CLACKAMAS COUNTY

DAN JOHNSON
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

August 7, 2025 BCC Agenda Date/Item: _____

Board of County Commissioners

Approval of a Public Improvement Contract with Westech Construction for sidewalks, curbs and other construction for the SE Johnson Creek Boulevard Project. Contract Value is $1,714,494.04 for 2 years. Funding is through County Road Fund, the Development Agency and the Oregon Department of Transportation. No County General Funds are involved.

Previous Board Action/Review	03/09/23: Approval of an Intergovernmental Agreement with Oregon Department of Transportation for Right of Way Services for the SE Johnson Creek Blvd: 79th Pl – 82nd Ave Project. 03/02/23: Approval of a Resolution Declaring the Public Necessity and purpose for Acquisition of Right of Way, Easements and Fee Property and Authorizing Good Faith Negotiations and Condemnation Actions with DTD/Transportation Engineering for the SE Johnson Creek Blvd: 79th Pl – 82nd Ave Project. 03/18/21: Approval of Supplemental Project Agreement with Oregon Department of Transportation for the SE Johnson Creek Blvd: 79th Pl – 82nd Ave Project. 06/21/18: Authorization to Apply to the Oregon Department of Transportation for All Roads Transportation Safety Program Funding.		
Performance Clackamas	The project will build a strong infrastructure and ensure safe, healthy and secure communities.		
Counsel Review	Yes	**Procurement Review**	Yes
Contact Person	Joel Howie	**Contact Phone**	503-742-4658

EXECUTIVE SUMMARY: Clackamas County obtained an All Roads Transportation Safety (ARTS) grant from the Oregon Department of Transportation (ODOT) to implement safety improvements on SE Johnson Creek Blvd. from 79th Place to 82nd Avenue. A total of 43 crashes were reported at this location from 2011 through 2015 and the location is one of the highest-ranked Safety Priority Index System sites in Clackamas County. The safety improvements include adding sidewalks, ADA Ramps, a signal at the intersection of SE Johnson Creek Blvd and 79th Place, and constructing a raised median curb in the roadway from 79th Place east that will restrict traffic turning

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to right-in, right-out from SE Johnson Creek Blvd to Fred Meyer.

The total construction contract cost is $1,714,494.04 and will be paid through County Road Fund, Development Agency, and the ARTS grant. Construction is expected to be substantially completed by June 30, 2026 and the purchase order for the contract will expire June 30, 2027 to allow for plant establishment.

PROCUREMENT PROCESS: This project was advertised in accordance with ORS and LCRB Rules on May 14, 2025, Invitation to Bid 2025-46. Bids were publicly opened on June 10, 2025. The County received five (5) bids in response to the Invitation to Bid from Westech Construction, Inc.; Moore Excavation, Inc.; Corpac Construction Co.; Dirt and Aggregate Interchange, Inc.; and Kodiak Pacific Construction. The apparent lowest bid was from Westech Construction, Inc. with a total value of $1,714,494.04. No math errors were found in Westech Construction Inc.'s bid. Dirt and Aggregate Interchange's bid proposal was missing the last bid item (#93) and the resulting bid total did not match the calculated total. Also, Kodiak Pacific Construction's bid proposal for bid items No 19 and 33 were not carried out to the total cost correctly and the total amount of the bid that was written did not match the total of the corrected. A review of the bids received led to a recommendation for a contract award to the apparent low bidder, Westech Construction, Inc.

RECOMMENDATION: Staff recommends that the Board of County Commissioners approve Public Improvement Contract #1382 with Westech Construction, Inc. for the SE Johnson Creek Blvd: 79th Pl – 82nd Ave Project.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director of Transportation & Development

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
#1382
AGREEMENT FORM

This Public Improvement Contract for the SE Johnson Creek Blvd: 79th Pl – 82nd Ave Project (the "Contract"), is made by and between the Clackamas County, a political subdivision of the State of Oregon ("County"), and **Westech Construction, Inc.** ("Contractor"), both collectively the "Parties". This Contract shall become effective on the date this Contract has been signed by all the Parties and shall expire upon completion the completion of all obligations under the terms of this Contract unless terminated earlier by the Parties.

All capitalized terms in this Contract shall have the meanings identified in the General Conditions for Construction for Clackamas County referenced within the Instructions to Bidders.

1. Contract Price, Contract Documents and Work.
The Contractor hereby agrees to perform all Work described in, and reasonably inferred from, the Contract Documents. The Owner will compensate the Contractor an amount not-to-exceed price **One Million Seven Hundred Fourteen Thousand Four Hundred Ninety-Four Dollars Four Cents ($1,714,494.04)** (the "Contract Price") in accordance with the requirements of the General Conditions for the performance of all Work described and reasonably inferred from the Contract Documents. The Contract Price is the price fixed in the Contractor's Bid Proposal for said Work as set forth herein under the Schedule of Bid Prices.

Also, the following documents are incorporated by reference in this Contract and made a part hereof:

- Notice of Public Improvement Contract Opportunity
- Instructions to Bidders
- Supplemental Instructions to Bidders
- Bid Bond
- Bid Proposal and Schedule of Prices
- Public Improvement Contract Form
- Affidavit of Non Collusion
- First-Tier Subcontractor Disclosure Form
- Certificate Regarding Ineligible Contractors
- Performance Bond and Payment Bond
- Prevailing Wage Rates
- Plans, Special Provisions and Drawings
- General Conditions for Construction for Clackamas County
- DBE, FHWA and ODOT Forms in Section 13

2. Representatives.
Contractor has named Joshua Meng as its' Authorized Representative to act on its behalf.

The County designates Joel Howie as its Authorized Representative in the administration of this Contract. The above-named individual shall be the initial point of contact for matters related to Contract performance, payment, authorization, and to carry out the responsibilities of the County.

3. Key Persons.
The Contractor's personnel identified below shall be considered Key Persons and shall not be replaced during the project without the prior written permission of County, which shall not be unreasonably withheld. If the Contractor intends to substitute personnel, a request must be given to County at least 30 days prior to the intended time of substitution. When replacements have been approved by County, the Contractor shall provide a transition period of at least 10 working days during which the original and replacement personnel shall be working on the project concurrently. Once a replacement for any of these staff members is authorized, further replacement shall not occur without the prior written permission of County. The Contractor's project staff shall consist of the following personnel:

Project Executive: Joshua Meng shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

Project Manager: Reed Woodward shall be the Contractor's project manager and will participate in all meetings throughout the project term.

Job Superintendent: Doug Paulron shall be the Contractor's on-site job superintendent throughout the project term.

Project Engineer: Michael Pingle shall be the Contractor's project engineer, providing assistance to the project manager, and subcontractor and supplier coordination throughout the project term.

4. Contract Dates.
The Contractor agrees to complete the Work in accordance with the following key dates:

CONTRACT COMPLETION DATE 1: August 27, 2025. The Contractor shall complete all Work related to the house demolitions at the former 7920 SE Johnson Creek Blvd property (file #5) (Section 00180.50(h)(1)).

CONTRACT COMPLETION DATE 2: June 30, 2026. The Contractor shall complete all Work to be done under the Contract, except for seeding and plant establishment (Section 00180.50(h)(3)).

FINAL COMPLETION DATE: June 30, 2027

Time is of the essence for this Contract. It is imperative that the Work in this Contract reach Second Notification and Third Notification by the above specified dates.

5. Insurance Certificates.
In accordance with Section 00170.70 of Section 12, General Conditions for Construction for Clackamas County, Contractor shall furnish proof of the required insurance naming Clackamas County and the State of Oregon and the Oregon Department of Transportation as an additional insured. Insurance certificates may be returned with the signed Contract or may emailed to Procurement@clackamas.us.

6. Tax Compliance.
The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle Owner to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.

7. Confidential Information.
Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Contract, be exposed to or acquire information that is confidential to County or the State of Oregon. Any and all information of any form obtained by Contractor or its employees or agents in the performance of this Contract shall be deemed confidential information of County and of State ("Confidential Information"). Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purpose unless specifically authorized in writing under this Contract.

8. Counterparts.
This Contract may be executed in several counterparts, all of which when taken together shall constitute an agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of the Contract so executed shall constitute an original.

9. Integration.
The Contract Documents constitute the entire agreement between the parties. There are no other understandings, agreements or representations, oral or written, not specified herein regarding this Contract. Contractor, by the signature below of its authorized representative, hereby acknowledges that it has read this Contract, understands it, and agrees to be bound by its terms and conditions.

10. Liquidated Damages
The Contractor acknowledges that the County will sustain damages as a result of the Contractor's failure to substantially complete the Project in accordance with the Contract Documents and Special Provision Section 00180.85 in Section 12, General Conditions for Construction for (Certified LPA) Clackamas County. These damages may include, but are not limited to delays in completion, use of the Project, and costs associated with Contract administration and use of temporary facilities.

11. Compliance with Applicable Law.
Contractor shall comply with all federal, state, county, and local laws, ordinances, and regulations applicable to the Work to be done under this Contract including, but not limited to, compliance with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract and failure to comply is a material breach that entitles Owner to exercise any rights and remedies available under this Contract including, but not limited to, termination for default.

12. Federal Contracting Requirements.
County intends that all or a portion of the consideration paid to Contractor is eligible for reimbursement by one or more federal agencies. This Contract is subject to the additional terms and conditions, required by federal law for a federal award, set in **Section 13 Required Contract Provisions Federal-Aid Construction Contracts (FHWA-1273)**, attached hereto and incorporated by this reference herein. All terms and conditions required under applicable federal law for a federal reward including, but not limited to, 2 C.F.R. § 200.327 and 2 C.F.R. § Pt. 200, App. II, are hereby incorporated by this reference herein.

13. Responsibility for Taxes. Contractor is solely responsible for payment of any federal, state, or local taxes required as a result of the Contract or the Work including, but not limited, to payment of the corporate activity tax imposed under enrolled HB 3427 (2019 Oregon regular legislative session).

14. Contractor DATA:
Westech Construction, Inc.
2204 NE 194th Ave
Portland, Oregon 97230

Contractor CCB # 99833 Expiration Date: 6/13/2026
Oregon Business Registry # 391288-89 Entity Type: DBC State of Formation: Oregon

Payment information will be reported to the IRS under the name and taxpayer ID# provided by the Contractor. Information must be provided prior to contract approval. Information not matching IRS records could subject Contractor to 28 percent backup withholding.

Signature Page Follows

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

Westech Construction, Inc.	Clackamas County
Authorized Signature — Date: 7/21/2025	Chair — Date
Cless Woodward President Name / Title Printed	Approved as to Form: County Counsel — Date: 7/23/2025

CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2025-46
SE Johnson Creek Blvd: 79th Place – 82nd Ave Project
May 14, 2025

Clackamas County ("County") through its Board of County Commissioners is accepting sealed bids for the **SE Johnson Creek Blvd: 79th Place – 82nd Ave Project** until **June 5, 2025, 2:00 PM,** Pacific Time, ("Bid Closing") at the following location:

This project includes Federal Funding. Bidding Documents can be downloaded from the state of Oregon procurement website ("OregonBuys") at the following address: https://oregonbuys.gov/bso/view/login/login.xhtml, Document No.S-C01010-000**13854**

Prospective Bidders will need to sign in to download the information and that information will be accumulated for a Plan Holder's List. Prospective Bidders are responsible for obtaining any Addenda from Website listed above.

Submitting Proposals: Bid Locker

Proposals will only be accepted electronically thru a secure online bid submission service, **Bid Locker**. *Email submissions to Clackamas County email addresses will no longer be accepted.*

A. Completed proposal documents must arrive electronically via Bid Locker located at https://bidlocker.us/a/clackamascounty/BidLocker.
B. Bid Locker will electronically document the date and time of all submissions. Completed documents must arrive by the deadline indicated in Section 1 or as modified by Addendum. LATE PROPOSALS WILL NOT BE ACCEPTED.
C. Proposers must register and create a profile for their business with Bid Locker in order to submit for this project. It is free to register for Bid Locker.
D. Proposers with further questions concerning Bid Locker may review the Vendor's Guide located at https://www.clackamas.us/how-to-bid-on-county-projects .

Engineers Estimate: The Engineer's estimated range of costs for the Project is between $**1,525,000** and $**1,625,000**.

Contact Information

Procurement Process Questions: Tralee Whitley at TWhitley@clackamas.us

Bids will be opened and publicly read aloud at the above Delivery address after the Bid Closing. Bid results will also be posted to the OregonBuys listing shortly after the opening.

To be eligible for award under this Invitation to Bid, Bidders (prime contractors) must submit proof of ODOT prequalification in the Classes of **Electrical (ELEC), or Earthwork and Drainage (EART) and Asphalt Concrete Paving and Oiling (ACP), or Earthwork and Drainage (EART) and Miscellaneous Highway Appurtenances (MHA), or Asphalt Concrete Paving and Oiling (ACP) and Miscellaneous Highway Appurtenances (MHA)** to the County by the time of Bid Closing. The County will reject Bids from Bidders who are not prequalified for the class of work indicated prior to the Bid Closing.

