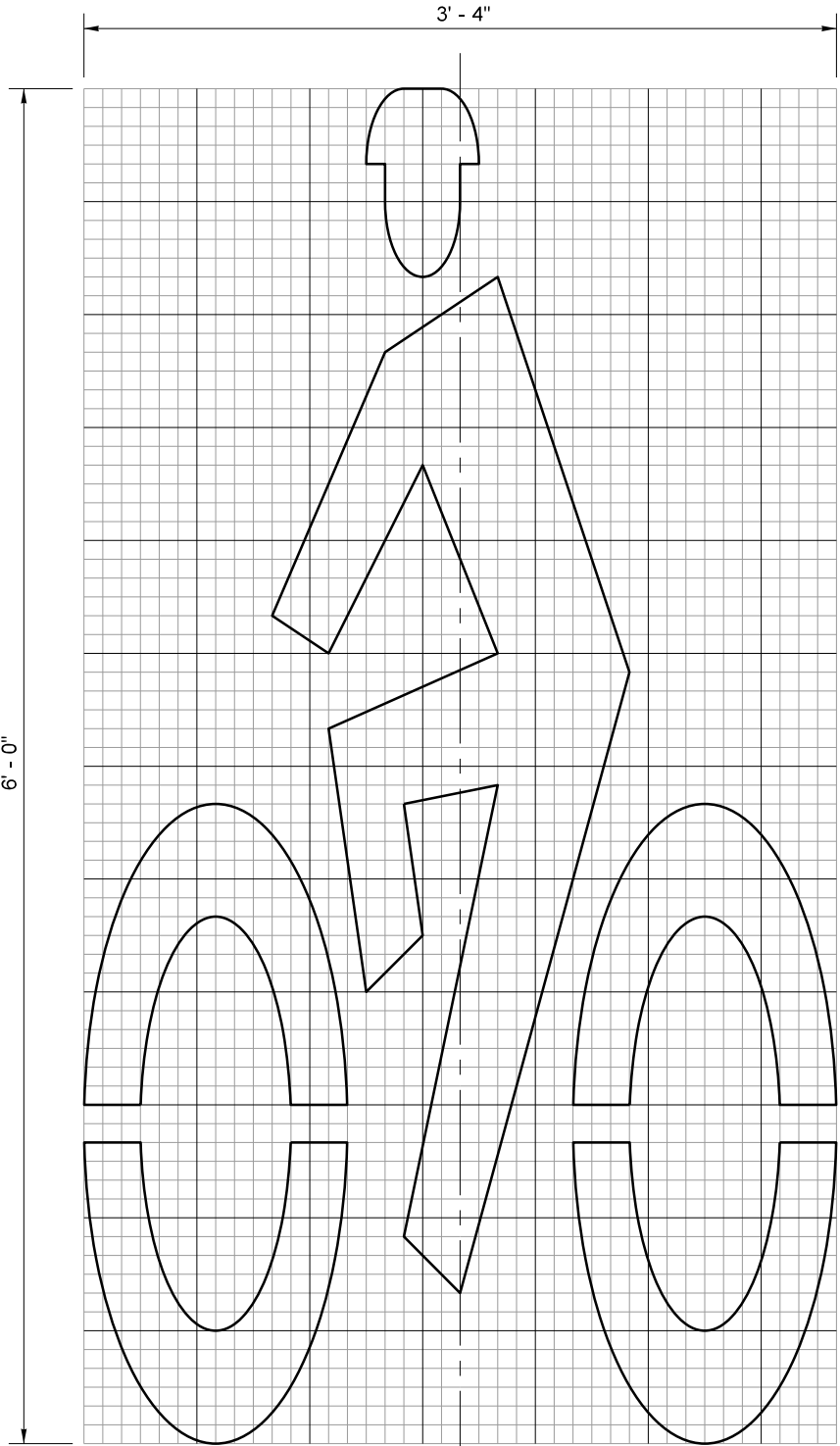
**Washington State Department of Transportation**



**BICYCLE LANE SYMBOL LAYOUT**

**KEY NOTES**

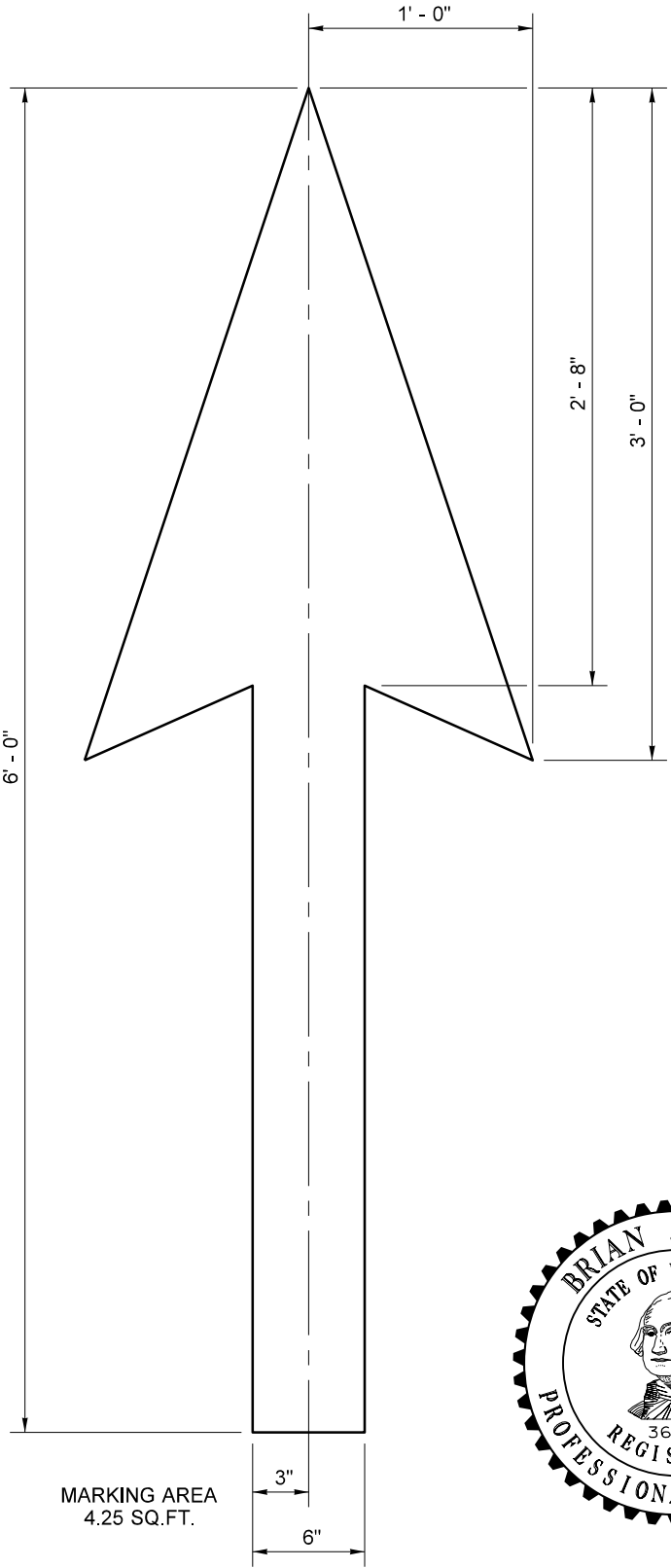
- ① Bid Item "Bicycle Lane Symbol" includes Bike Lane Arrow and Bike Rider Symbol.
- ② 2' (ft) x 6' (ft) White Bike Lane Arrow.
- ③ Bike Rider Symbol.



**BIKE RIDER SYMBOL DETAIL**

**GENERAL NOTE**

See Contract for location and material requirements.