This is a public work contract subject to ORS 279C.800 to 279C.870 and the Federal Prevailing Rate of Wage required Under the Davis-Bacon Act (40 U.S.C. 3141 Et Seq.). All projects have minimum wage rate requirements. Each worker in each trade or occupation employed to perform work on the project shall be paid not less than the existing prevailing wage rate established by the Oregon Bureau of Labor and Industries (BOLI) or the applicable federal prevailing wage rate required under the Davis-Bacon Act, whichever is higher.

Prevailing wage rates published in the wage determinations and any applicable modifications or amendments apply to this Project and are incorporated by reference:

(1) U.S. Department of Labor, "General Wage Determinations Issued under the Davis- Bacon and Related Acts: Oregon Highway Construction Projects", and

(2) Oregon Bureau of Labor and Industries (BOLI), "Prevailing Wage Rates For Public Works Contracts.

The applicable Federal prevailing wage rates and the existing State prevailing wage rates last published prior to the time of Bid Closing as stated above, apply to this Project.

Wage Rates are Internet-Accessible - The applicable Davis-Bacon wage rates can be found on the US Department of Labor website at: https://sam.gov/wage-determinations

The BOLI wage rates can be found on the Oregon Bureau of Labor and Industries website at: http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx The Work will take place in Clackamas County, Oregon.

Wage Rates are Subject to Change - Modifications or amendments to the Davis-Bacon and BOLI wage rates applicable to this Project may occur at any time before Bid Closing. Bidders are responsible to monitor the respective web page(s) for modifications and amendments up until Bid Closing.

The applicable Davis-Bacon and BOLI wage rates will be included in the Contract.

Clackamas County in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 200-4 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, herby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises 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 or national origin in consideration for award.

All federally funded projects have “BUILD AMERICA, BUY AMERICA” requirements. The project is subject to the DBE policy statement as cited in 49 CFR 26. DBE Goal for this project is **13**%. The Reimbursable On-the-job Training requirement is **0** hours.

Clackamas County encourages bids from Disadvantaged business enterprise, a minority-owned business, a woman-owned business, or an emerging small business that is certified under ORS 200.055.

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

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SECTION 2

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
INSTRUCTIONS TO BIDDERS

Clackamas County Local Contract Review Board Rules ("LCRB Rules") govern this procurement process and are in accordance with state and federal requirements. LCRB Rules may be found at: http://www.clackamas.us/code/documents/appendixc.pdf. The Instructions to Bidders is applicable to the procurement process for Clackamas County, or any component unit thereof identified on the Notice of Public Improvement Contract Opportunity, herein after referred to as the "County."

Article 1. Scope of Work/Bidder Prequalification

The work contemplated under this contract with the County, includes all labor, materials, transportation, equipment and services necessary for, and reasonably incidental to, the completion of all construction work in connection with the project described in the Contract Documents. The Contract Documents are defined in Section 00110.20 of Section 12, General Conditions for Construction for Clackamas County.

Only Bidders prequalified through ODOT for the classes of work described in the Contract Documents will be accepted. See Section 00120.00 of Section 12, General Conditions for Construction for Clackamas County. Under ORS 279C.430, proof of prequalification for the classes of work described in the Notice of Public Improvement Contract Opportunity must be submitted to the County prior to Bid Closing. **IF YOU ARE UNCERTAIN REGARDING YOUR PREQUALIFICATION STATUS, PLEASE CONTACT PROCUREMENT AT 503-742-5441.**

Article 2. Examination of Site and Conditions

Before making a Bid, the Bidder shall examine the site of the work and ascertain all the physical conditions in relation thereto. See Section 00120.15 of Section 12, General Conditions for Construction for Clackamas County.

Article 3. Interpretation of Contract Documents and Approval of Materials Equal to Those Provided in the Specifications

If any Bidder contemplating submitting a Bid for the proposed contract is in doubt as to the true meaning of any part of the Plans, Special Provisions or forms of Contract Documents, or detects discrepancies or omissions, such Bidder may submit to the Engineer written request for an interpretation thereof at least ten (10) calendar days prior to the date set for the Bid Closing.

When a prospective Bidder seeks approval of a particular manufacturer's material, process or item of equal value, utility or merit other than that designated by the Engineer in the Contract Documents, the Bidder may submit to the Engineer a written request for approval of such substitute at least ten (10) calendar days prior to the date set for the Bid Closing. The prospective Bidder submitting the request will be responsible for its prompt delivery.

Requests of approval for a substitution from that specified shall be accompanied by samples, records of performance, certified copies of tests by impartial and recognized laboratories, and such other information as the Engineer may request.

To establish a basis of quality, certain processes, types of machinery and equipment or kinds of materials may be specified in the Contract

Documents either by description of process or by designating a manufacturer by name and referring to a brand or product designation or by specifying a kind of material. Whenever a process is designated or a manufacturer's name, brand or item designation is given, or whenever a process or material covered by patent is designated or described, it shall be understood that the words "or approved equal" follow such name, designation or description, whether in fact they do so or not.

Any interpretation of the Contract Documents or approval of manufacturer's material will be made only by an Addendum duly issued. All Addenda will be posted to the OregonBuys listing and will become a part of the Bid Documents. The County will not be responsible for any other explanation or interpretation of the Contract Documents nor for any other approval of a particular manufacturer's process or item for any Bidder.

When the Engineer approves a substitution by Addendum, it is with the understanding that the Contractor guarantees the substituted article or material to be equal or better than the one specified.

Unless the Engineer has approved substitutions of Materials, Equipment, and/or methods prior to opening of Bids, the Bidder shall furnish the items specified in the Contract. Substitution after Award is specified in 00180.31(b), 00180.31(c), and 00180.31(d).

Article 4. Security to Be Furnished by Each Bidder

Each Bid must be accompanied by either 1) a cashier's check or a certified check drawn on a bank authorized to do business in the State of Oregon, or 2) a Bid Bond described hereinafter, executed in favor of the County, for an amount equal to ten percent (10%) of the total amount Bid as a guarantee that, if awarded the contract, the Bidder will execute the contract and provide a Performance Bond and Payment Bond as required or 3) Irrevocable letter of credit issued by an insured institution as defined in ORS 706.008. The successful Bidder's check or Bid Bond will be retained until the Bidder has entered into a contract satisfactory to County and furnished a one hundred percent (100%) performance bond and one hundred percent (100%) Payment Bond. The County reserves the right to hold the Bid security as described in Article 10 hereof. Should the successful Bidder fail to execute and deliver the contract as provided for in Article 12 hereof, including a satisfactory performance bond and payment bond within twenty (20) calendar days after the Bid has been accepted by the County, then the contract award made to such Bidder may be considered canceled and the Bid security may be forfeited as liquidated damages at the option of the County. The date of the acceptance of the Bid and the award of the contract as contemplated by the Contract Documents shall mean the date of acceptance specified in the Notice of Intent to Award.

Article 5. Execution of Bid Bond

Should the Bidder elect to utilize a Bid Bond as described in Article 4 in order to satisfy the Bid security requirements, such form must be completed in the following manner:

A. Bid bonds must be executed on the County forms, which will be provided to all prospective Bidders by the County.

B. The Bid Bond shall be executed on behalf of a bonding company licensed to do business in the State of Oregon.

C. In the case of a sole individual, the bond need only be executed as principal by the sole individual. In the case of a partnership, the bond must be executed by at least one of the partners. In the case of a corporation, the bond must be executed by stating the official name of the corporation under which is placed the signature of an officer authorized to sign on behalf of the corporation followed by such person's official capacity, such as president, etc. The corporation seal should then be affixed to the bond.

D. The name of the surety must be stated in the

execution over the signature of its duly authorized attorney-in-fact and accompanied by the seal of the surety corporation.

Article 6. Execution of the Bid Proposal Form and Bid Schedule of Prices

Each Bid shall be made in accordance with: (i) the sample Bid Proposal Form and Bid Schedule of Prices accompanying these instructions; (ii) the appropriate signatures for a sole individual, partnership, corporation or limited liability corporation shall be added as noted in Article 5C above; (iii) numbers pertaining to base Bids shall be stated both in writing and in figures; and (iv) the Bidder's address shall be typed or printed.

The Bid Schedule of Prices relates to Bids on specific Contract Documents. Only the amounts and information asked for on the Bid Schedule of Prices furnished will be considered as the Bid. Each Bidder shall Bid upon the work exactly as specified and provided in the Bid Schedule of Prices. The Bidder shall include in the Bid a sum to cover the cost of all items contemplated by the Contract.

Bidders shall complete the certifications and statements included in the Bid Section of the Bid Booklet according to the instructions. The Bid Proposal Form and Bid Schedule of Prices shall be signed by an authorized representative certifying that the Statements in the Bid Proposal Form are accurate and the Bid Schedule of Prices represents the proposed cost.

Article 7. Prohibition of Alterations to Bid

Bids that are incomplete, or contain ambiguities or have differing conditions required by the Bidder, including requested changes or exceptions to the Public Improvement Contract Agreement Form or other portions of the Contract Documents, may be rejected in County's sole and absolute discretion. Refer to Section 00120.68 of Section 12, General Conditions for Construction for Clackamas County.

Article 8. Submission of Bid

Proposals will only be accepted electronically thru a secure online bid submission service, **Bid Locker**. *Email submissions to Clackamas County email addresses are no longer be accepted.*

A. Completed proposal documents must arrive electronically via Bid Locker located at https://bidlocker.us/a/clackamascounty/BidLocker.
B. Bid Locker will electronically document the date and time of all submissions. Completed documents must arrive by the deadline indicated in the Invitation to Bid or as modified by Addendum. LATE PROPOSALS WILL NOT BE ACCEPTED.
C. Bidders must register and create a profile for their business with Bid Locker in order to submit for this project. It is free to register for Bid Locker.
D. Bidders with further questions concerning Bid Locker may review the Vendor's Guide located at https://www.clackamas.us/how-to-bid-on-county-projects .

Article 9. Bid Closing and Opening of Bids

All Bids must be received by the County through Bid Locker at the place and time set for the Bid Closing. Bid Locker provides a virtual bid window, which allows submittal of Bids up until the solicitation close date. After the virtual bid window closes, County can review the submitted Bid. Any Bids submitted or received after the scheduled Bid Closing time for receipt of Bids will be rejected.

At the time of opening and reading of Bids, each Bid received will be publicly opened and read aloud, irrespective of any irregularities or informalities in such Bids. Refer to Section 00120.65 of Section 12, General Conditions for Construction for Clackamas County.

Generally, Bid results will be posted to the OregonBuys listing within two business days of the Bid Closing.

Article 10. Acceptance or Rejection of Bids by County

Unless all Bids are rejected, the County will award a contract based on the lowest responsive Bid from a responsible Bidder. Refer to Section

00130.00 and 00130.10 of Section 12, General Conditions for Construction for Clackamas County. If that Bidder does not execute the contract, it will be awarded to the next lowest responsible Bidder or Bidders in succession.

The County reserves the right to reject all Bids and to waive minor informalities. The procedures for contract awards shall be in compliance with the provisions of the LCRB Rules in effect at that time.

The County reserves the right to hold the Bid and Bid security of the three lowest Bidders for a period of thirty (30) calendar days from and after the time of Bid Closing pending award of the contract. Following award of the contract the Bid security of the three lowest Bidders may be held twenty (20) calendar days pending execution of the contract. All other Bids will be rejected and Bid security will be returned.

If no Bid has been accepted within thirty (30) calendar days after the opening of the Bids, each of the three lowest Bidders may withdraw the Bid submitted and request the return of the Bid security.

Article 11. Revision or Withdrawal of Bids

At any time prior to the Bid Closing, a Bidder may revise or withdraw its Bid. This will not preclude the submission of another Bid by such Bidder prior to the time set for the Bid Closing.

Information entered into the Bid Proposal Form by the Bidder may be changed after the Bid has been submitted through Bid Locker. Bid Locker allows for revision or withdrawal of Bids up until the time set for the Bid Closing and the virtual Bid window closes within Bid Locker.

After the time set for the Bid Closing, no Bidder will be permitted to withdraw its Bid within the time frames specified in Article 10 for award and execution, except as provided for in that Article.

Article 12. Execution of Contract, Performance Bond and Payment Bond

The County will provide the successful Bidder with Contract Documents within seven (7) calendar days after the completion of the award protest period. The Bidder is required to execute the contract forms as provided, including a performance bond and a payment bond from a surety company licensed to do surety business in the State of Oregon, within ten (10) calendar days after receipt of the contract forms. The Contract Documents shall be delivered to the County in the number called for and to the location as instructed by the County. For Execution by the County, refer to Section 00130.50(b) of Section 12, General Conditions for Construction for Clackamas County.

Article 13. Recyclable Products

Contractors will use recyclable products to the maximum extent economically feasible in the performance of the Contract.

Article 14. Clarification or Protest of the Solicitation Document or Specifications

Any request for clarification or protest of the solicitation document or specifications must be submitted in the manner provided for in the applicable section of the LCRB Rules to the Procurement Representative referenced in the Notice of Public Improvement Contract Opportunity.

A protest of the Solicitation Document must be received within seven (7) business days of the issuance of the Bid or within three (3) business days of issuance of an addendum.

Requests for clarification may be submitted no less than seven (7) business days prior to the Bid Closing Date.

Article 15. Protest of Intent to Award

County will name the apparent successful Bidder in a "Notice of Intent to Award" letter. Identification of the apparent successful Bidder is procedural only and creates no right in the named Bidder to the award of the contract. Competing Bidders will be notified by publication of the Notice of Intent to Award on the OregonBuys website listing the selection of the apparent successful Bidder(s) and Bidders shall be given seven (7) calendar days from the date on the "Notice of Intent to Award" letter to review the file at the Procurement Division office and file a written protest of award, pursuant to LCRB C-049-0450. Any award protest must be in writing and must be delivered by hand delivery or mail to the Procurement Division Director at: Procurement Division, 2051 Kaen Road, Oregon City, OR 97045.

Article 16. Disclosure of First-Tier Subcontractors

Without regard to the amount of a Bidder's Bid, if the Agency's cost range for a public improvement Project in the Notice of Public Improvement Contract Opportunity, or in other advertisement or solicitation documents, exceeds $100,000, the Bidder shall, within 2 working hours of the time Bids are due to be submitted, submit to the Agency, on a form provided by the Agency, a disclosure identifying any first-tier Subcontractors that will furnish labor or labor and Materials, and whose contract value is equal to or greater than:

- 5% of the total Project Bid, but at least $15,000; or
- $350,000, regardless of the percentage of the total Project Bid.

For each Subcontractor listed, Bidders shall state:

- The name of the Subcontractor;
- The dollar amount of the subcontract and
- The category of Work that the Subcontractor would be performing.

If no subcontracts subject to the above disclosure requirements are anticipated, a Bidder shall so indicate by entering "NONE" or by filling in the appropriate check box. For each Subcontractor listed, Bidders shall provide all requested information. An incomplete form will be cause for rejection of the Bid.

Disclosures may be submitted with the Bid or may be hand delivered to the Bid Closing address or emailed to procurement@clackamas.us.

Subcontractor Disclosure Forms submitted by any method will be considered late if not received by the Agency within two 2 working hours of the time designated for receiving Bids.

In the event that multiple Subcontractor Disclosure Forms are submitted, the last version received prior to the deadline will be considered to be the intended version.

Bids not in compliance with the requirements of this Subsection will be considered non-responsive.

Article 17. Wage Rates

This project is subject to both federal and State prevailing wage rate requirements. Not less than the higher of the applicable federal or existing State prevailing wage rates shall be paid to workers according to 00170.65(b) and 00170.65(e) of Section 12, General Conditions for Construction for Clackamas County.

Applicable Wages – Prevailing wage rates published in the following wage determinations and any applicable modifications or amendments apply to this Project and are incorporated by reference:

1. U.S. Department of Labor, "General Wage Determinations Issued under the Davis_Bacon and Related Acts: Oregon Highway Construction Projects", available at https://sam.gov/wage-determinations (Wage Determinations OnLine.gov) and

2. Oregon Bureau of Labor and Industries (BOLI), "Prevailing Wage Rates for Public Works Contracts in Oregon" available at

http://www.oregon.gov/boli/WHD/PWR/pages/index.aspx (Oregon Prevailing Wage Rate Publications).

The applicable federal prevailing wage rates and the existing State prevailing wage rates last published prior to the time of Bid Closing, which is stated on the Notice of Public Contract Opportunity page, apply to this Project. Modifications or amendments to the Davis-Bacon and BOLI wage rates applicable to this Project may occur any time before Bid Closing. Bidders are responsible to monitor the respective web page(s) for modifications and amendments up to Bid Closing.

The applicable Davis-Bacon and BOLI wage rates will be included in the Contract.

Article 18. Employee Drug Testing Program

Pursuant to ORS 279C.505(2), that the bidder has an employee drug testing program in place, and will maintain such program for the entire period of this contract. Failure to maintain such program shall constitute a material breach of contract.

Article 19. Additional Terms

Sections 00120 and 00130 of Section 12, General Conditions for Construction for Clackamas County are hereby incorporated into these Instructions. In the event of a conflict between Sections 00120 and 00130 of the General Conditions for Construction for Clackamas County and terms contained in these Instructions, the terms contained in these Instructions shall control.

SECTION 3

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project Name 2025-46 SE Johnson Creek Blvd: 79th Place – 82nd Ave Project

The following modify the Clackamas County "Instructions to Bidders" for this Project. Where a portion of the Instructions to Bidders has been modified by these Supplemental Instructions to Bidders, the unaltered portions shall remain in effect.

1. To be eligible for award under this Invitation to Bid, bidders (prime contractors) must submit a prequalification application (either ODOT or County) to the County at least two business days prior to the Bid Closing. County will reject bids from bidders who are not prequalified for the class of work indicated prior to the Bid Closing. **Bidders must be prequalified in Electrical (ELEC), or Earthwork and Drainage (EART) and Asphalt Concrete Paving and Oiling (ACP), or Earthwork and Drainage (EART) and Miscellaneous Highway Appurtenances (MHA), or Asphalt Concrete Paving and Oiling (ACP) and Miscellaneous Highway Appurtenances (MHA).**

2. **Electronic Submissions: The County is requiring all bids for this project be electronically submitted. Complete Bids (including all attachments) will only be accepted electronically thru a secure online bid submission service, Bid Locker. Email submissions to Clackamas County email addresses will no longer be accepted.**
   https://bidlocker.us/a/clackamascounty/BidLocker.

   Bids will be publicly read aloud via the computer application, Zoom. Bidders will be allowed to video conference or listen by phone to the bid results. The projects Zoom meeting can be accessed via the information below:

   ZOOM LINKS.
   Join Zoom Meeting
   https://clackamascounty.zoom.us/j/83912783946

   Meeting ID: 839 1278 3946

   One tap mobile
   +13462487799,,83912783946# US (Houston)
   +14086380968,,83912783946# US (San Jose)

Dial by your location
• +1 346 248 7799 US (Houston)
• +1 408 638 0968 US (San Jose)
• +1 669 444 9171 US
• +1 669 900 6833 US (San Jose)
• +1 719 359 4580 US
• +1 253 205 0468 US
• +1 253 215 8782 US (Tacoma)
• +1 646 931 3860 US
• +1 689 278 1000 US
• +1 301 715 8592 US (Washington DC)
• +1 305 224 1968 US
• +1 309 205 3325 US
• +1 312 626 6799 US (Chicago)
• +1 360 209 5623 US
• +1 386 347 5053 US
• +1 507 473 4847 US
• +1 564 217 2000 US
• +1 646 876 9923 US (New York)

Meeting ID: 839 1278 3946

Find your local number: https://clackamascounty.zoom.us/u/koKh2Ra5y

**The Apparent Low bid results will be posted to the projects OregonBuys listing as soon as possible following the bid opening.

SECTION 4

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID BOND

Project Name: 2025-46 SE Johnson Creek Blvd: 79th Place – 82nd Ave Project

We, Westech Construction, Inc., as "Principal,"
(Name of Principal)

and United Fire & Casualty Company, an Iowa Corporation,
(Name of Surety)

authorized to transact Surety business in Oregon, as "Surety," hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns to pay Clackamas County ("Obligee") the sum of ($ 10%)

Ten Percent of Total Amount Bid dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its bid proposal for 2025-46 - SE Johnson Creek Blvd: 79th Place - 82nd Ave Project, which bid proposal is made a part of this bond by reference, and Principal is required to furnish bid proposal security in an amount equal to ten (10%) percent of the total amount of the bid proposal pursuant to the Contract Documents

NOW, THEREFORE, if the bid proposal submitted by Principal is accepted, and if a contract pursuant to the bid proposal is awarded to Principal, and if Principal enters into and executes such contract within the time specified in the Instructions to Bidders and executes and delivers to Obligee its good and sufficient Performance Bond and Payment Bond required by Obligee within the time fixed by Obligee, then this obligation shall be void; otherwise, it shall remain in full force and effect. Obligee may require payment under this bond if Principal fails to enter into a contract with Obligee on the terms and conditions set forth on the form of contract published with the bid solicitation within twenty (20) days of the notice of intent to award.

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this 27th day of May, 2025.

Principal: Westech Construction, Inc.

By: Chris Woodward
Signature

PRESIDENT
Official Capacity

Attest: Chris Woodward
Corporation Secretary

Surety: United Fire & Casualty Company

By: Attorney-In-Fact

Sarah Harren
Name

PO Box 73909
Address

Cedar Rapids, IA 52407-3909
City State Zip

(319) 399-5700
Phone

(866) 726-9738
Fax

UNITED FIRE & CASUALTY COMPANY CORPORATE SEAL CEDAR RAPIDS IOWA

UNITED FIRE & CASUALTY COMPANY, CEDAR RAPIDS, IA
UNITED FIRE & INDEMNITY COMPANY, WEBSTER, TX
FINANCIAL PACIFIC INSURANCE COMPANY, LOS ANGELES, CA
CERTIFIED COPY OF POWER OF ATTORNEY
(original on file at Home Office of Company – See Certification)

Inquiries: Surety Department
118 Second Ave SE
Cedar Rapids, IA 52401

KNOW ALL PERSONS BY THESE PRESENTS, That United Fire & Casualty Company, a corporation duly organized and existing under the laws of the State of Iowa; United Fire & Indemnity Company, a corporation duly organized and existing under the laws of the State of Texas; and Financial Pacific Insurance Company, a corporation duly organized and existing under the laws of the State of California (herein collectively called the Companies), and having their corporate headquarters in Cedar Rapids, State of Iowa, does make, constitute and appoint

KARL CHOLTUS, SARAH HARREN, MICHAEL MERTZ, JAIMIE KANGAS, NICK DEAN, CHERYL KLEINER, NICOLE SAJI, AMY M BURNS, EMILY NAGEL, CATHY COMBS, ALEX RE, LORI FORD, ROBYN COHEN GAGNON, PABLO RIOS JR, ASHLEY TYREE, TYLER DEBORD, EACH INDIVIDUALLY

their true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature provided that no single obligation shall exceed $50,000,000.00 and to bind the Companies thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Companies and all of the acts of said Attorney, pursuant to the authority hereby given and hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effect until revoked by United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

This Power of Attorney is made and executed pursuant to and by authority of the following bylaw duly adopted by the Boards of Directors of United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

"Article VI – Surety Bonds and Undertakings"

Section 2, Appointment of Attorney-in-Fact. "The President or any Vice President, or any other officer of the Companies may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Companies in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby, and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Companies as the original signature of such officer and the original seal of the Companies, to be valid and binding upon the Companies with the same force and effect as though manually affixed. Such attorneys-in-fact, subject to the limitations set of forth in their respective certificates of authority shall have full power to bind the Companies by their signature and execution of any such instruments and to attach the seal the Companies thereto. The President or any Vice President, the Board of Directors or any other officer of the Companies may at any time revoke all power and authority previously given to any attorney-in-fact.

IN WITNESS WHEREOF, the COMPANIES have each caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 1st day of April, 2024

UNITED FIRE & CASUALTY COMPANY
UNITED FIRE & INDEMNITY COMPANY
FINANCIAL PACIFIC INSURANCE COMPANY

By: Kyanna M Saylor
Vice President

State of Iowa, County of Linn, ss:

On 1st day of April, 2024, before me personally came Kyanna M. Saylor to me known, who being by me duly sworn, did depose and say; that she resides in Cedar Rapids, State of Iowa; that she is a Vice President of United Fire & Casualty Company, a Vice President of United Fire & Indemnity Company, and a Vice President of Financial Pacific Insurance Company the corporations described in and which executed the above instrument; that she knows the seal of said corporations; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporations and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.

Patti Waddell
Iowa Notarial Seal
Commission number 713274
My Commission Expires 10/26/2025

Patti Waddell
Notary Public
My commission expires: 10/26/2025

I, Mary A. Bertsch, Assistant Secretary of United Fire & Casualty Company and Assistant Secretary of United Fire & Indemnity Company, and Assistant Secretary of Financial Pacific Insurance Company, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the bylaws and resolutions of said Corporations as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID CORPORATIONS, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Corporations this 27th day of May, 2025.

By: Mary A Bertsch
Assistant Secretary,
UF&C & UF&I & FPIC

SECTION 5

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID PROPOSAL FORM

PROJECT #: 2025-46
PROJECT NAME: SE Johnson Creek Blvd: 79th Place – 82nd Ave Project
BID CLOSING: June 5, 2025, 2:00 PM, Pacific Time
BID OPENING: June 5, 2025, 2:05 PM, Pacific Time

FROM: Westech Construction, Inc.
Bidder's Name (must be full legal name, not ABN/DBA)

TO: https://bidlocker.us/a/clackamascounty/BidLocker

1. Bidder is (*check one of the following and insert information requested*):

____a. An individual; or

____b. A partnership registered under the laws of the State of _____; or

__X__ c. A corporation organized under the laws of the State of Oregon; or

____d. A limited liability corporation organized under the laws of the State of _____;

and authorized to do business in the State of Oregon hereby proposes to furnish all material and labor and perform all work hereinafter indicated for the above project in strict accordance with the Contract Documents for the total Bid as follows:

One million, seven hundred fourteen thousand, four hundred ninety-four dollars and four cents. Dollars ($ 1,714,494.04)

and the Undersigned agrees to be bound by the following documents and any other Contract Documents as defined in Section 00110.20 of Section 12, General Conditions for Construction Clackamas County:

- Notice of Public Improvement Contract Opportunity
- Instructions to Bidders
- Supplemental Instructions to Bidders
- Bid Bond
- Bid Proposal Form and Bid Schedule of Prices
- Public Improvement Contract Form
- Affidavit of Non Collusion
- First-Tier Subcontractor Disclosure Form
- Certificate Regarding Ineligible Contractors
- Performance Bond and Payment Bond
- Prevailing Wage Rates
- Plans, Special Provisions and Drawings
- General Conditions for Construction for Clackamas County
- DBE, FHWA and ODOT Forms in Section 13

- ADDENDA numbered 1 through 3, inclusive *(fill in blanks)*

2. The Undersigned proposes to accept the total Bid in the attached Schedule of Prices, subject to adjustment for actual quantities completed during the course of work and any Amendment between the

parties, for the items or work designated in the Contract Documents, for which any adjustments in the Contract amount will be made in accordance with Section 12, General Conditions for Construction for Clackamas County.