**BIKE LANE ARROW DETAIL**

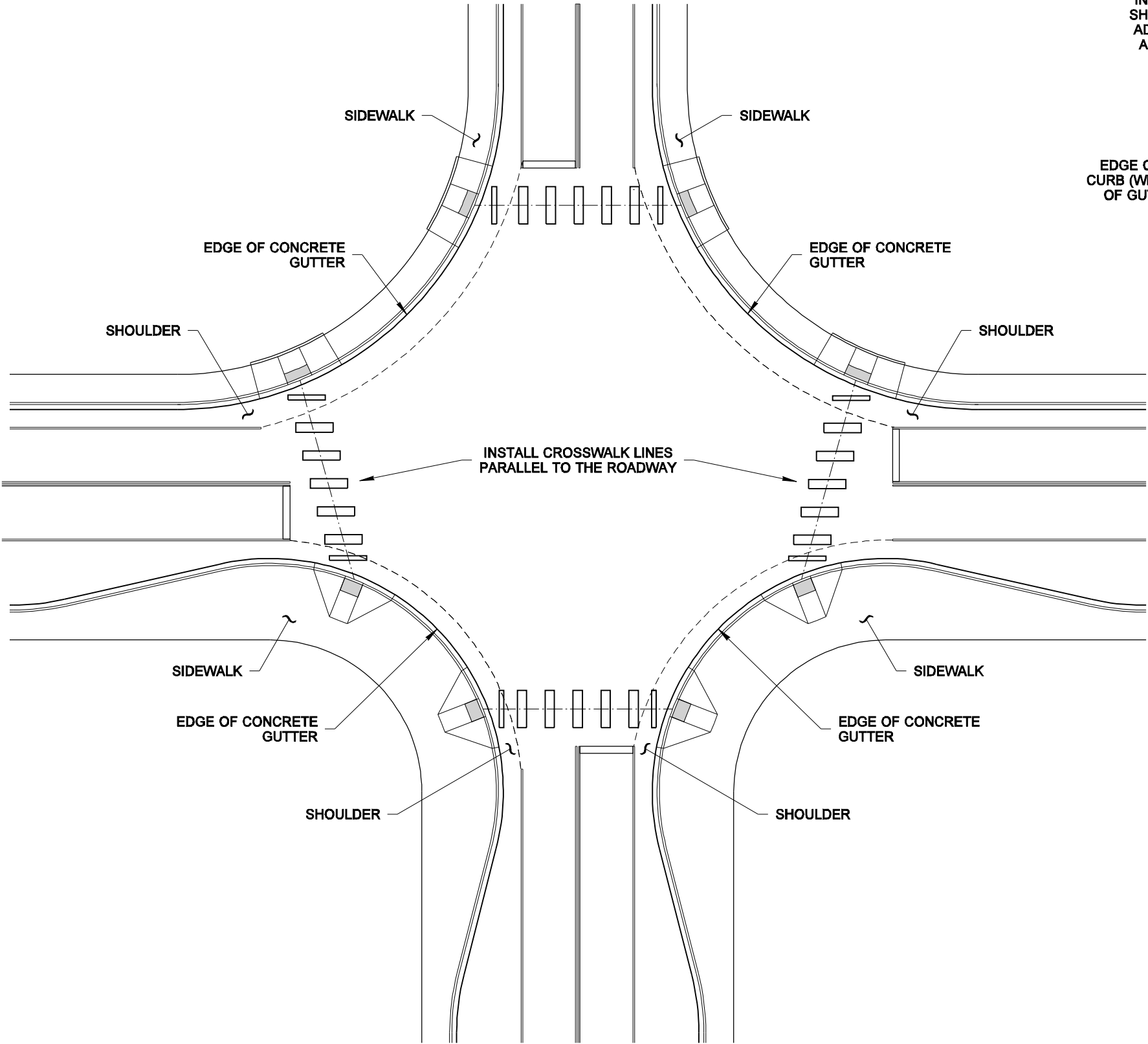


**BICYCLE LANE SYMBOL LAYOUT**

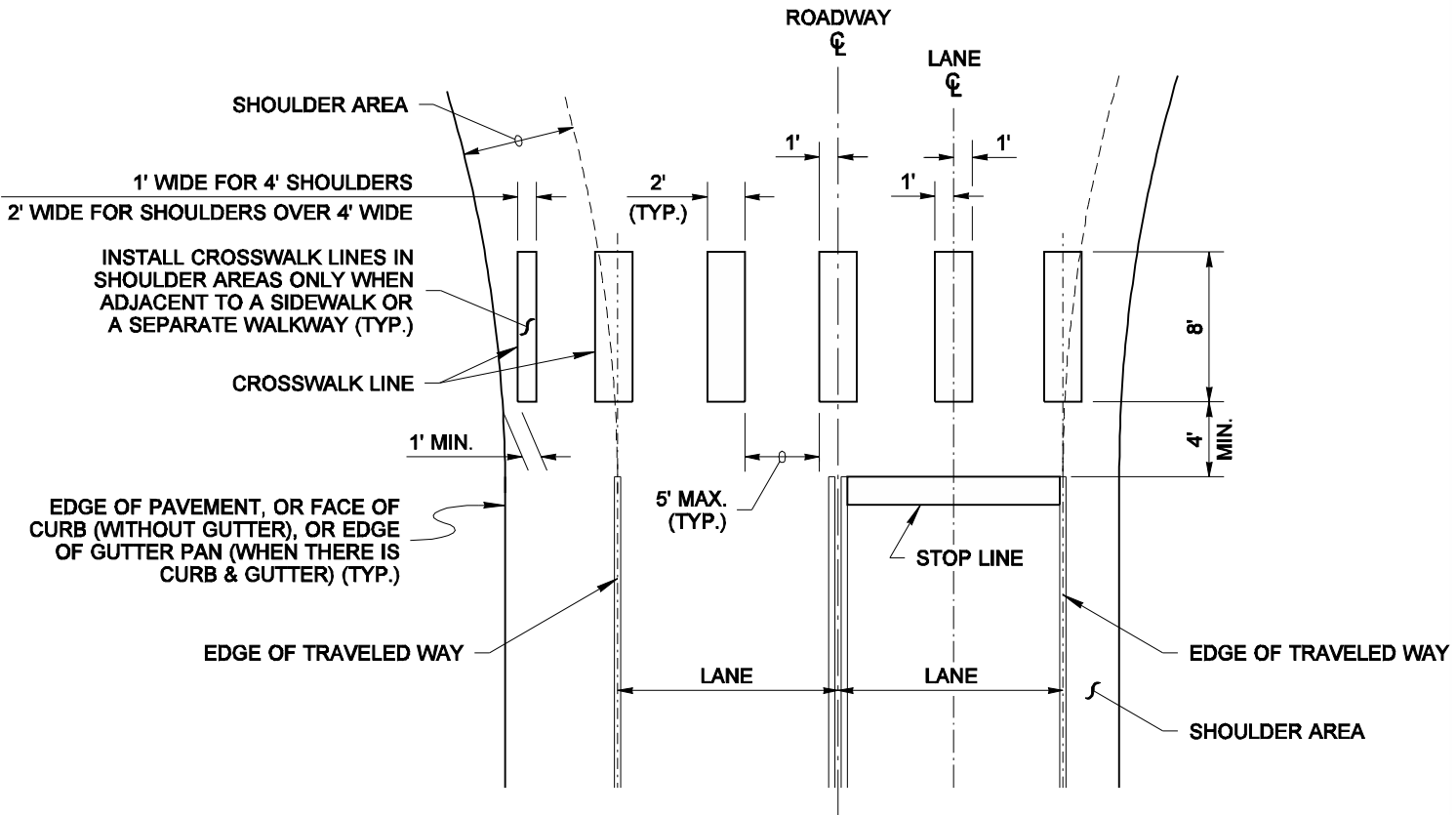
**STANDARD PLAN M-9.50-02**

SHEET 1 OF 1 SHEET

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TYPICAL APPLICATIONS



DETAIL

NOTES

1. See the Contract Plans for locations of crosswalk centerlines.
2. To the maximum extent possible, curb ramp centerline should be perpendicular to the crosswalk centerline.
3. To the maximum extent possible, crosswalks should be perpendicular to the centerline of the traveled way.



EXPIRES AUGUST 9, 2007

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CROSSWALK LAYOUT

STANDARD PLAN M-15.10-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Ken L. Smith