3. The work shall be completed within the time stipulated and specified in Section 00180.50(h) of Section 12, General Conditions for Construction for Clackamas County.

4. Accompanying herewith is Bid Security which is equal to ten percent (10%) of the total amount of the Basic Bid.

5. The Undersigned agrees, if awarded the Contract, to execute and deliver to Clackamas County, within ten (10) calendar days after receiving the Contract forms, a Contract Form, a Federal Tax Identification Number for the Contractor, and a satisfactory Performance Bond and Payment Bond each in an amount equal to one hundred percent (100%) of the Contract sum, using forms provided by the County. The surety requested to issue the Performance Bond and Payment Bond will be:

United Fire and Casualty Company.
(name of surety company - not insurance agency)

The Undersigned hereby authorizes said surety company to disclose any information to the County concerning the Undersigned's ability to supply a Performance Bond and Payment Bond each in the amount of the Contract.

6. The Undersigned further agrees that the Bid Security accompanying the Bid is left in escrow with Clackamas County; that the amount thereof is the measure of liquidated damages which the County will sustain by the failure of the Undersigned to execute and deliver the above-named Contract Form, Performance Bond and Payment Bond, each as published, and that if the Undersigned defaults in either executing the Contract Form or providing the Performance Bond and Payment Bond within ten (10) calendar days after receiving the Contract forms, then the Bid Security shall become the property of the County at the County's option; but if the Bid is not accepted within thirty (30) calendar days of the time set for the opening of the Bids, or if the Undersigned executes and timely delivers said Contract Form, Performance Bond and Payment Bond, the Bid Security shall be returned.

7. The Undersigned certifies that: (i) This Bid has been arrived at independently and is being submitted without collusion with and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment or services described in the invitation to bid designed to limit independent bidding or competition; and (ii) the contents of the Bid have not been communicated by the Undersigned or its employees or agents to any person not an employee or agent of the Undersigned or its surety on any Bond furnished with the Bid and will not be communicated to such person prior to the official opening of the Bid.

8. The undersigned **HAS**, **HAS NOT** (*circle applicable status*) paid unemployment or income taxes in Oregon within the past 12 months and **HAS**, **HAS NOT** (*circle applicable status*) a business address in Oregon. The undersigned acknowledges that, if the selected bidder, that the undersigned will have to pay all applicable taxes and register to do business in the State of Oregon before executing the Public Improvement Contract Agreement Form.

9. The Undersigned agrees, if awarded a contract, to comply with the provisions of ORS 279C.800 through 279C.870 pertaining to the payment of the prevailing rates of wage.

10. Contractor's CCB registration number is 99833. As a condition to

execution of a Contract, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number within 14 Calendar Days of Bid Closing will make the bid unresponsive and it will be rejected, unless contrary to federal law.

11. The successful Bidder hereby certifies that all subcontractors who will perform construction work as described in ORS 701.005(2) were registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time the subcontractor(s) made a bid to work under the contract.

12. The successful Bidder hereby certifies that, in compliance with the Worker's Compensation Law of the State of Oregon, its Worker's Compensation Insurance provider is Saif, Policy No. 612755, and that Contractor shall submit Certificates of Insurance as required.

13. Contractor's Key Individuals for this project (supply information as applicable):

Project Executive: Joshua Meng, Cell Phone: 503-969-5259,
Project Manager: Reed Woodward, Cell Phone: 503-969-3940,
Job Superintendent: Doug Paulson, Cell Phone: 971-400-6659,
Project Engineer: Michael Pingle, Cell Phone: 503-410-4963.

14. The Undersigned pursuant to ORS 279A.110, the Bidder has not discriminated and will not discriminate against a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns, or an emerging small business in obtaining any required subcontracts. The Bidder understands that it may be disqualified from Bidding on this public improvement project if the Agency finds that the Bidder has violated subsection (1) of ORS 279A.110.

REMINDER: Bidder must submit a First-Tier Subcontractor Disclosure Form.

By signature below, Contractor agrees to be bound by this Bid.

NAME OF FIRM Westech Construction, Inc.

ADDRESS 2204 NE 194th Ave
Portland, OR 97230

TELEPHONE NO 503-777-7000

EMAIL Josh@wtc-inc.com

SIGNATURE 1) _____
Sole Individual

or 2) _____
Partner

or 3) Joshua Meng, Vice President
Authorized Officer of Corporation

***** *END OF BID* *****

Bid Item #	Item #	Item Description	Unit	Quantity	Unit Price	Total Price
1	0210-0100000A	MOBILIZATION	LS	1	$ 171,000.00	$ 171,000.00
2	0221-0100000A	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	1	$ 22,000.00	$ 22,000.00
3	0222-0102000J	TEMPORARY SIGNS	SQFT	200	$ 33.30	$ 6,660.00
4	0222-0162000E	SEQUENTIAL ARROW SIGNS	EACH	1	$ 1,345.00	$ 1,345.00
5	0223-0168000T	FLAGGERS	HOUR	800	$ 80.00	$ 64,000.00
6	0224-0104000E	TEMPORARY BARRICADES, TYPE II	EACH	4	$ 36.00	$ 144.00
7	0224-0105000E	TEMPORARY BARRICADES, TYPE III	EACH	2	$ 99.00	$ 198.00
8	0224-0145000E	TEMPORARY PLASTIC DRUMS	EACH	26	$ 22.00	$ 572.00
9	0225-0153000F	TEMPORARY STRIPING	FOOT	2700	$ 1.60	$ 4,320.00
10	0225-0154000F	STRIPE REMOVAL	FOOT	3250	$ 1.60	$ 5,200.00
11	0228-0141600F	PEDESTRIAN CHANNELIZING DEVICES	FOOT	300	$ 5.50	$ 1,650.00
12	0280-0100000A	EROSION CONTROL	LS	1	$ 10,000.00	$ 10,000.00
13	0280-0113000F	SEDIMENT FENCE	FOOT	485	$ 8.00	$ 3,880.00
14	0280-0114040E	INLET PROTECTION, TYPE 4	EACH	14	$ 46.00	$ 644.00
15	0280	CONSTRUCTION ENTRANCE, TYPE 1	EACH	1	$ 2,700.00	$ 2,700.00
16	0280-0111020G	TIRE WASH FACILITY, TYPE 1	EACH	1	$ 6,500.00	$ 6,500.00
17	0290-0100000A	POLLUTION CONTROL PLAN	LS	1	$ 1,100.00	$ 1,100.00
18	0294-0100000A	HEALTH AND SAFETY PLAN	LS	1	$ 2,200.00	$ 2,200.00
19	0294-0200010M	CONTAMINATED SOIL DISPOSAL	TON	138	$ 112.00	$ 15,456.00
20	0294-0500000A	LEAD COMPLIANCE PLAN	LS	1	$ 5,500.00	$ 5,500.00
21	0295-0100000F	REMOVE ASBESTOS MATERIAL, FRIABLE	FOOT	5	$ 61.00	$ 305.00
22	0295-0200000F	REMOVE ASBESTOS MATERIAL, NON-FRIABLE	SQFT	2,750	$ 3.50	$ 9,625.00
23	0305-0100000A	CONSTRUCTION SURVEY WORK	LS	1	$ 20,000.00	$ 20,000.00
24	0310-0100000F	REMOVAL OF PIPES	FOOT	248	$ 10.25	$ 2,542.00
25	0310-0104000E	REMOVAL OF INLETS	EACH	3	$ 1,555.00	$ 4,665.00
26	0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1	$ 9,000.00	$ 9,000.00
27	0310-0109000A	REMOVAL OF BUILDINGS	LS	1	$ 24,000.00	$ 24,000.00
28	0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	FOOT	1030	$ 3.25	$ 3,347.50
29	0320-0100000A	CLEARING AND GRUBBING	LS	1	$ 4,000.00	$ 4,000.00
30	0330-0105000K	GENERAL EXCAVATION	CUYD	793	$ 70.00	$ 55,510.00
31	0331-0109000J	18 INCH SUBGRADE STABILIZATION	SQYD	114	$ 19.00	$ 2,166.00
32	0350-0105000J	SUBGRADE GEOTEXTILE	SQYD	946	$ 1.69	$ 1,598.74
33	0390-0119000K	GROUTED RIPRAP	SF	190	$ 65.00	$ 12,350.00
34	0415-0100000F	MAINLINE VIDEO INSPECTION	FOOT	331	$ 9.00	$ 2,979.00
35	0415-0400000E	SERVICE LINE LATERAL VIDEO INSPECTION	EACH	1	$ 275.00	$ 275.00
36	0445-030006BF	6 INCH SANITARY SEWER PIPE, 10 FT DEPTH	FOOT	52	$ 340.00	$ 17,680.00
37	0445-035012AF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	331	$ 175.00	$ 57,925.00
38	0445	6 INCH STORM SEWER CLEANOUT	EACH	1	$ 1,275.00	$ 1,275.00
39	0470-0101000E	CONCRETE STORM SEWER MANHOLES	EACH	1	$ 6,800.00	$ 6,800.00
40	0470-0315000E	CONCRETE INLETS, TYPE GB-2	EACH	5	$ 2,250.00	$ 11,250.00
41	0490-0100000E	ADJUSTING BOXES	EACH	2	$ 320.00	$ 640.00
42	0490-0102000E	ADJUSTING CATCH BASINS	EACH	1	$ 1,200.00	$ 1,200.00
43	0490-0104000E	CONNECTION TO EXISTING STRUCTURES	EACH	2	$ 2,300.00	$ 4,600.00
44	0490-0120000E	MINOR ADJUSTMENT OF MANHOLES	EACH	4	$ 2,400.00	$ 9,600.00
45	0620-0123000J	COLD PLANE PAVEMENT REMOVAL, 4 INCHES DEEP	SQYD	3363	$ 6.50	$ 21,859.50
46	0640-0100000M	AGGREGATE BASE	TON	740	$ 75.00	$ 55,500.00
47	0295-0200000F	REMOVE ASBESTOS MATERIAL, FRIABLE	SQFT	470	$ 19.00	$ 8,930.00
48	0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	1052	$ 130.00	$ 136,760.00
49	0748-0103000J	6 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	500	$ 118.00	$ 59,000.00
50	0749-0100000E	EXTRA FOR ASPHALT APPROACHES	EACH	5	$ 685.00	$ 3,425.00
51	0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	FOOT	634	$ 42.95	$ 27,230.30
52	0759-0106000F	CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB	FOOT	18	$ 69.00	$ 1,242.00
53	0759-0110000F	CONCRETE CURBS, STANDARD CURB	FOOT	304	$ 45.00	$ 13,680.00
54	0759-0122000J	CONCRETE ISLANDS	SQFT	370	$ 18.00	$ 6,660.00
55	0759-0126000J	CONCRETE DRIVEWAYS	SQFT	215	$ 33.00	$ 7,095.00
56	0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	SQFT	730	$ 35.00	$ 25,550.00
57	0759-0128000J	CONCRETE WALKS	SQFT	3280	$ 14.00	$ 45,920.00
58	0759-0154100E	EXTRA FOR NEW CURB RAMPS	EACH	12	$ 2,200.00	$ 26,400.00
59	0759-0510000J	TRUNCATED DOMES ON NEW SURFACES	SQFT	155	$ 50.00	$ 7,750.00
60	0855-0102100E	BI-DIRECTIONAL YELLOW TYPE I MARKERS	EACH	89	$ 9.50	$ 845.50
61	0855-0102100E	BI-DIRECTIONAL WHITE TYPE I MARKERS	EACH	33	$ 9.50	$ 313.50
62	0865-0160000F	THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON- PROFILED	FOOT	6662	$ 2.15	$ 14,323.30
63	0867-0103500E	PAVEMENT LEGEND, TYPE AB: ARROWS	EACH	6	$ 415.00	$ 2,490.00
64	0867-0131000E	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	EACH	6	$ 415.00	$ 2,490.00
65	0867-0145100J	PAVEMENT BAR, TYPE B-HS	SQFT	604	$ 21.00	$ 12,684.00
66	0867-0174000E	PAVEMENT LEGEND, TYPE B-HS : BICYCLE DETECTOR STENCIL	EACH	1	$ 333.00	$ 333.00
Bid Item #	**Item #**	**Item Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
67	0868-0100000J	GREEN BICYCLE LANE, PREFORMED THERMOPLASTIC FILM	SQFT	75	$ 20.00	$ 1,500.00
68	0902-0101000E	CROSSWALK CLOSURE SUPPORTS	EACH	4	$ 1,350.00	$ 5,400.00
69	0905-0100000A	REMOVE EXISTING SIGNS	LS	1	$ 555.00	$ 555.00
70	0920-0100000A	SIGN SUPPORT FOOTINGS	LS	1	$ 4,100.00	$ 4,100.00
71	0930-0114000A	PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS	LS	1	$ 3,400.00	$ 3,400.00
72	0930-0117000A	PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	1	$ 525.00	$ 525.00
73	0940-0201000J	SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	88	$ 29.00	$ 2,552.00
74	0970-0100000A	POLE FOUNDATIONS	LS	1	$ 3,000.00	$ 3,000.00
75	0970-0105000A	SWITCHING, CONDUIT, AND WIRING	LS	1	$ 7,500.00	$ 7,500.00
76	0987-0100000A	TELECOMMUNICATIONS, MATERIAL	LS	1	$ 23,000.00	$ 23,000.00
77	0987-0110000A	TELECOMMUNICATIONS, INSTALLATION	LS	1	$ 32,000.00	$ 32,000.00
78	0990-0101000A	TRAFFIC SIGNAL INSTALLATION, JOHNSON CK BLVD & 79TH PL	LS	1	$ 447,000.00	$ 447,000.00
79	1011-0200000A	BIORETENTION POND, WATER QUALITY FACILITY	LS	1	$ 58,000.00	$ 58,000.00
80	1030-0108000R	PERMANENT SEEDING	ACRE	0.12	$ 13,000.00	$ 1,560.00
81	1040-0183000E	WETLAND PLANTS, PLUGS	EACH	1607	$ 1.10	$ 1,767.70
82	1040-0101000K	TOPSOIL	CUYD	64	$ 50.00	$ 3,200.00
83	1040-0153000E	SHRUBS, #1 CONTAINER	EACH	29	$ 13.00	$ 377.00
84	1040-0185000E	WETLAND PLANTS, #1 CONTAINER	EACH	218	$ 13.00	$ 2,834.00
85	1040-0190000K	BARK MULCH	CUYD	15	$ 66.00	$ 990.00

86	1050-0162000F	TYPE CL-4R CHAIN LINK FENCE WITH BLACK PVC COATING	FOOT	85	$ 80.00	$ 6,800.00
87	1050-0162000F	TYPE CL-6R CHAIN LINK FENCE WITH BLACK PVC COATING AND SCREENING PICKETS	FOOT	139	$ 95.00	$ 13,205.00
88	1050-0198000E	12 FOOT X 48 INCH CHAIN LINK DOUBLE GATES	EACH	1	$ 3,100.00	$ 3,100.00
89	1070-0100000E	SINGLE MAILBOX SUPPORTS	EACH	2	$ 1,335.00	$ 2,670.00
90	1070-0102000E	MAILBOX CONCRETE COLLARS	EACH	1	$ 720.00	$ 720.00
91	1070-0103000E	REMOVE AND REINSTALL MAILBOX SUPPORTS	EACH	1	$ 1,550.00	$ 1,550.00
92	1170-0109000F	1 INCH COPPER WATER SERVICE LINE	FOOT	127	$ 115.00	$ 14,605.00
93	0280-0111020H	CONCRETE WASH OUT FACILITY	EACH	1	$ 3,700.00	$ 3,700.00

PROPOSED COST BID SCHEDULE (Numerically): $1,714,494.04

PROPOSED COST BID SCHEDULE (Written in Words): One million, seven hundred fourteen thousand, four hundred ninety-four dollars and four cents

COMPANY NAME: Westech Construction, Inc.

AUTHORIZED SIGNATURE:

SECTION 6

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: 2025-46

BID OPENING: June 5, 2025, 2:00 PM, Pacific Time

Failure to submit this Form by the disclosure deadline will result in a nonresponsive bid.

INSTRUCTIONS:
Fill out and submit this First-Tier Subcontractor Disclosure Form ("Form") to the location specified in the Notice of Public Improvement Contract Opportunity by the advertised Bid Closing, or within two working hours after the advertised Bid Closing Time.

The Form may be mailed, hand-delivered or emailed to: Procurement@clackamas.us. It is the responsibility of Bidders to submit this Form and any additional sheets with the Project name clearly marked on the envelope or the subject line of the email.

Subcontractor lists may be submitted with the Bid Locker submittal documents at the Bid Closing date and time. Subcontractor lists **MUST** be submitted within **two (2) hours** of the Bid Closing date and time.

List below the name of each subcontractor that will be furnishing labor, or labor and materials, for which disclosure is required, the category of work that the subcontractor will be performing, and the dollar value of the subcontract. Enter **"NONE"** if the value of the project bid is less than $100,000 or there are no subcontractors that need to be disclosed. ATTACH ADDITIONAL SHEETS IF NECESSARY.

	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1.	Global Electric	$499,900.00	Electrical
2.	Lemas Construction	$107,938.00	Concrete
3.	Eagle-Elsner	$156,632.00	Paving
4.			
5.			
6.			

The above listed first-tier subcontractor(s) are providing labor, or labor and material, with a Dollar Value equal to or greater than:

a) 5% of the total Contract Price, but at least $15,000. If the Dollar Value is less than $15,000 do not list the subcontractor above; or
b) $350,000 regardless of the percentage of the total Contract Price.

Firm Name: Westech Construction, Inc.

Bidder Signature: _____ Phone # 503-777-7000

SECTION 7

AFFIDAVIT OF NON-COLLUSION

STATE OF Oregon

COUNTY OF Multnomah

I state that I am Vice President (title) of Westech Construction (name of firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this Offer.

I state that:

(1) The price(s) and amount of this Offer have been arrived at independently and without consultation, communication or agreement with any other contractor, Proposer or potential Proposer, except as disclosed on the attached appendix.

(2) That neither the price(s) nor the amount of this Offer, and neither the approximate price(s) nor approximate amount of this Offer, have been disclosed to any other firm or person who is a Proposer or potential Proposer, and they will not be disclosed before Solicitation opening.

(3) No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit an Offer higher than this Offer, or to submit any intentionally high or noncompetitive Offer or other form of complementary Offer.

(4) The Offer of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Offer.

(5) Westech Construction, Inc. (name of firm), its affiliates, subsidiaries, officers, directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted of or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as described in the attached appendix.

I state that Westech Construction, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by Clackamas County in awarding the contract(s) for which this Offer is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from Clackamas County of the true facts relating to the submission of Offers for this contract.

(Authorized Signature)

Westech Construction / Vice President
(Name of Company/Position)

Sworn to and subscribed before me this 10th day of June, 2025.

Heather Louise Uhl
Notary Public for Oregon
My Commission Expires: February 18, 2029

OFFICIAL STAMP
HEATHER LOUISE UHL
NOTARY PUBLIC - OREGON
COMMISSION NO. 1056342
MY COMMISSION EXPIRES FEBRUARY 18, 2029

FAILURE TO SUBMIT THIS EXECUTED STATEMENT AS PART OF THE BIDING DOCUMENTS WILL MAKE THE BID NON-RESPONSIVE AND NOT ELIGIBLE FOR AWARD CONSIDERATION.

CONGRESSIONAL LOBBYING CERTIFICATE

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

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of ANY Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with THIS Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions [as amended by "Government-wide Guidance for New Restrictions on Lobbying," 61 Federal Regulations 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)].

The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each expenditure or failure.]

The Bidder, Westech Construction, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Proposer understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date: 6/10/2025
Company Name: Westech Construction, Inc.
Signature: _____
Name: Joshua Meyer (Print)
Title: Vice President

NOTE: BIDDER IS REQUIRED PURSUANT TO FEDERAL LAW TO INCLUDE THE ABOVE LANGUAGE IN SUBCONTRACTS OVER $100,000 AND TO OBTAIN THIS LOBBYING CERTIFICATE FROM EACH SUBCONTRACTOR BEING PAID $100,000 OR MORE UNDER THIS CONTRACT.

FAILURE TO SUBMIT THIS EXECUTED STATEMENT AS PART OF THE BIDING DOCUMENTS WILL MAKE THE BID NON-RESPONSIVE AND NOT ELIGIBLE FOR AWARD CONSIDERATION.

SECTION 8

CERTIFICATE REGARDING INELIGIBLE CONTRACTORS

CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION FROM TRANSACTIONS FINANCED IN PART BY THE U.S. GOVERNMENT

Joshua Meny — Vice President
(Name of Certifying Officer) (Title of Certifying Officer)

Hereby certify that: Westech Construction, Inc.
(Name of Bidder)

Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any State or Federal department or agency or from participation in Oregon Department of Transportation projects;

Have not within a three (3)-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in Paragraph 2 of this certification; and

Have not within a three (3)-year period preceding this bid had one or more public transactions (Federal, State or local) terminated for cause or default.

If Bidder is unable to certify to any of the statements in this certification, such prospective Bidder shall attach an explanation to this certification.

I hereby certify and affirm the truthfulness and accuracy of the above statement, and I understand that the provisions of 31 United States Code (U.S.C.) §3801 et seq., (Administrative Remedies for False Claims and Statements) are applicable hereto.

Westech Construction, Inc.
Name of Bidder

2204 NE 194th Ave
Street Address

Portland — OR — 97230
City State Zip

Signature of Certifying Officer

503-777-7000
Telephone Number of Bidder

FAILURE TO SUBMIT THIS EXECUTED STATEMENT AS PART OF THE BIDING DOCUMENTS WILL MAKE THE BID NON-RESPONSIVE AND NOT ELIGIBLE FOR AWARD CONSIDERATION.

CONFLICT OF INTEREST (COI) DISCLOSURE FORM

Oregon Department of Transportation

Firms under Contract or proposing to enter into a Contract with Agency must be in conformance with the "ODOT Conflict of Interest Guidelines" available on the Internet at: http://www.oregon.gov/ODOT/Business/Procurement/DocsPSK/COIForm.docx (under "Misc. Procurement Related Forms"). The definitions of terms used in this COI Disclosure Form shall be those provided in the ODOT Conflict Of Interest Guidelines (note that "Public Official" includes all Agency employees).

Submit this form with your bid, if disclosure is required by the Contractor.

SECTION 9

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: 54266800
Solicitation: 2025-46
Project Name: SE Johnson Creek Blvd: 79th Place – 82nd Ave Project

United Fire & Casualty Company (Surety #1)
_____ (Surety #2)*
* *If using multiple sureties*

Bond Amount No. 1:	$1,714,494.04
Bond Amount No. 2:*	$
Total Penal Sum of Bond:	$1,714,494.04

We, Westech Construction, Inc. as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto Clackamas County, the State of Oregon and the Oregon Department of Transportation, the sum of (Total Penal Sum of Bond) $1,714,494.04 (One Million Seven Hundred Fourteen Thousand Four Hundred Ninety-Four and 04/100 Dollars) (Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety); and

WHEREAS, the Principal has entered into a contract with Clackamas County, along with the plans, specifications, terms and conditions of which are contained in the above-referenced Solicitation; and

WHEREAS, the terms and conditions of the contract, including, but not limited to applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and all authorized modifications of the Contract which increase the amount of the work, the amount of the Contract, or constitute an authorized extension of the time for performance, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things undertaken by Contractor to be performed under the Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless Clackamas County, the State of Oregon and the Oregon Department of Transportation, and their respective elected officials, officers, employees and agents, against any direct or indirect damages or claim of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Principal or its subcontractors, and shall in all respects perform said contract according to law, then this obligation is to be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

If the County determines that any of the above conditions have not been met, the County may require payment under this bond at its sole and absolute discretion and Surety shall issue prompt payment of the full value of this bond without set-off or dispute or requirement for an opportunity to cure.

Nonpayment of the bond premium will not invalidate this bond nor shall Clackamas County, be obligated for the payment of any premiums.

This bond is given and received under authority of Oregon Revised Statutes Chapter 279C and the Clackamas County Local Contractor Review Board Rules, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES.

Dated this 15th day of July, 2025.

PRINCIPAL: Westech Construction, Inc.

By: Chris Woodward
Signature

PRESIDENT
Official Capacity

Attest: Chris Woodward
Corporation Secretary

SURETY: United Fire & Casualty Company
[Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:
[Power-of-Attorney must accompany each bond]

Sarah Harren, Attorney-in-Fact
Name

Sarah Harren
Signature

PO Box 73909
Address

Cedar Rapids	IA	52407-3909
City	State	Zip

(319) 399-5700	(866) 726-9738
Phone	Fax

UNITED FIRE & CASUALTY COMPANY
CORPORATE
SEAL
CEDAR RAPIDS IOWA

SECTION 10

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: 54266800
Solicitation: 2025-46
Project Name: SE Johnson Creek Blvd: 79th Place – 82nd Ave Project

United Fire & Casualty Company (Surety #1)	Bond Amount No. 1:	$ 1,714,494.04
_____(Surety #2)*	Bond Amount No. 2:*	$ _____
* *If using multiple sureties*	Total Penal Sum of Bond:	$ 1,714,494.04

We, Westech Construction, Inc., as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto Clackamas County, the State of Oregon and the Oregon Department of Transportation, the sum of (Total Penal Sum of Bond) $1,714,494.04 (One Million Seven Hundred Fourteen Thousand Four Hundred Ninety-Four and 04/100 Dollars) (Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety); and

WHEREAS, the Principal has entered into a contract with Clackamas County, along with the plans, specifications, terms and conditions of which are contained in above-referenced Solicitation; and

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Payment Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and schedule of contract prices which are set forth in the Contract and any attachments, and all authorized modifications of the Contract which increase the amount of the work, or the cost of the Contract, or constitute authorized extensions of time for performance of the Contract, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless Clackamas County, the State of Oregon and the Oregon Department of Transportation, and their respective elected officials, officers, employees and agents, against any claim for direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Contractor or its subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its subcontractors in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all sums required to be deducted and retained from the wages of employees of the

Principal and its subcontractors pursuant to ORS 316.167, and shall permit no lien nor claim to be filed or prosecuted against Clackamas County on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State, then this obligation shall be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

If the County determines that any of the above conditions have not been met, the County may require payment under this bond at its sole and absolute discretion and Surety shall issue prompt payment of the full value of this bond without set-off or dispute or requirement for an opportunity to cure.