STATE DESIGN ENGINEER

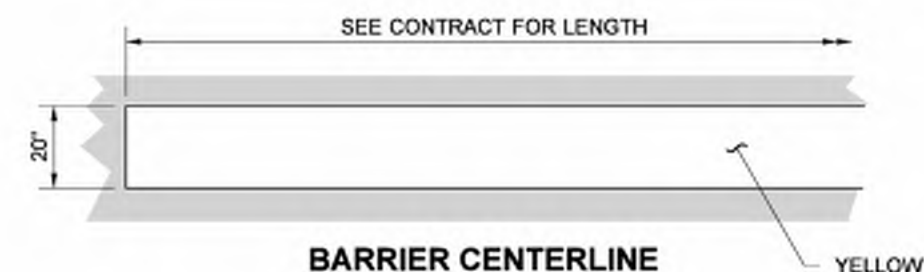
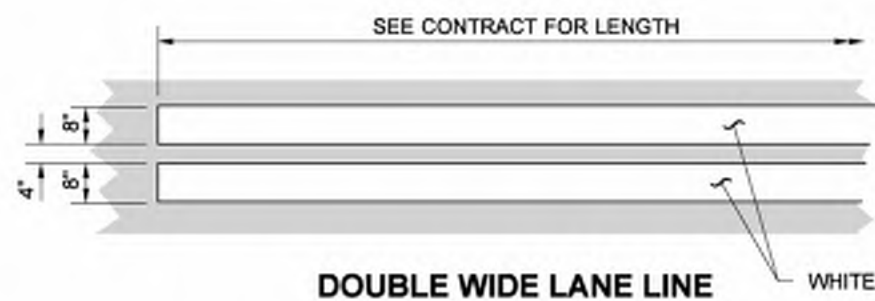
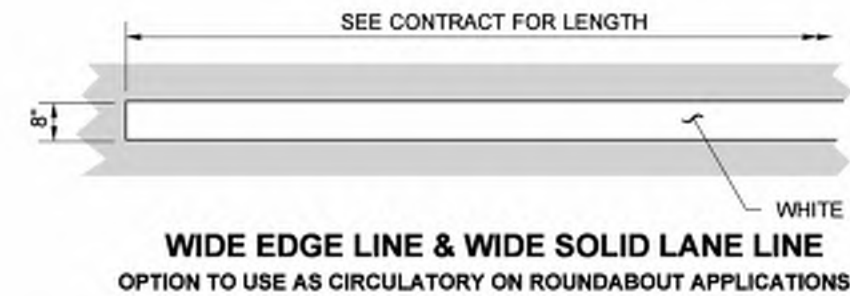
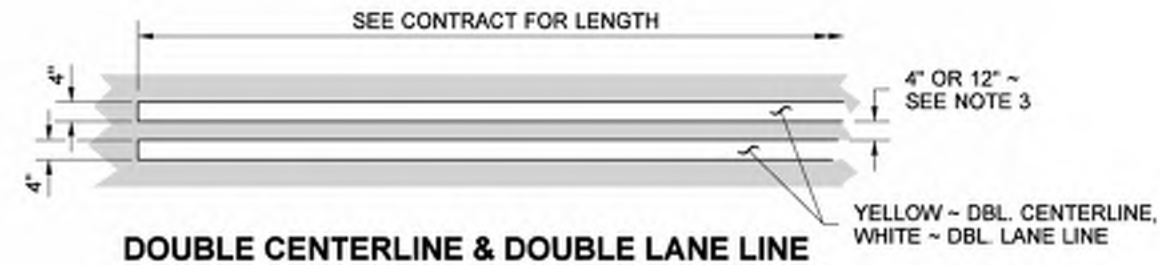
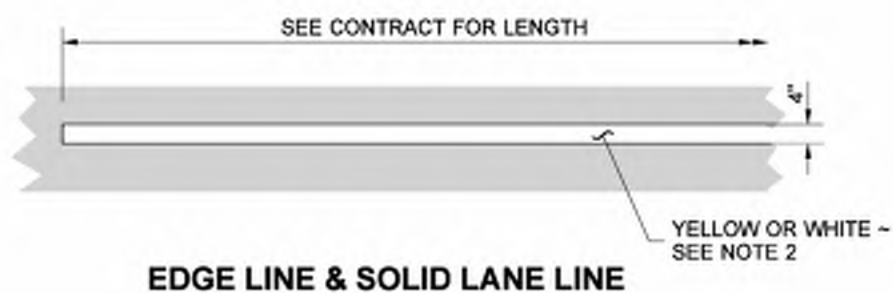
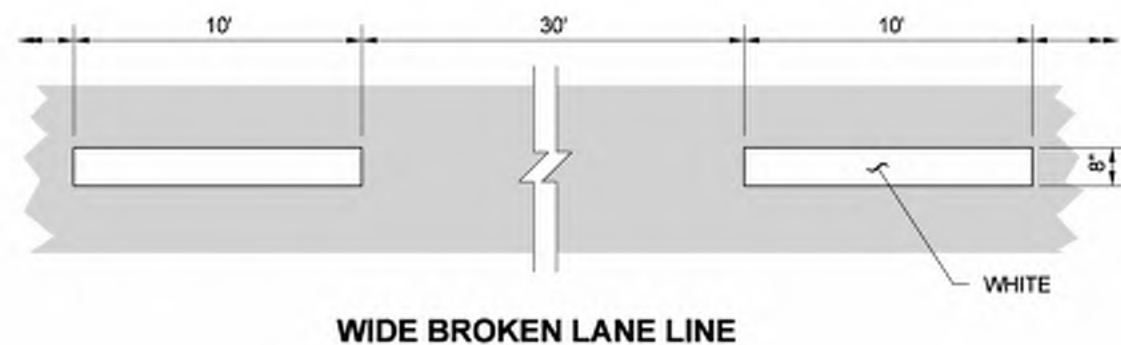
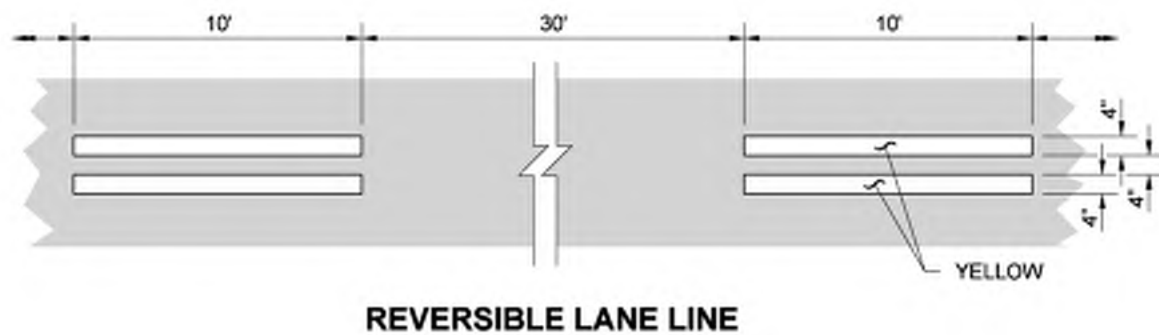
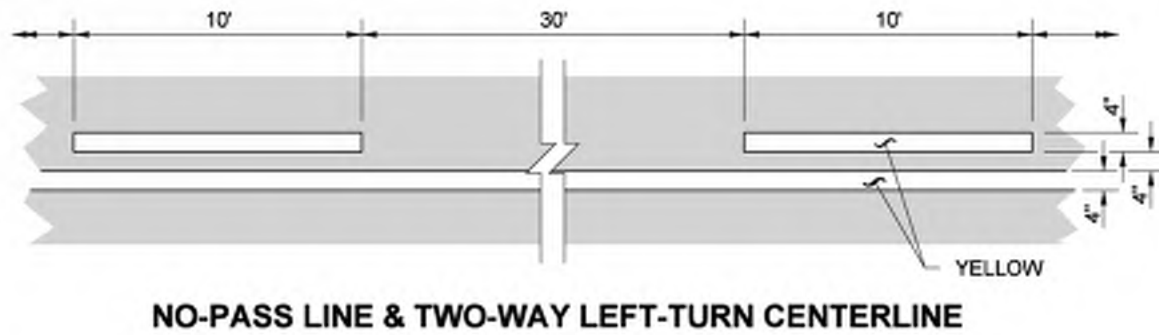
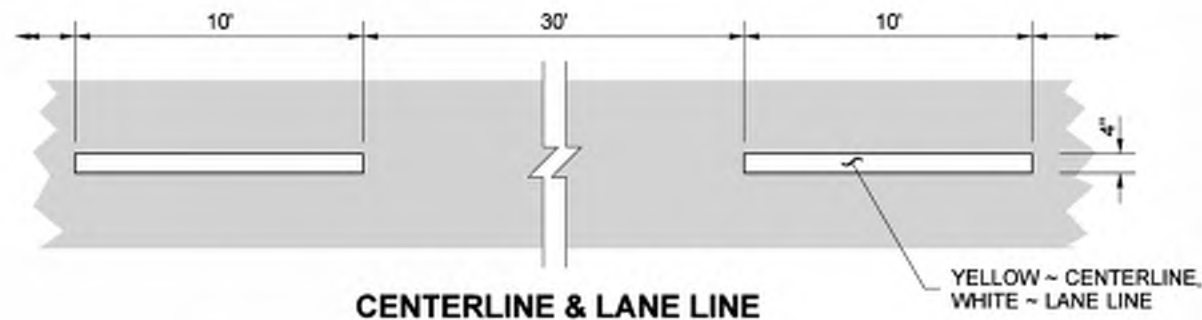
02-06-07

DATE



Washington State Department of Transportation





## NOTES

1. Dotted Extension Line shall be the same color as the line it is extending.
2. Edge Line shall be white on the right edge of traveled way, and yellow on the left edge of traveled way (on one-way roadways). Solid Lane Line shall be white.
3. The distance between the lines of the Double Centerline shall be 12" everywhere, except 4" for left-turn channelization and narrow roadways with lane widths of 10 feet or less. Local Agencies (on non-state routes) may specify a 4" distance for all locations.  
The distance between the lines of the Double Lane Line shall be 4".



*Brian J. Walsh* Walsh, Brian  
Sep 23 2020 3:46 PM

## LONGITUDINAL MARKING PATTERNS STANDARD PLAN M-20.10-03

SHEET 1 OF 2 SHEETS

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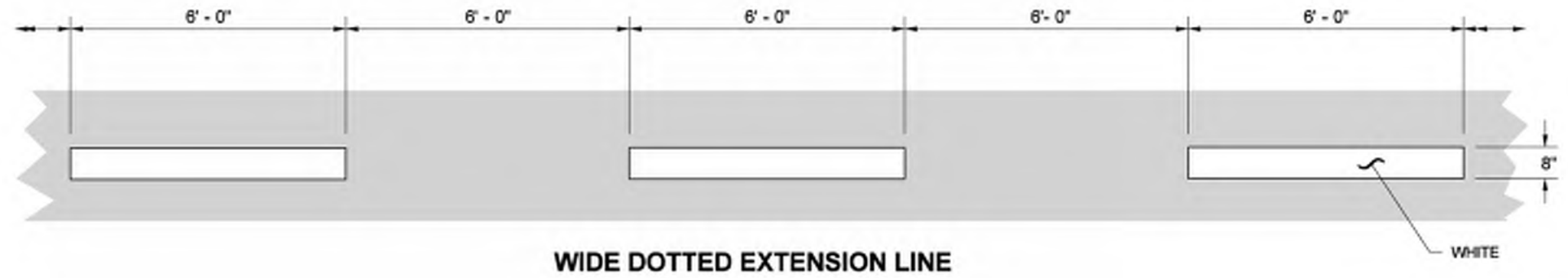
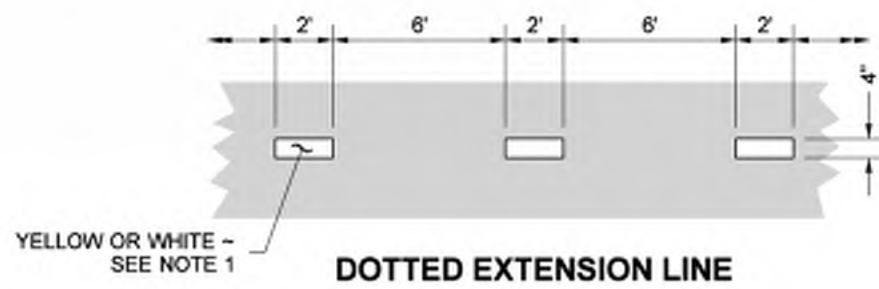
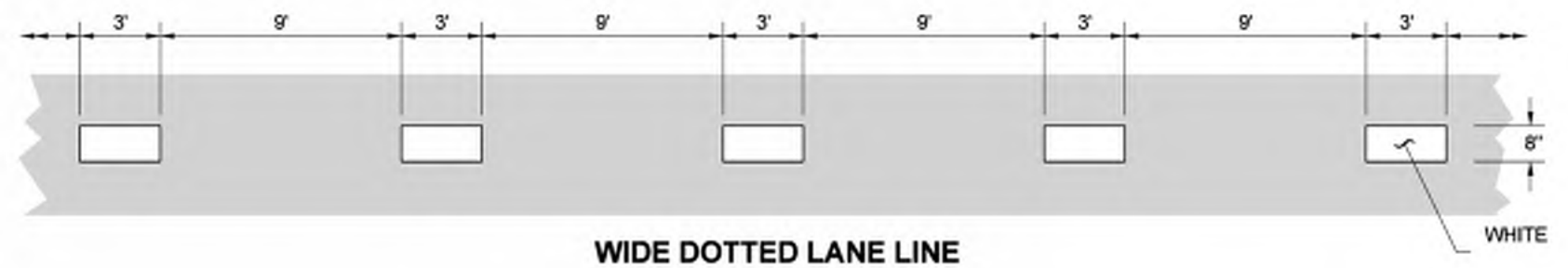
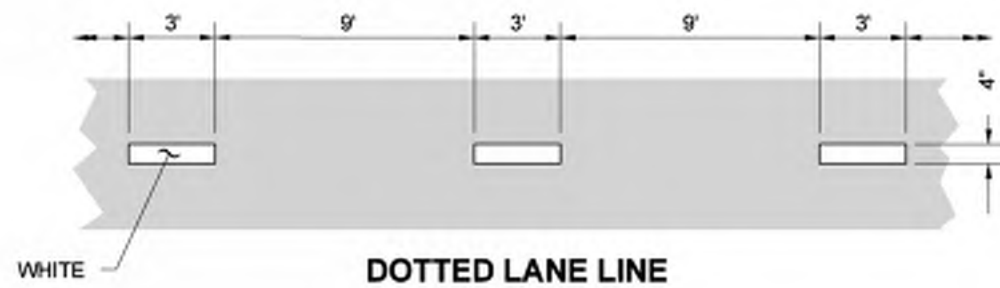
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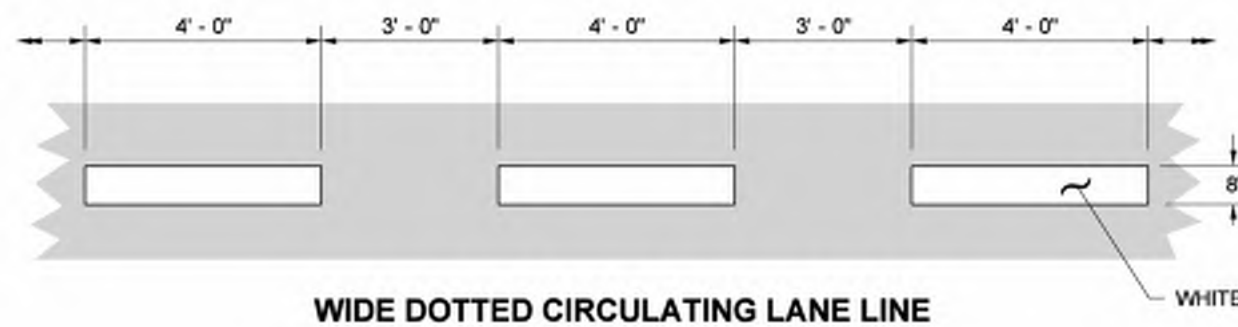
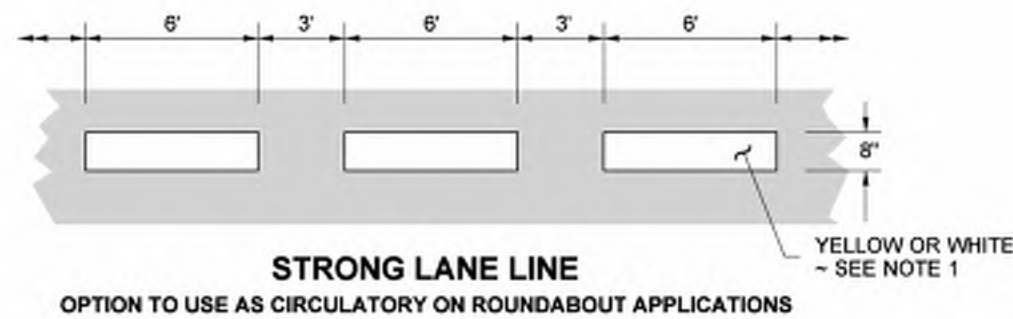
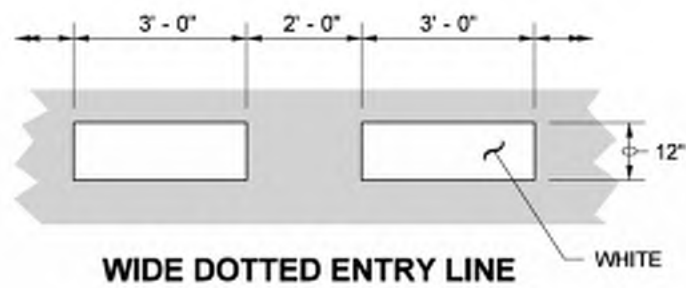


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### Roundabout Specific Lines

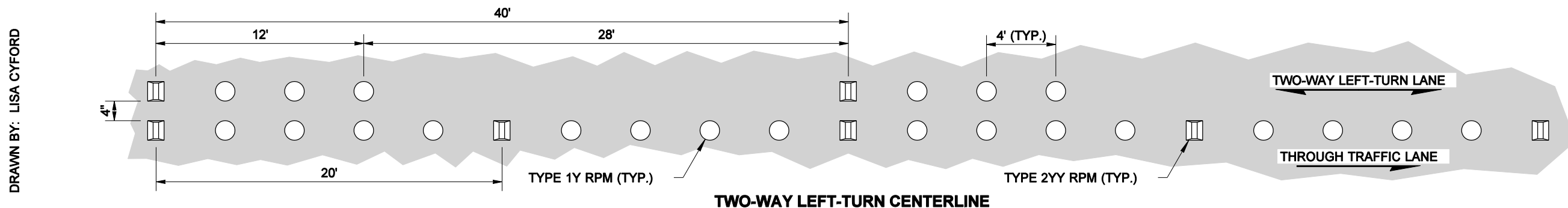


*Brian J. Walsh* Walsh, Brian  
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### LONGITUDINAL MARKING PATTERNS STANDARD PLAN M-20.10-03