Nonpayment of the bond premium will not invalidate this bond nor shall Clackamas County be obligated for the payment of any premiums.

This bond is given and received under authority of Oregon Revised Statutes Chapter 279C and the Clackamas County Local Contractor Review Board Rules, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES:

Dated this 15th day of July, 2025.

PRINCIPAL: Westech Construction, Inc.

By: _____
Signature

PRESIDENT
Official Capacity

Attest: _____
Corporation Secretary

SURETY: United Fire & Casualty Company
[Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:
[Power-of-Attorney must accompany each bond]

Sarah Harren, Attorney-in-Fact
Name

_____
Signature

PO Box 73909
Address

Cedar Rapids	IA	52407-3909
City	State	Zip
(319) 399-5700	(866) 726-9738	
Phone	Fax	

UNITED FIRE & CASUALTY COMPANY
CORPORATE SEAL
CEDAR RAPIDS IOWA

UNITED FIRE & CASUALTY COMPANY, CEDAR RAPIDS, IA
UNITED FIRE & INDEMNITY COMPANY, WEBSTER, TX
FINANCIAL PACIFIC INSURANCE COMPANY, LOS ANGELES, CA
CERTIFIED COPY OF POWER OF ATTORNEY
(original on file at Home Office of Company – See Certification)

Inquiries: Surety Department
118 Second Ave SE
Cedar Rapids, IA 52401

KNOW ALL PERSONS BY THESE PRESENTS, That United Fire & Casualty Company, a corporation duly organized and existing under the laws of the State of Iowa; United Fire & Indemnity Company, a corporation duly organized and existing under the laws of the State of Texas; and Financial Pacific Insurance Company, a corporation duly organized and existing under the laws of the State of California (herein collectively called the Companies), and having their corporate headquarters in Cedar Rapids, State of Iowa, does make, constitute and appoint

KARL CHOLTUS, SARAH HARREN, MICHAEL MERTZ, JAIMIE KANGAS, NICK DEAN, CHERYL KLEINER, NICOLE SAJI, AMY M BURNS, CATHY COMBS, ALEX RE, LORI FORD, ROBYN COHEN GAGNON, ASHLEY TYREE, TYLER DEBORD, BENJAMIN RYAN PINKERTON, EACH INDIVIDUALLY

their true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature provided that no single obligation shall exceed $50,000,000.00 and to bind the Companies thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Companies and all of the acts of said Attorney, pursuant to the authority hereby given and hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effect until revoked by United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

This Power of Attorney is made and executed pursuant to and by authority of the following bylaw duly adopted by the Boards of Directors of United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

"Article VI – Surety Bonds and Undertakings"

Section 2, Appointment of Attorney-in-Fact. "The President or any Vice President, or any other officer of the Companies may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Companies in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby, and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Companies as the original signature of such officer and the original seal of the Companies, to be valid and binding upon the Companies with the same force and effect as though manually affixed. Such attorneys-in-fact, subject to the limitations set of forth in their respective certificates of authority shall have full power to bind the Companies by their signature and execution of any such instruments and to attach the seal the Companies thereto. The President or any Vice President, the Board of Directors or any other officer of the Companies may at any time revoke all power and authority previously given to any attorney-in-fact.

IN WITNESS WHEREOF, the COMPANIES have each caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 1st day of April, 2024

UNITED FIRE & CASUALTY COMPANY
UNITED FIRE & INDEMNITY COMPANY
FINANCIAL PACIFIC INSURANCE COMPANY

By: Kyanna M Saylor
Vice President

State of Iowa, County of Linn, ss:

On 1st day of April, 2024, before me personally came Kyanna M. Saylor to me known, who being by me duly sworn, did depose and say; that she resides in Cedar Rapids, State of Iowa; that she is a Vice President of United Fire & Casualty Company, a Vice President of United Fire & Indemnity Company, and a Vice President of Financial Pacific Insurance Company the corporations described in and which executed the above instrument; that she knows the seal of said corporations; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporations and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.

Patti Waddell
Iowa Notarial Seal
Commission number 713274
My Commission Expires 10/26/2025

Patti Waddell
Notary Public
My commission expires: 10/26/2025

I, Mary A. Bertsch, Assistant Secretary of United Fire & Casualty Company and Assistant Secretary of United Fire & Indemnity Company, and Assistant Secretary of Financial Pacific Insurance Company, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the bylaws and resolutions of said Corporations as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID CORPORATIONS, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Corporations this 15th day of July, 2025.

By: Mary A Bertsch
Assistant Secretary,
UF&C & UF&I & FPIC

SECTION 11

SECTION 12

CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
PROJECT INFORMATION, PLANS, GENERAL CONDITIONS FOR CONSTRUCTION FOR CLACKAMAS COUNTY AND DRAWINGS

PROJECT: 2025-46 SE Johnson Creek Blvd: 79th Place – 82nd Ave Project

Background:
The County received a federal grant to install a signal at 79th Place and Johnson Creek Boulevard. A signal will provide a safer environment for individuals exiting Fred Meyer to make a left onto Johnson Creek Blvd and provide a signalized intersection for pedestrians to cross. The project will also install a median on Johnson Creek Blvd, thus allowing right-in and right-out only movements from 80th Pl and the additional Fred Meyer entrance, which will further improve safety.

Project Scope: The Clackamas County Department of Transportation and Development is requesting bids to construct signal and pavement improvements to SE Johnson Creek Blvd. The improvements include the following:

1. Install and remove temporary traffic control measures.
2. Install and remove erosion and sediment control measures.
3. Perform construction survey work.
4. Demolish existing house.
5. Perform earthwork.
6. Install storm drain facilities.
7. Construct curbs, driveway approaches, driveways, sidewalks, and ADA Ramp improvements.
8. Furnish and place aggregate base and hot mix asphalt concrete.
9. Construct water quality facility.
10. Furnish and install traffic signal and interconnect system.
11. Furnish and install permanent signs and striping.
12. Complete seeding and landscaping.
13. Perform additional and incidental Work, as called for by the Specifications and Plans.

The project is anticipated to take approximately 8 months.

The Scope further includes the Plans, General Conditions for Construction for Clackamas County and Supplemental Special Provisions. The following reports and resource agency permits are included in the Contract Documents:

1. General Conditions for Construction for Clackamas County (158 pages).
2. SE Johnson Creek Blvd: 79th Pl – 82nd Ave Project Plans (55 pages).
3. ODOT Standard Drawings (23 pages)
4. Clackamas County and WES Standard Drawings (20 pages)
5. Final Cabinet Prints (8 pages)
6. SE Johnson Creek Blvd: 79th Pl – 82nd Ave Combined Special Provisions (81 pages)

Due to the size of the following documents they can be found at the Dropbox with the following link: https://www.dropbox.com/scl/fo/v06wvl9nlfqb2fp5qqp4o/AMXsT2GCUD37RjJV6mZ0HHw?rlkey=n6tdmnwz7vnhi959drw1eaklm&st=faksa03e&dl=0

7. Preliminary Site Investigation II for SE Johnson Creek Boulevard: 79th Place – 82nd Avenue by Shannon & Wilson, Inc. dated January 2023 (62 pages)

8. Shoulder Material Investigation for SE Johnson Creek Boulevard: 79th Place – 82nd Avenue by Shannon & Wilson, Inc. dated December 2022 (92 pages)
9. Hazardous Building Materials Survey for 7920 Johnson Creek Boulevard by Shannon & Wilson, Inc. dated September 2024 (89 pages).
10. Phase I Environmental Site Assessment for 7920 SE Johnson Creek Boulevard by Shannon & Wilson, Inc. dated September 2024 (982 pages).
11. Phase II Environmental Site Assessment for 7920 SE Johnson Creek Boulevard by Shannon &Wilson, Inc. dated October 2024 (46 pages).
12. Geotechnical Report for SE Johnson Creek Boulevard and SE 79th Place by Shannon &Wilson, dated December 2024 (61 pages)

SECTION 13

SECTION 13

Disadvantaged Business Enterprise (DBE) Commitment Requirements

DBE Information Page

DBE Commitment Certification and Utilization Form

Assigned DBE Contract Goal

ODOT DBE Policy Statement

Disadvantaged Business Enterprise Provisions

Equal Employment Opportunity Provisions

Equal Employment Opportunity-Aspirational Target Provisions

On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts

Required Contract Provision Federal-Aid Construction Contracts (FHWA 1273)

Reimbursable Federal On-the-job and Apprenticeship Training

DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENT REQUIREMENTS

1. DBE Policies, Obligations, Applicabilities, and Authorities

According to 49 CFR Part 26, all ODOT, all Bidders, and all Contractors shall agree to abide by and take all necessary and reasonable steps to comply with the DBE policies, obligations, applicabilities and authorities listed in the Disadvantaged Business Enterprise (DBE) Supplemental Required Contract Provisions.

The "assigned DBE contract goal" for this project is referred to in the project Special Provisions.

2. Eligibility Requirements for DBE Participation on Projects

Participation shall be accomplished by including certified DBEs in any part of the Contract work that is necessary to complete the Contract obligation. A certified DBE may participate as a prime Contractor, subcontractor, joint venture, material supplier, material manufacturer, or professional service provider.

Only those firms certified by the State of Oregon Certification Office of Business Inclusion and Diversity (COBID) as a DBE in the types of work selected shall be eligible to fulfill required DBE participation Contract obligations.

3. Crediting of DBE Participation Toward Meeting the Assigned DBE Contract Goal

(a) Crediting of DBE Participation in Bid Submission

Credit toward meeting the assigned DBE contract goal shall be granted only when a listed firm is currently certified by COBID as a DBE. Bidders should not assume that a minority-owned or a woman-owned firm is currently certified by COBID as a DBE firm or that a firm is certified to perform any particular type of work. Bidders are encouraged to verify each DBE firm's certification by:

1) requesting a copy of the DBE certification letter from the committed DBE firm and contacting COBID at 503-986-0075 to confirm the firm's current certification status; or

2) accessing information on certification and the updated Certification Directory of DBEs by going to the COBID website at
https://www.oregon.gov/biz/programs/COBID/Pages/default.aspx

For joint ventures, the percentage of DBE participation to be credited toward the assigned DBE contract goal will be determined and approved by ODOT prior to Bid Opening on the basis of information submitted in the joint venture application according to Item No. 6 DBE Participation through Joint Venture.

(b) Crediting of DBE Participation Subsequent to Contract Award

The total dollar value of and the scope of work for the DBE commitment as shown on the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM shall be credited toward meeting the assigned DBE contract goal, provided the DBE performs a Commercially Useful Function according to 49 CFR 26.55(c)(1).

(c) Crediting of DBE Participation through the Use of DBE Manufacturers

The Bidder may count 100% of its expenditure to a DBE manufacturer. According to 49 CFR 26.55(e)(1)(ii), a DBE manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.

The Bidder may count 100% of its expenditures for a DBE firm that furnishes and places these materials ***only if*** the DBE firm is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The DBE shall negotiate the cost, arrange delivery of, and pay for the materials and supplies required for the work of its contract. Invoices for materials must be invoiced to the DBE firm and not to the Contractor.

(d) Crediting of DBE Participation Through Use of DBE Regular Dealers

The Bidder may count only 60% of the committed amount for the cost of supplies and materials from regular dealers toward meeting the assigned DBE contract goal. According to 49 CFR 26.55(e)(2)(ii) a DBE regular dealer owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the Contract are bought, kept in stock, and regularly sold to the public in the usual course of business.

No credit will be granted if the Contractor makes a direct payment to a material supplier. However, it will be permissible for a material supplier to invoice the Contractor and the DBE jointly and be paid by the Contractor making remittance to the DBE firm and material supplier jointly, provided such joint payment arrangements received prior written approval from ODOT.

No credit will be granted if the Contractor deducts from the amounts owed to DBE firms for work performed the costs for: (1) materials and service ordered by the DBE firm and used by the DBE in performing its work, (2) purchase price of supplies or materials acquired from the Contractor by the DBE firm and used by the DBE in performing its work, and (3) cost of equipment leased or rented from the Contractor by the DBE firm and used by the DBE in performing its work. Credit shall be withheld where such costs have been deducted from dollar amounts paid to DBE firms for work performed.