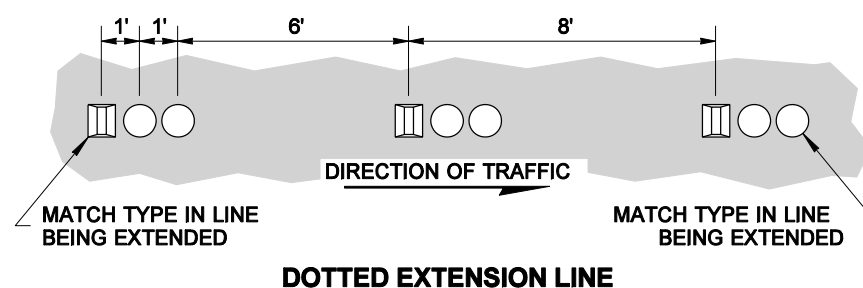
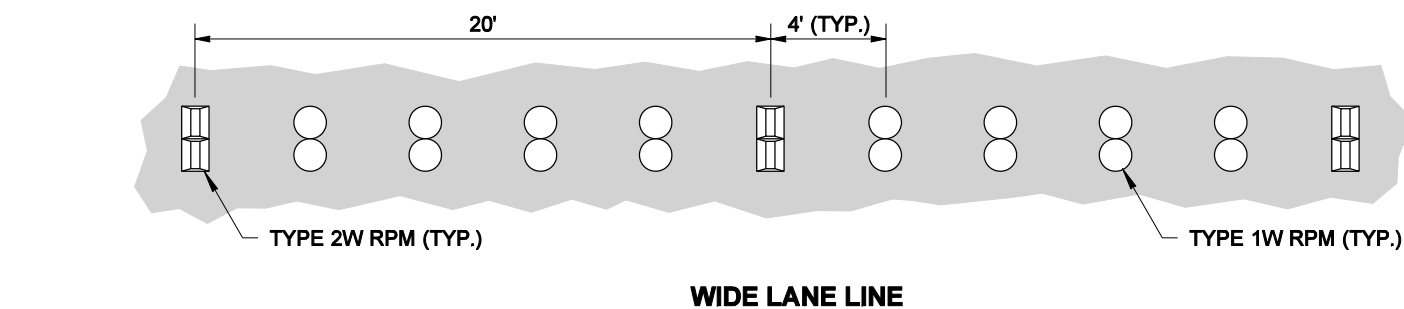
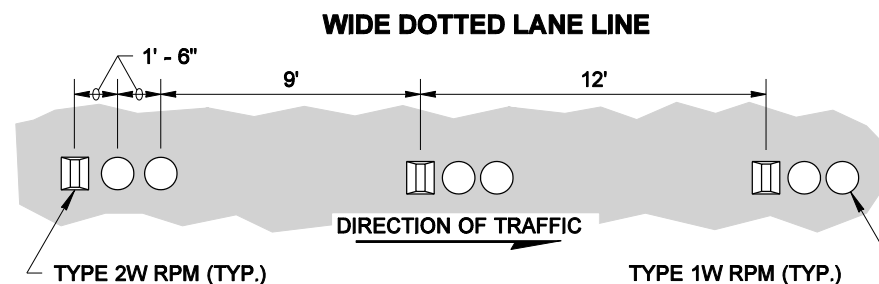
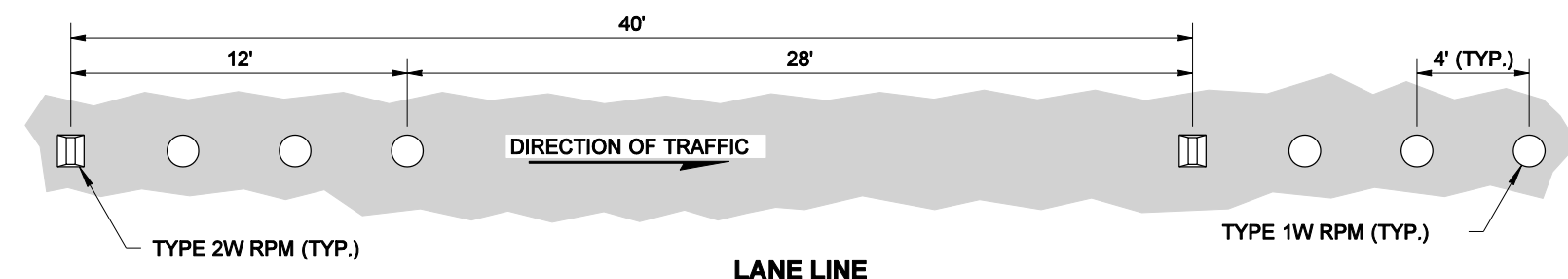
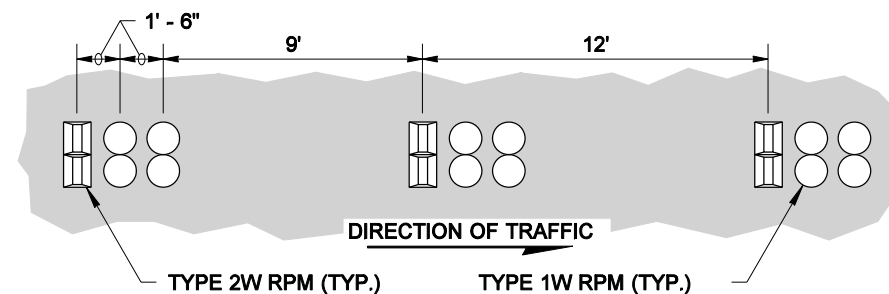
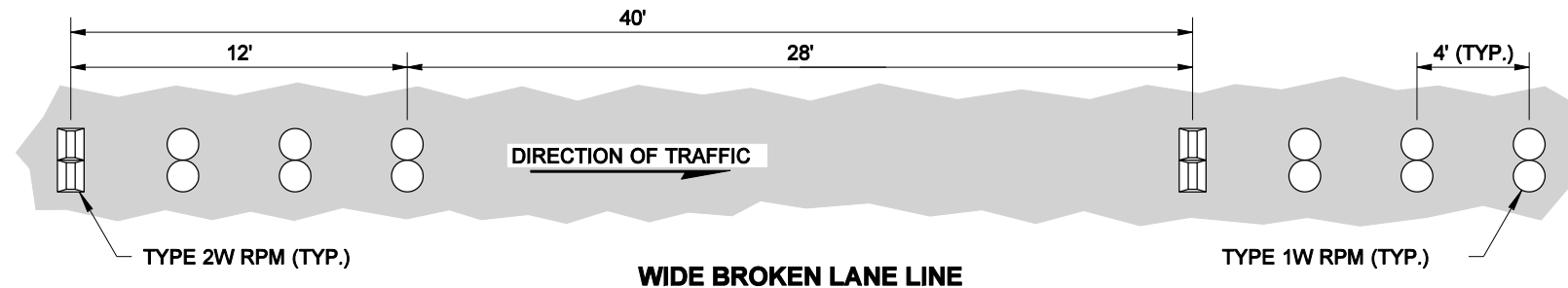
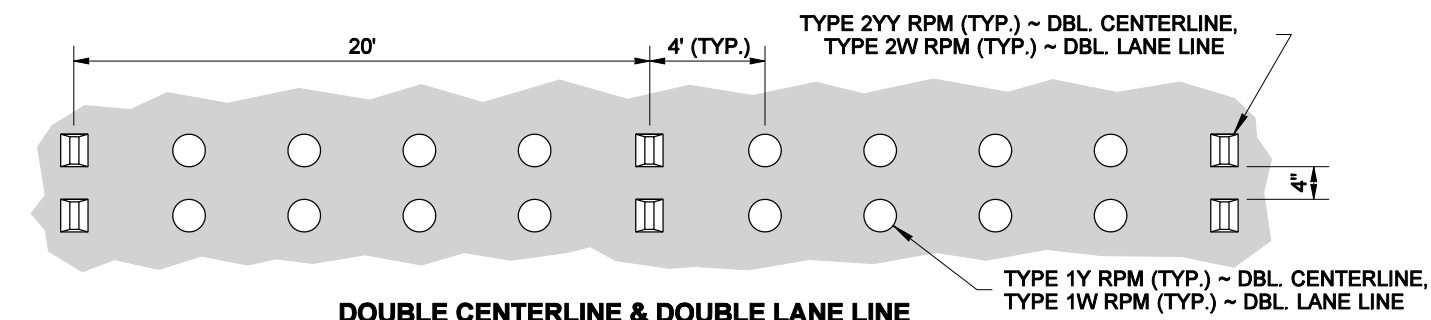
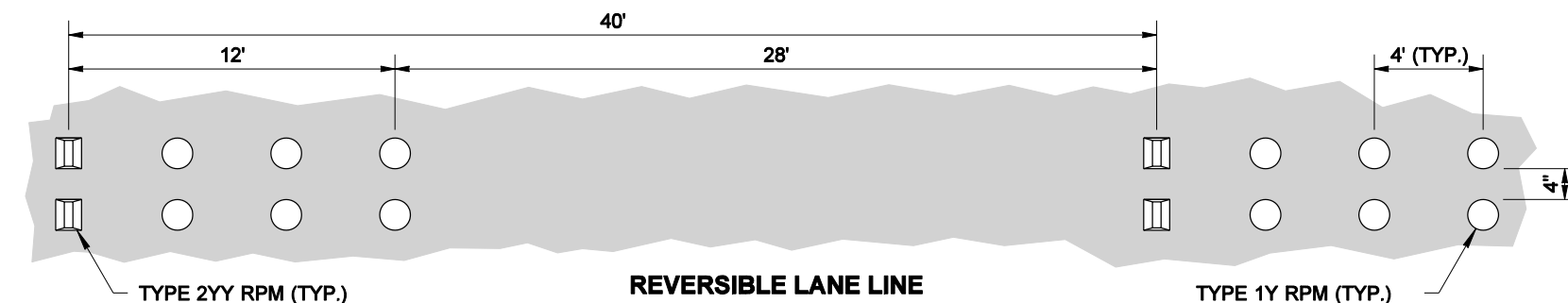
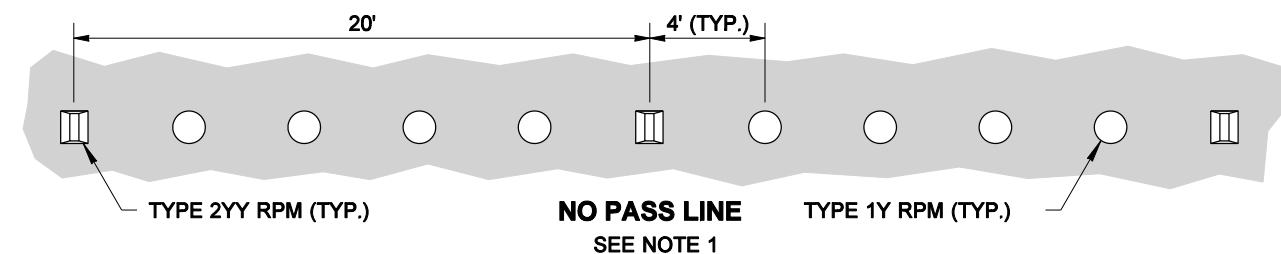
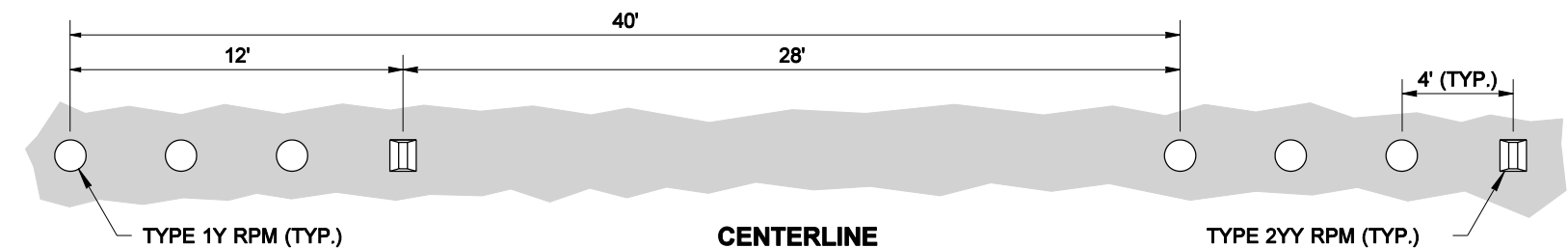
SHEET 2 OF 2 SHEETS





### NOTE

1. The NO PASS LINE (when required) is applied parallel to the CENTERLINE, 4" away, with the Type 2YY RPM's aligned (similar to TWO-WAY LEFT-TURN LINE).



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**LONGITUDINAL MARKING  
SUBSTITUTION W/RAISED  
PAVEMENT MARKERS  
STANDARD PLAN M-20.50-02**

**SHEET 1 OF 1 SHEET**

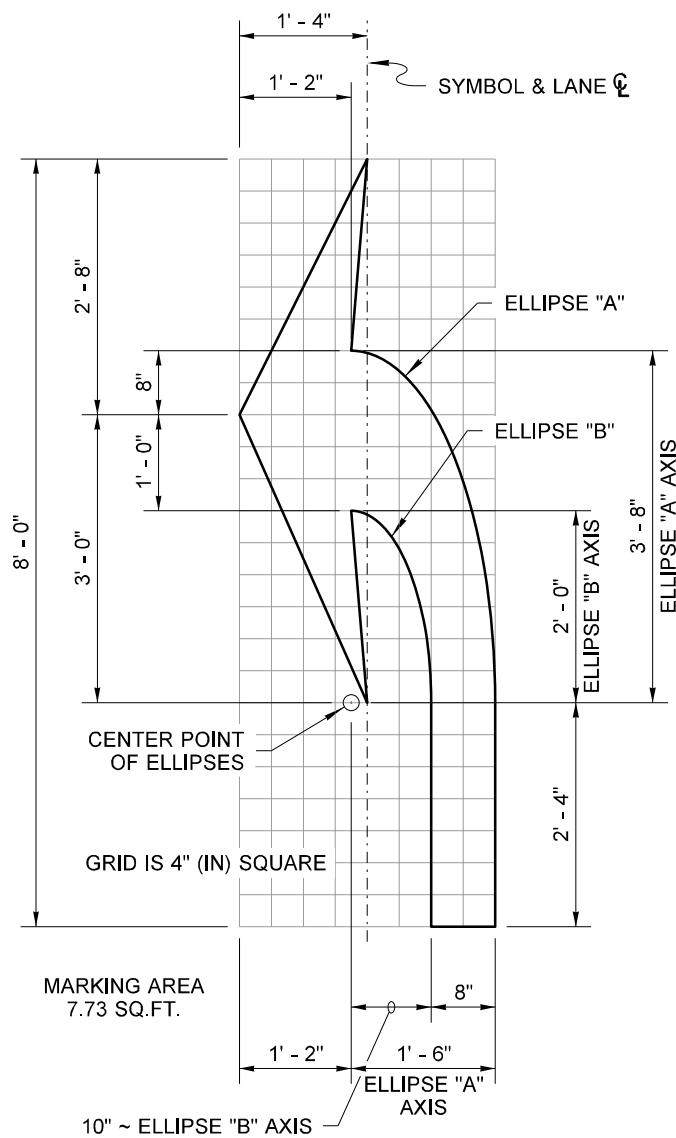
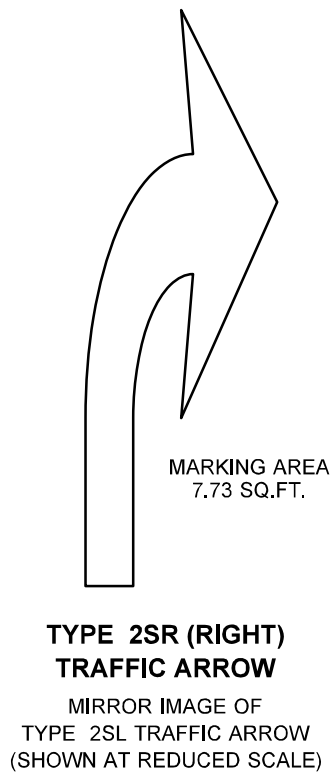
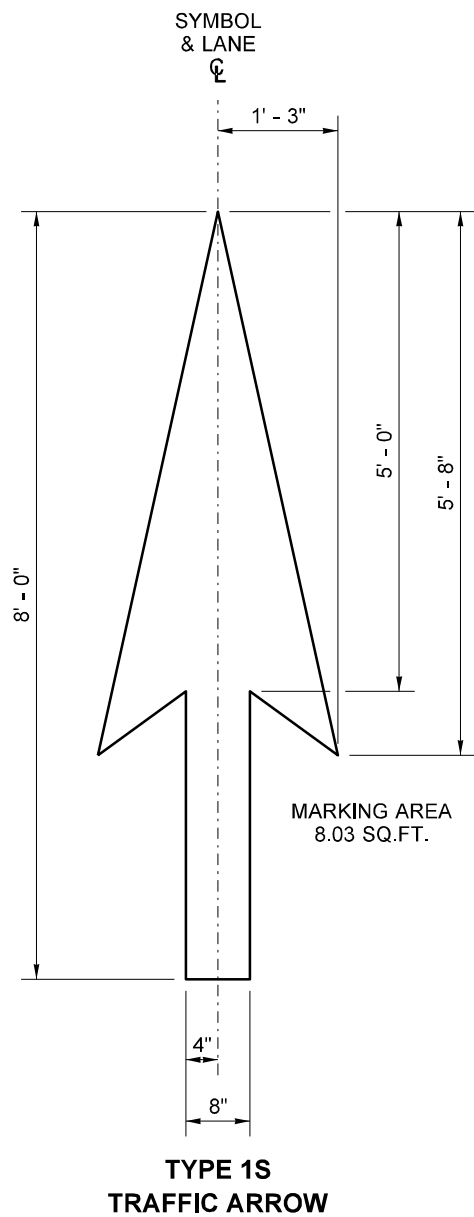
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**Pasco Bakotich III**