(e) Crediting of DBE Participation through Use of DBE Service Providers

Credit toward meeting the assigned DBE contract goal through use of DBE service providers shall be granted for:

(1) The fees or commissions charged for providing a BONA FIDE service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the Contract, provided that the fee or commission is determined by ODOT to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(2) The fees charged for delivery of materials and supplies required on a job site (but not the cost of materials and supplies themselves) when the hauler, trucker, or delivery service is not also the manufacturer of or a regular dealer in the materials or supplies. The fee must be reasonable and not excessive as compared with fees customarily allowed for similar services.

(3) The fees or commissions charged for providing any bonds or insurance specifically required for the performance of the Contract, provided that the fee or commission is determined by ODOT to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(4) The total dollar value of payments to the DBE for which a Commercially Useful Function was performed in delivering a professional, technical and/or expert service.

(f) Crediting of DBE Participation Through Use of DBE Owner/Operator Trucking

A DBE owner/operator must own and operate at least one truck and be certified by COBID.

In order for the Contractor or subcontractor to be credited and receive payment for DBE owner/operator trucking participation, a valid agreement that includes or has attached the following information must be submitted to the Engineer:

(1) Driver's name;
(2) Copy of driver's license;
(3) Vehicle identification number;
(4) Copy of vehicle registration;
(5) Motor vehicle license plate number;
(6) Motor Carrier Plate Number;
(7) Copy of ODOT Motor Carrier 1A Permit;
(8) Name of owner/operator from the side of the truck; and
(9) Method of payment (hour, ton or load)

(g) Crediting of DBE Participation Through Use of DBE Trucking Firms

In order for the Contractor to receive credit and payment for the use of a DBE trucking firm, the trucking firm must be covered by a subcontract or written agreement, and the Engineer must have granted consent to that subcontract or agreement prior to the beginning of the work.

4. Documentation of Bidders' Proposed DBE Participation

(a) DBE Commitment Certification and Utilization Form

DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM shall become a part of the resulting Contract. This certification and utilization form shall be used to determine the Bidder's responsiveness to the DBE requirements.

If the assigned DBE contract goal is greater than zero, the Bidder must complete and sign the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM. The form must be completed and signed by the Bidder's authorized representative. In Part I of the form, the Bidder shall fill in each committed DBE firm and its corresponding type of work, its capacity, and the subcontract amount, expenditure, fee, or commission. Should the Bidder fail to completely fill out, sign, and submit the form with the bid when the assigned DBE contract goal is greater than zero, the Bidder will be considered non-responsive. Part I of the form is not required if the Bidder is a DBE, the DBE contract goal is greater than zero, and the DBE meets the goal by self-performing the minimum required 30% of the work. Part I is required if the Prime DBE must meet a goal greater than 30% or the Prime DBE has subcontracts with additional DBEs. The Agency will calculate each DBE amount, total the amount to be applied to the assigned DBE contract goal and calculate the DBE commitment as a percentage of the total bid.

(b) DBEs Bidding as Prime Contractors

The requirements of section 4(a) will apply to DBE Bidders for a Contract. In determining whether a DBE Bidder for a Contract has met an assigned DBE contract goal, the Agency will automatically calculate 30% of the bid for the DBE credit. If the DBE goal is more than 30% of the bid the DBE must list any additional work that the DBE will self-perform or subcontract to other DBEs.

DBEs bidding as prime Contractors shall complete the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM indicating the percentage of work to be performed by its own forces as well as the work to be performed by other committed DBEs to meet the assigned DBE contract goal.

(c) DBE Commitment Certification Form Part II - Good Faith Efforts

Should bidders not meet the assigned DBE contract goal for DBE participation, they must demonstrate good faith efforts at the time of bid. ODOT must decide whether the efforts made to obtain DBE participation constituted good faith efforts. ODOT will review the quality and intensity of those efforts. Efforts that are merely superficial are not good faith efforts to meet the assigned DBE contract goal.

The Bidder shall provide additional information regarding good faith efforts per the requirements of Part II of the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM. The Bidder must document the steps taken to obtain DBE participation, which demonstrate good faith efforts ("Documentation of GFE"), such as those outlined below:

(1) Evidence that the Bidders attended any pre-solicitation or prebid meetings that were scheduled by ODOT to inform DBEs of contracting and subcontracting or material supply opportunities available on the project;

(2) Evidence that the Bidder identified and selected specific economically feasible units of the project to be performed by DBEs in order to increase the likelihood of participation by DBEs;

(3) Evidence that the Bidder advertised in general circulation, trade association, minority and trade oriented, women-focus publication, concerning the subcontracting or supply opportunities;

(4) Evidence that the Bidder provided written notice to a reasonable number of specific DBEs, identified from the Certification Directory of DBEs for the selected subcontracting of material supply work, in sufficient time to allow the enterprises to participate effectively;

(5) Evidence that the Bidder followed up initial solicitations of interest by contacting the enterprises to determine with certainty whether the enterprises were interested. This may include the information outlined below:

(a) The names, addresses, and telephone numbers of DBEs who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacting the DBEs to determine with certainty whether the DBEs were interested;

(b) A description of the information provided to the DBEs regarding the plans and specifications and estimated quantities for portions of the work to be performed;

(c) Documentation of each DBE contacted but rejected and the reasons for the rejection.

(6) Evidence that the Bidder provided interested DBEs with adequate information about the plans, specifications and requirements for the selected subcontracting or material supply work;

(7) Evidence that the Bidder negotiated in good faith with the enterprises, and did not without justifiable reason reject as unsatisfactory bids prepared by any DBE;

(8) Evidence that the Bidder advised and made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance required by ODOT or contractor;

(9) Evidence that the Bidder's efforts to obtain DBE participation were reasonably expected to produce a level of participation sufficient to meet the assigned DBE contract goal or requirements of ODOT; and

(10) Evidence that the Bidder used the services of minority community organizations, minority contractor groups, local, state and federal minority business assistance offices or other organizations that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises.

Documentation of GFE must be received before Bid Closing. For paper or electronic Bids, the Documentation of GFE must be received at the time and place for receipt of Bids by mail, parcel delivery service or hand delivery as identified in the "Time and Place for Receiving Bids" section in the Bid Booklet. Documentation of GFE may also be submitted by email which must be received before Bid Closing by Marie Wright, Construction Contracts Manager, at the ODOT Procurement Office at: ODOTProcurementOfficeConstruction@odot.oregon.gov.

(d) Failure to Comply

All Bidders, including certified DBE prime Bidders, shall submit a completed and signed DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM with its bid when the assigned DBE contract goal is greater than zero.

If the Bidder fails to properly and completely fill out the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM and/or to provide sufficient evidence of compliance with good faith effort requirements, the bid shall be considered non-responsive and the bid shall be rejected.

5. Contract Award Selection Procedure

In addition to the provisions of Sections 00120 and 00130 of the bid documents, the following items will be considered in determining Contract Award:

(a) The Award of the Contract will be in the best interest of the State of Oregon and will assure that ODOT meets its commitment to its overall DBE goal.

(b) If the low Bidder offering a reasonable bid meets or exceeds the assigned DBE contract goal, that Bidder will be considered responsive to the DBE requirement.

(c) If a DBE's type of work listed on the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM does not match the type of work for which the DBE subcontractor is certified by COBID, then the firm's participation on that Contract cannot count toward the assigned DBE contract goal or overall DBE goals. The Bidder will be determined non-responsive unless the Bidder meets or exceeds the assigned DBE contract goal by self-performing as a DBE or committing sufficient other work to one or more certified DBE firms with matching types of work, or the Bidder has established sufficient good faith efforts.

(d) If the low Bidder has not met the assigned DBE contract goal, ODOT will review the documentation regarding its good faith effort activities to determine if the steps taken are satisfactory. If the steps taken are found satisfactory during the review process, that Bidder will be considered responsive to the DBE requirement. If the steps taken are not found satisfactory, the bid will be considered non-responsive to the DBE requirement.

(e) If the low Bidder is determined to be non-responsive, ODOT, before awarding the Contract, will notify the Bidder in writing within 15 Calendar Days of the Bid Opening. The notification will include the reason for the determination and provide the Bidder an opportunity for administrative reconsideration.

Administrative Reconsideration includes:

(1) The Bidder will have the opportunity to provide written documentation or argument to the Review Committee, consisting of personnel knowledgeable with DBE Program requirements, concerning the issue of whether it met the assigned DBE contract goal or made adequate good faith efforts to do so, within four Calendar Days of the receipt of notification.

(2) Upon request, the Bidder will have the opportunity to meet in person with the Review Committee, to discuss the issue of whether it met the assigned DBE contract goal or made adequate good faith efforts to do so.

(3) The Review Committee will make a decision on reconsideration within four Calendar Days after reviewing evidence of Good Faith Efforts.

(4) The Bidder will be notified in writing by the Review Committee regarding the decision of reconsideration within five Calendar Days of the decision. This notice will explain the basis for finding that the Bidder did or did not meet the assigned DBE contract goal or make adequate good faith efforts to do so.

(5) The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

6. DBE Participation Through Joint Venture

Bidders who plan to bid as a joint venture with a DBE partner must be pre-qualified with the ODOT Procurement Office under the provisions of ORS 279C.430 and Oregon Administrative Rule 731-007-0520 through 731-007-0540. The requirements of 49 CFR 26.55(b) also apply to Bidders bidding as joint ventures. The pre-qualification application must be received by ODOT Procurement Office - Construction Contracts Unit at least 10 days prior to the date of Bid Opening for each individual Contract, and approval given prior to Bid Opening.

7. DBE Contract Compliance After Award and Before Contract Execution

ODOT will send the successful Bidder written notice of acceptance and Award, including a request for further breakdown of the DBE information. Within 10 Calendar Days after Award and prior to Contract execution, the successful Bidder shall provide ODOT with a completed Committed DBE Breakdown and Certification Form describing the work to be performed by each DBE firm.

The successful Bidder shall submit the following breakdown information: bid item, type of work, bid quantity and unit, unit price, and total price. Furthermore, the successful Bidder shall indicate partial work on a bid item and explain the partial item work. If trucking is a DBE committed work

item, the successful Bidder shall indicate if the DBE firm is an owner/operator trucking firm. The Contractor and the Committed DBE Contractor shall sign the form.

FAILURE TO PROVIDE DETAILED DBE INFORMATION TO ODOT WITHIN TEN CALENDAR DAYS AFTER AWARD SHALL BE CAUSE FOR CANCELLATION OF THE AWARD AND WITHDRAWAL OF THE CONTRACT AND MAY BE CAUSE FOR FORFEITURE OF THE BID GUARANTY.

8. Information Relating to Contractors Soliciting Project Participation (Bidders List)

Within ten Calendar Days after Bid Opening, all Bidders shall provide information requested in the Subcontractor Solicitation and Utilization Report, (see appendix), listing bona fide bids or quotes received on this project. The information provided will be used to construct a Bidders List required by 49 CFR 26.11(c).

9. Information Relating to the DBE Requirements on this Project

For further information concerning Disadvantaged Business Enterprise participation, including confirmation of certification for type of work, contact in writing, the DBE Program Manager no later than one week prior to the project Bid Opening at *ocrinforequest@odot.oregon.gov*.

Other requests may be directed to:

Oregon Department of Transportation
Office of Equity and Civil Rights
800 Airport Rd SE
Salem, OR 97301
Phone: 503-986-4350
Fax: 503-986-6382
ocrinforequest@odot.oregon.gov

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DBE INFORMATION

GENERAL INFORMATION

It is the policy of the Oregon Department of Transportation (ODOT) that Disadvantaged Business Enterprises (DBE) as defined in 49 CFR Part 26 shall have the opportunity to participate in the performance of contracts financed in whole or in part with USDOT funds under this agreement.

A full explanation of DBE Participation Goals and Requirements is in Sections 03.00 and 04.00 of the DBE Supplemental Required Contract Provisions.

Firms certified by the State of Oregon Certification Office of Business Inclusion and Diversity (COBID) as DBE in the state of Oregon shall be used to meet the assigned DBE contract goals for DBE participation on contracts funded in whole or in part with U.S. Department of Transportation (USDOT) funds.

Responsiveness is based on the DBE firm's certification status at time of Bid Opening. Contractors should not rely upon past experiences and verbal assurances of firms listed or non-listed.

Services and Commodity Codes reflect information provided by the certified DBE Firms and is not used as a pre-qualification factor by ODOT.

All Bidders, including DBE prime Bidders, are required to submit a Subcontractor Solicitation and Utilization Report form to ODOT Office of Equity and Civil Rights, DBE Program, within 10 Calendar Days after the Bid Opening date.

WEBSITES

DBE Directory - A Certification Directory of DBEs is available from COBID at:

https://oregon4biz.diversitysoftware.com/FrontEnd/SearchCertifiedDirectory.asp?XID=2315&TN=oregon4biz

Subcontractor Solicitation And Utilization Report - The Subcontractor Solicitation and Utilization Report form is available from the Office of Equity and Civil Rights at:

https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx

Project Name _____ **Bid Opening Date** _____

DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM
Are you a DBE prime contractor?
☐ Yes ☐ No

This DBE Certification and Utilization Form applies solely to meeting the assigned DBE contract goal for DBE participation. If the assigned DBE contract goal is greater than zero, each Bidder, including DBE prime Bidders, shall complete and submit this form with their Bid. SHOULD THE BIDDER FAIL TO COMPLETELY FILL OUT, SIGN, AND SUBMIT THIS FORM WITH THE BID WHEN THE ASSIGNED DBE CONTRACT GOAL IS GREATER THAN ZERO, THE BIDDER WILL BE CONSIDERED NON-RESPONSIVE. This certification shall be deemed a part of the resulting contract.