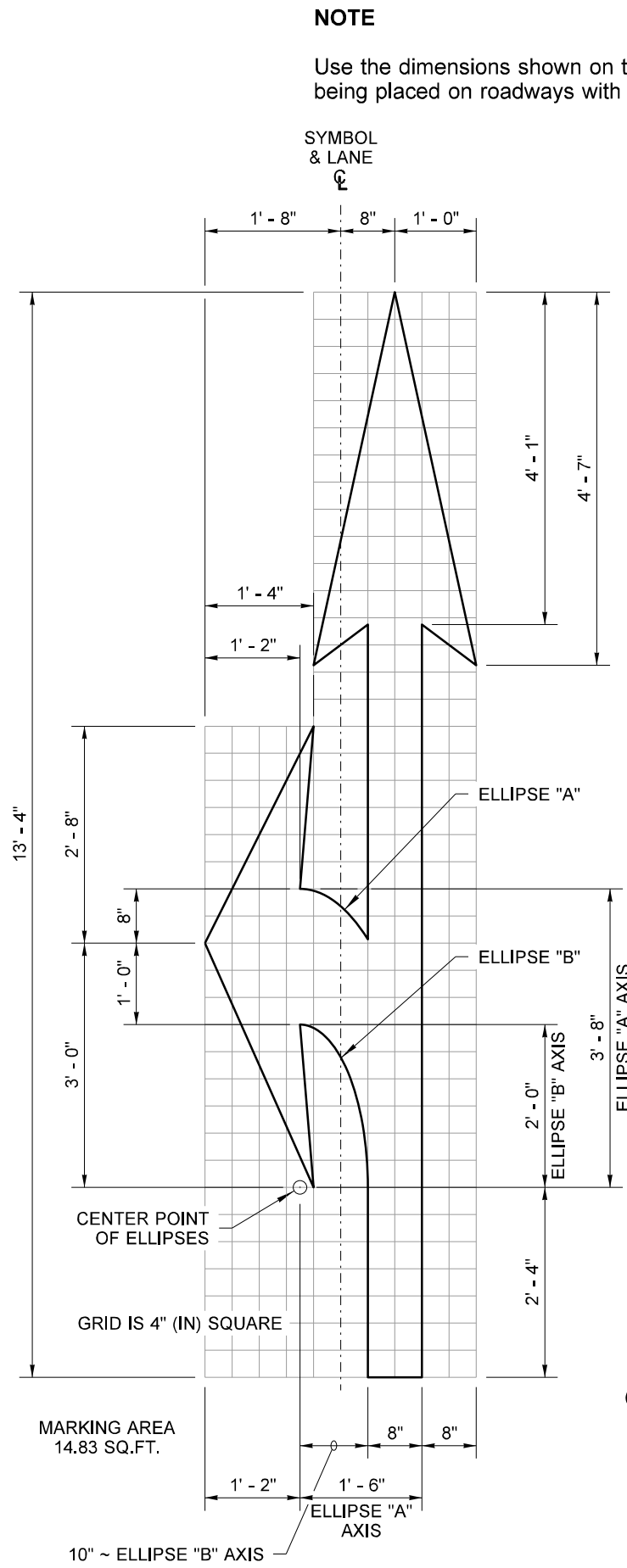
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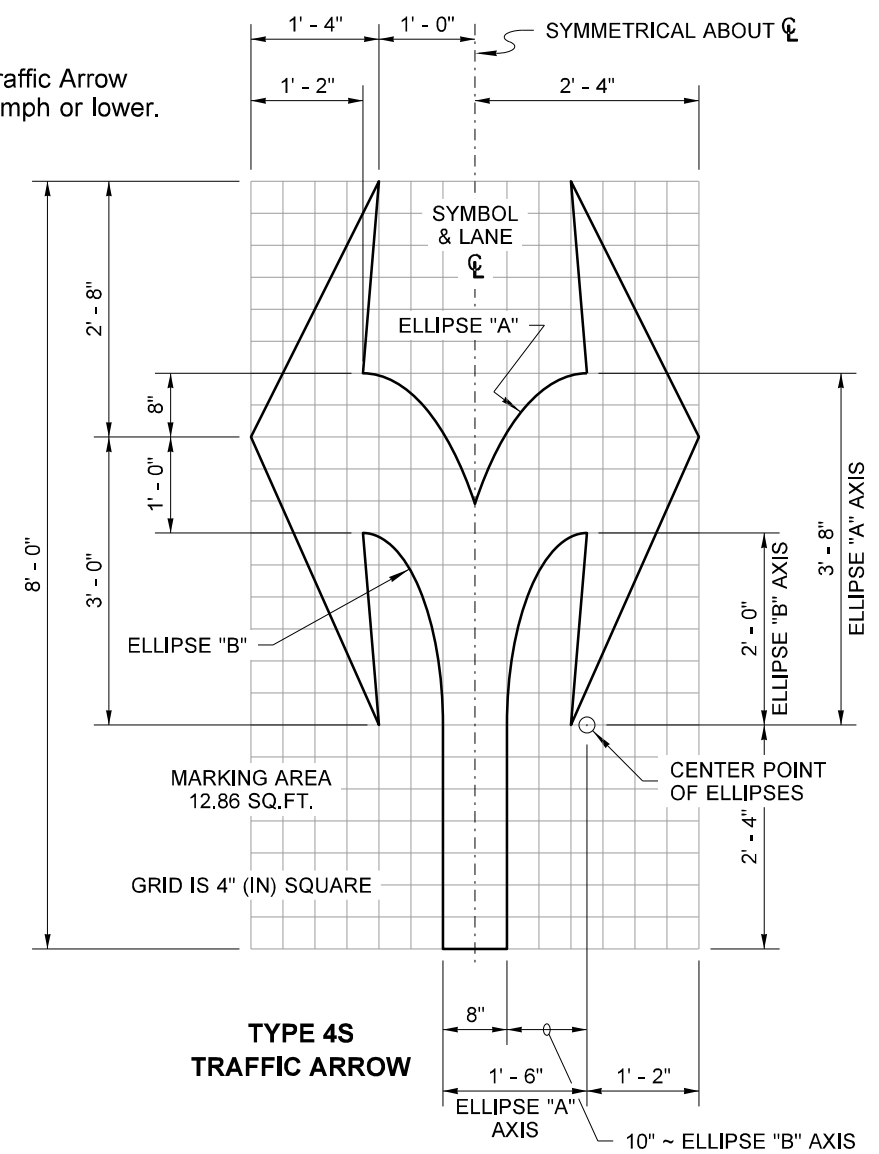
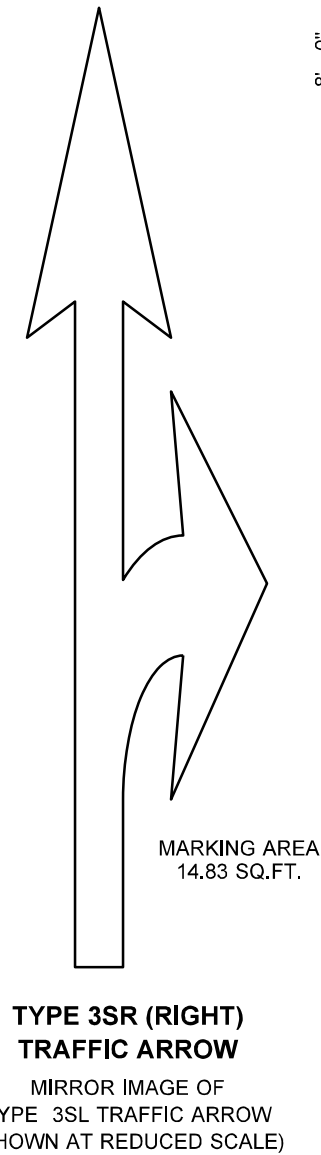
**Washington State Department of Transportation**



**TYPE 2SL (LEFT) TRAFFIC ARROW**



**TYPE 3SL (LEFT) TRAFFIC ARROW**



Walsh, Brian  
Apr 16 2015 2:21 PM

**SYMBOL MARKINGS ~  
TRAFFIC ARROWS FOR  
LOW-SPEED ROADWAYS  
STANDARD PLAN M-24.40-02**

SHEET 1 OF 2 SHEETS

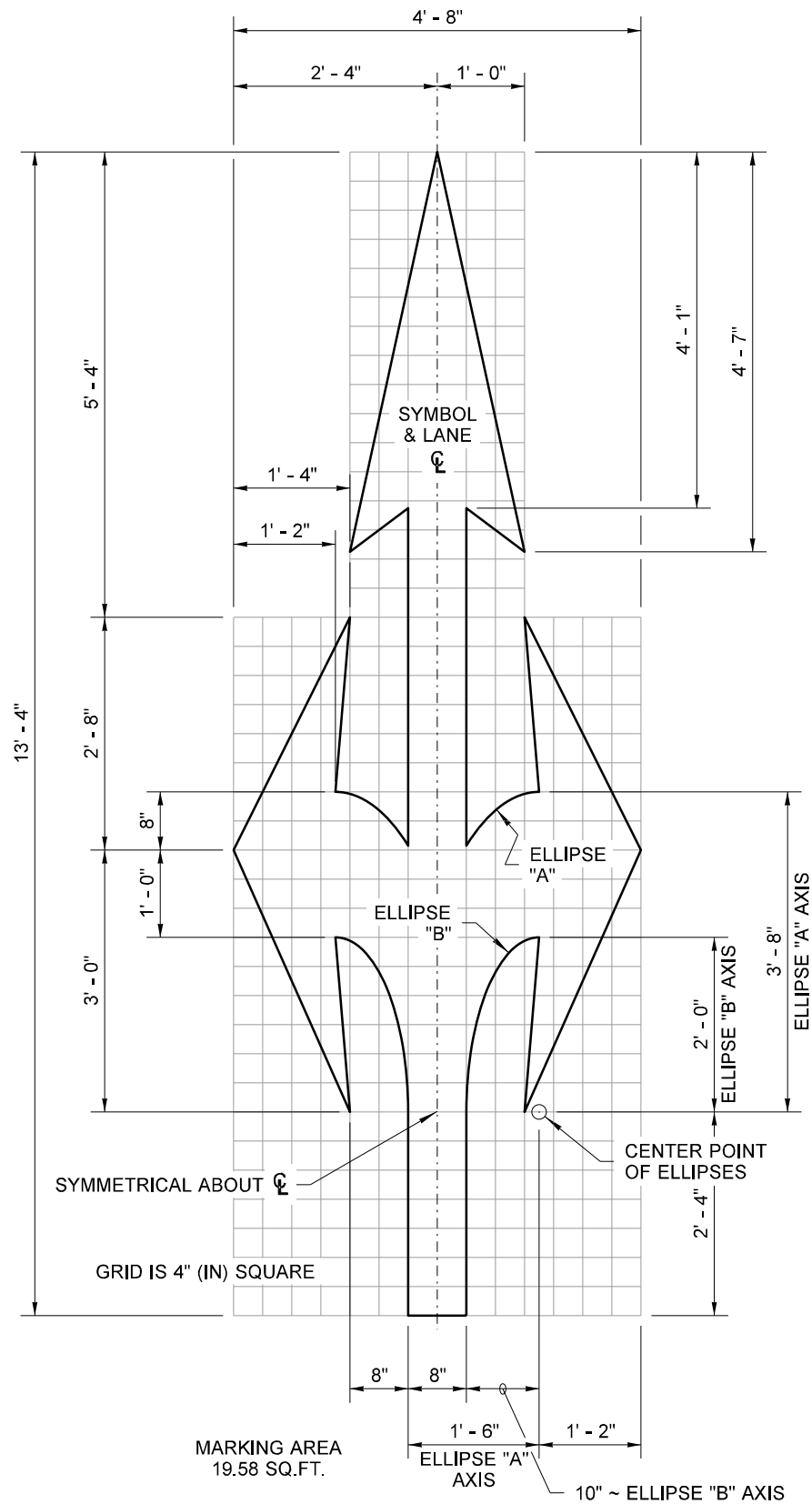
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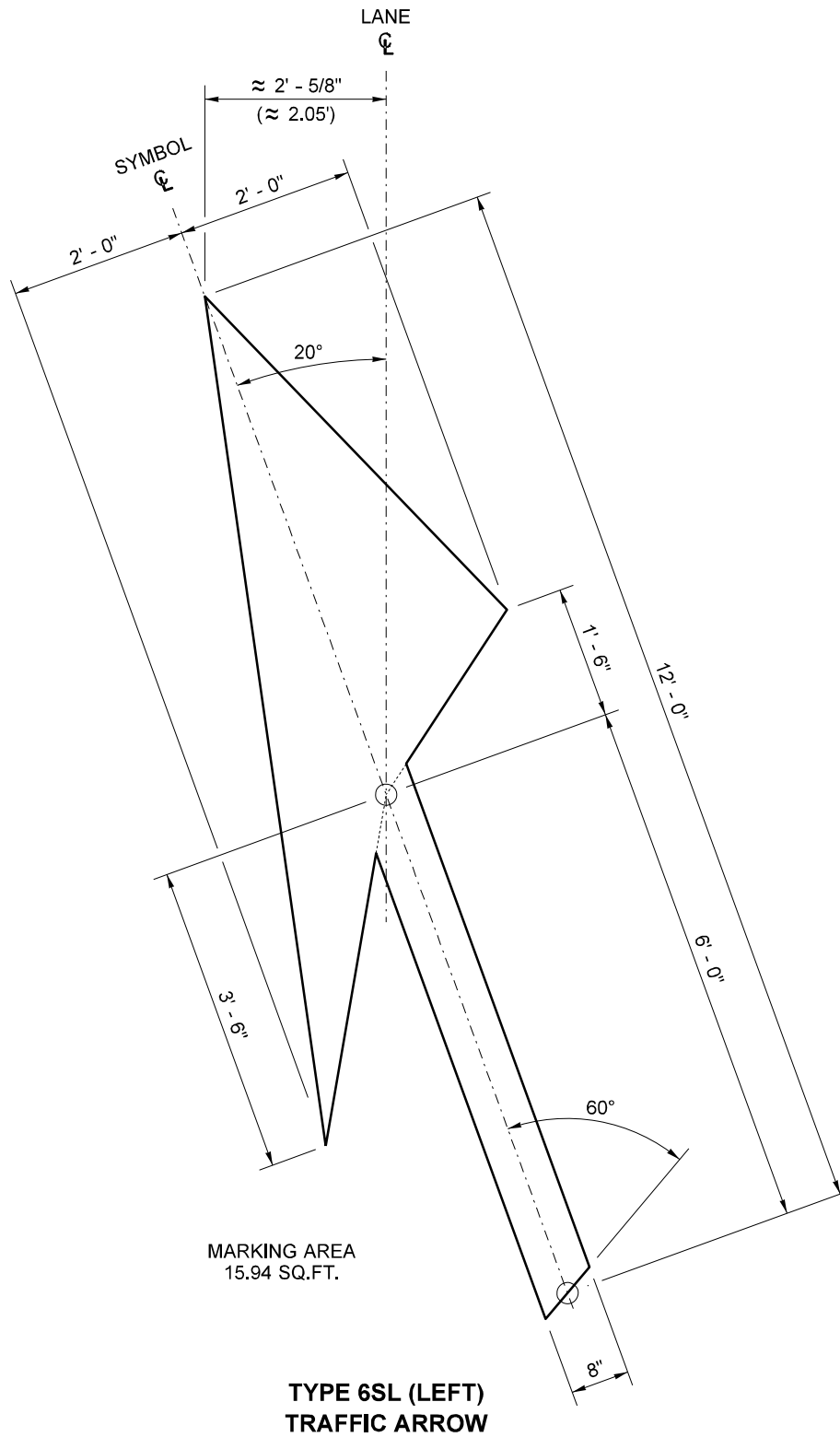
Washington State Department of Transportation



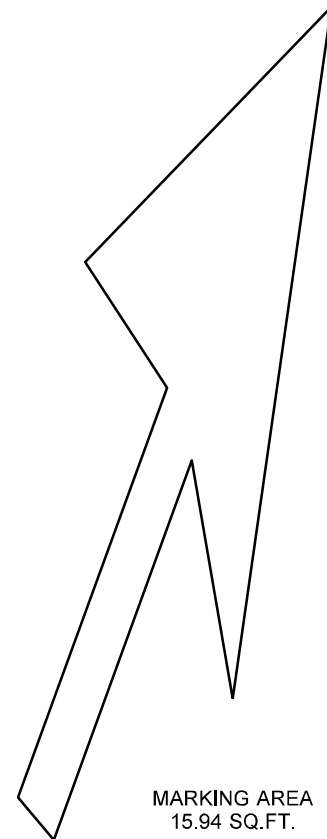
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TYPE 7S TRAFFIC ARROW



TYPE 6SL (LEFT)  
TRAFFIC ARROW



TYPE 6SR (RIGHT)  
TRAFFIC ARROW

MIRROR IMAGE OF TYPE 6SL  
(MIRRORED ABOUT LANE CENTERLINE)  
(SHOWN AT REDUCED SCALE)



Walsh, Brian  
Apr 16 2015 2:21 PM

**SYMBOL MARKINGS ~  
TRAFFIC ARROWS FOR  
LOW-SPEED ROADWAYS  
STANDARD PLAN M-24.40-02**

SHEET 2 OF 2 SHEETS

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