The Bidder acknowledges and certifies that this form accurately represents receipt of and consent from the listed DBE firm as to the use of the referenced itemized quote below for the performance of this project. Bidder certifies that it had direct contact with the named DBE firms regarding participation of this project. Bidder certifies, if awarded this project, that it shall award subcontracts to or enter into agreements with the named DBE. DBE Prime Contractor will receive a minimum 30% credit to be applied to the DBE goal. Part I of the form is not required if the Bidder is a DBE, the DBE contract goal is greater than zero, and the DBE meets the goal by self-performing the minimum required 30% of the work. If the DBE is self-performing more than 30%, it must include any additional work to receive appropriate DBE credit for the goal.

If the Bidder is submitting evidence of good faith efforts to secure participation, Bidder certifies that the good faith efforts documentation is true, accurate and correctly reports the actions taken by the Bidder.

_____
Bidder's Authorized Representative (PRINT)

_____ _____ _____
Bidder's Authorized Representative (SIGN) Date Name of Contractor (Company Name)

PART I

These columns to be completed by Bidder				***These columns to be completed by Agency***	
Name of DBE Firm	**Type of Work ***	**Function ** (examples: Sub., Supp., DBE Man., Serv., Brok.)**	**Subcontract Amount (or expenditure amount or fee/commission amount)**	***Goal Participation % ******	***DBE Amount ********

* From " Certification Office of Business Inclusion and Diversity " ** From "Function" column below. *** *From "Goal Participation %" column below.*
**** *(Subcontract Amount* x *Goal Participation %)*

Function	***Goal Participation %***
Subcontractor	*100% (of subcontract amount)*
Supplier (Regular Dealer)	*60% (of supply expenditure amount)*
DBE Manufacturer	*100% (of material expenditure amount)*
Service Provider	*100% (of fee or commission)*
Broker	*100%*

This section to be completed by Agency	
ASSIGNED DBE CONTRACT GOAL	*%*
TOTAL DBE AMOUNT	*$*
TOTAL BID AMOUNT	*$*
DBE COMMITMENT *(TOTAL DBE AMOUNT ÷ TOTAL BID AMOUNT) (calculated to two decimal places (0.01))*	*%*

	(of brokerage fee only)		

Additional sheets may be used by copying this form.
Bidder must sign each additional sheet to certify its content and completion of form.

PART II

If Bidder's participation commitment to eligible DBEs is less than the assigned DBE contract goal, Bidder shall submit documentation of "good faith efforts" as evidence of actions to secure DBE participation. This may not be applicable to a DBE prime contractor.

Bidder's documentation of "good faith efforts" shall meet the requirements provided in the Disadvantaged Business Enterprise (DBE) Commitment Requirements, item no. 4(c) DBE Commitment Certification Form Part II - Good Faith Efforts, which outlines the activities considered for good faith efforts.

ASSIGNED DBE CONTRACT GOAL

The minimum Assigned **DBE** Contract Goal for this Project is **13.0%**.

(Overall DBE program goal for ODOT is set at 23.43%for FHWA funded Contracts for federal fiscal years 2023, 2024 and 2025.)

A Certification Directory of DBEs is available from the Certification Office of Business Inclusion and Diversity (COBID) website at:
https://oregon4biz.diversitysoftware.com/FrontEnd/SearchCertifiedDirectory.asp

or by telephone at 503-986-0075.

Oregon Department of Transportation
Policy Statement
Disadvantaged Business Enterprise (DBE) Program

The Oregon Department of Transportation (ODOT) is committed to a Civil Rights Program that includes participation of Disadvantaged Business Enterprises (DBEs) in ODOT contracting opportunities. ODOT has established a DBE program in accordance with U.S. Department of Transportation (USDOT) regulations 49 CFR Part 26, as amended in 2014 and effective as of November 3, 2014.

It is ODOT's policy never to exclude any person from participation in, deny any person the benefits of, or otherwise discriminate on the basis of race, color, sex, national origin, or disability in the award and administration of USDOT-assisted contracts. It is ODOT's policy to ensure DBEs, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also our policy to:

1. Ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. Create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. Ensure the DBE program is narrowly tailored in accordance with applicable law;
4. Ensure only firms that fully meet 49 CFR Part 26 eligibility standards are permitted to participate as DBEs;
5. Help remove barriers to the participation of DBEs in USDOT-assisted contracts;
6. Promote the use of DBEs in all types of federally-assisted contracts and procurement activities conducted by recipients
7. Assist the development of firms that can compete successfully in the marketplace outside the DBE program; and
8. Provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs.

The Director of ODOT establishes the DBE policy for the department. The Manager of the Office of Civil Rights (OCR) is delegated as the DBE Liaison Officer. In that capacity, the Manager of OCR, in coordination with all ODOT personnel, is responsible for implementing all aspects of the DBE program. Implementation of the DBE program is accorded the same priority as compliance with all other legal obligations incurred by ODOT in its financial assistance agreements with the USDOT. It is the expectation of the Director that all ODOT personnel shall adhere to the intent as well as the provisions and procedures of the DBE Program.

ODOT circulates this policy to the following in accordance with the DBE program: (1) The Oregon Transportation Commission, (2) ODOT personnel involved with USDOT-assisted work, (3) Members of the DBE and non-DBE business communities that perform or are interested in performing work on ODOT contracts. The complete DBE Program and the overall goal calculation reports are available for review at:

ODOT Office of Civil Rights
800 Airport Road SE
Salem, OR 97301
https://www.oregon.gov/odot/Business/OCR/Pages/Disadvantaged-Business-Enterprise.aspx

For questions or further information, please contact:
Angela M. Crain, Manager
Office of Civil Rights
(T) 503-931-2575
(F) 503-986-6382
Angela.M.Crain@odot.oregon.gov

Kristopher Strickler, Director
Oregon Department of Transportation

June 10, 2022
Date

DISADVANTAGED BUSINESS ENTERPRISE (DBE)
SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

01.00 DBE Policy and Authorities:

(a) DBE Policy, Required Assurance, and Applicability - As required by 49 CFR Part 26, the Oregon Department of Transportation (ODOT) and the Contractor agree to abide by and take all necessary and reasonable steps to comply with the policy set out below:

(1) DBE Policy - It is the policy of the United States Department of Transportation (USDOT) to practice nondiscrimination on the basis of race, color, sex and/or national origin in the award and administration of USDOT assisted contracts. Consequently, the Disadvantaged Business Enterprise (DBE) requirements of 49 CFR part 26 apply to this agreement.

(2) DBE Required Assurance - The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of USDOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as ODOT deems appropriate. Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

(3) DBE Applicability - This applies to all public improvement projects financed in whole or in part with federal funds received from FHWA, FTA and FAA through ODOT. ODOT and its Contractors shall conform to all applicable civil rights laws, orders, and regulations. ODOT and its Contractors shall not discriminate on the basis of race, age, sex, color, religion, national origin, mental or physical disability, political affiliation, or marital status in the award and performance of ODOT contracts.

(b) Authorities - These DBE Supplemental Required Contract Provisions are authorized by the following laws, rules, regulations and guidelines, which, in conjunction with any pertinent policy memoranda or procedures issued by the FHWA, all of which are incorporated by reference into the provisions, govern ODOT's administration of the DBE Program.

(1) The USDOT Regulations (49 CFR Part 26) published in the Federal Register, effective March 4, 1999, established a requirement that all recipients of USDOT funds establish a DBE Program. The regulations are applicable both to ODOT's Federal-aid construction and to its non-construction activities.

(2) The USDOT's legal authority for its DBE regulations includes Executive Order 11625 (October 13, 1971), which required that federal executive agencies develop comprehensive plans and programs to encourage minority business participation. USDOT requires ODOT to establish a DBE Program as a condition for receiving USDOT federal funds.

(3) Title VI, Civil Rights Act of 1964. This Act concerns non-discrimination in federally assisted programs or activities on the grounds of race, color, sex or national origin.

(4) The Program is also subject to the following laws: Section 30 of the Airport and Airway Development Act of 1970 and Section 520 of the Airport and Airway Improvement Act of 1982, as amended by the Airport and Airway Safety Capacity Expansion Act of 1987; Section 905 of the Railroad Act of 1978 (45 USC 903); and Section 19 of the Urban Mass Transportation Act of 1964, as amended (Public Law 95-599).

(5) Oregon Revised Statutes, Chapters 200 and Chapters 279A, 279B and 279C.

(6) Oregon Administrative Rules, Chapter 123, Division 200, Certification Procedures.

The Contractor agrees that these Disadvantaged Business Enterprise (DBE) Supplemental Required Contract Provisions (including all references) shall be incorporated into all subcontracts, regardless of tier, and into any agreements with Committed DBEs, regardless of form of agreement.

02.00 Abbreviations and Definitions - Abbreviations and definitions of words and phrases used in connection with the DBE Program are as follows:

(a) Abbreviations:

COBID - State of Oregon Certification Office of Business Inclusion and Diversity, which is authorized to certify DBE firms according to federal regulations

DBE - Disadvantaged Business Enterprise

FAA - Federal Aviation Administration

FHWA - Federal Highway Administration

FTA - Federal Transit Administration

ODOT - Oregon Department of Transportation (also referred to as 'Agency')

USDOT - United States Department of Transportation

(b) Definitions:

Assigned DBE Contract Goal - An assigned numerical percentage value of the total dollar amount of a Contract Award that is allocated solely for DBE participation. For a DBE to count towards participation it must be certified by COBID under the commodity codes of the work it is contracted to perform.

Broker - A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the contract.

Certification Directory of DBEs - A publication (available in paper or Internet) listing all DBEs which are currently certified by the COBID. The Directory is provided to the Contractor for use in identifying DBE firms whose participation on a contract may be counted toward achievement of the assigned DBE contract goal.

Certified Disadvantaged Business Enterprise (DBE) - A business firm certified by the COBID, indicating that it:

- Meets the criteria outlined in 49 CFR part 26 regarding certification as a DBE; and
- Possesses the required resources and expertise to perform designated types of work.

Commercially Useful Function (CUF) - The definition is consistent with 49 CFR 26.55(c) and describes how ODOT counts DBE participation towards DBE goals:

> A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

Committed DBE - A Committed DBE firm is one that was identified by the Contractor to meet an assigned DBE contract goal as a condition of Contract Award, and includes any substitute DBE that has been approved by ODOT in accordance with 49 CFR 26.53(f) and section 10.00 of the Disadvantaged Business Enterprise (DBE) Supplemental Required contract Provisions in exhibit C-5 that has subsequently been committed work to meet the assigned DBE contract goal. A non-Committed DBE is one that was hired on a race- and gender-neutral basis and has not been identified as a substitute Committed DBE.

Commodity Codes - Codes assigned by the COBID to indicate the standard types of services, labor, materials, or work the DBE provides. Services and commodity codes reflect information provided by the certified DBE firms and are not used as prequalification factors by ODOT.

Contractor's DBE Liaison Officer - The individual designated by the Contractor to assist the Contractor in meeting the Contractor's responsibility of compliance with the legal requirements of the DBE program and with the contractual obligations imposed by these supplementary provisions including but not limited to assuring that the DBE subcontractors on this project perform a commercially useful function.

DBE Eligibility - A firm is eligible to participate as a DBE if it meets the criteria as established by the federal DBE regulations in 49 CFR part 26 and enforced by the certifying agency, which in Oregon is COBID, applies these regulations to make

certification decisions. A firm will no longer be able to participate as a DBE on current or future contracts when it receives notification of decertification, denial of recertification, or notice of graduation by the certifying agency.

Equipment - All machinery, tools, and apparatus needed to complete the contract.

Federal-Aid Contract - For the purposes of these Disadvantaged Business Enterprise (DBE) Supplemental Required Contract Provisions, any contract including consultant agreements or modifications of a contract between ODOT and a Contractor which is paid for in whole or in part with USDOT financial assistance from FHWA, FTA or FAA.

Good Faith Efforts - Efforts required to obtain and support DBE participation that could reasonably be expected to produce and maintain a level of DBE participation sufficient to meet the assigned DBE contract goal. Good faith efforts are required before Bid Opening, upon Contract Award, and continue throughout the performance of the contract to maximize DBE participation. See 49 CFR 26.53 and 49 CFR Part 26, Appendix A.

Joint Venture DBE - An ODOT certified enterprise consisting of one or more firms of which at least one is a certified DBE, formed to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks and profits of the joint venture are commensurate with its ownership interest of the business. (see Section 8.00).

Managerial Control - Consistent with normal industry practice, management shall include scheduling work operations, ordering equipment and materials (if materials are part of the contract), preparing and submitting payrolls and all other required reports and forms, and hiring and firing employees, including supervisory employees.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.

Operational Control - Consistent with normal industry practice, the DBE shall supervise the daily operations of the work contracted. There are only two acceptable ways for the DBE to supervise the daily operations. The DBE owner shall act as superintendent and directly supervise the work or the DBE owner shall supervise the work of and employ a skilled and knowledgeable superintendent. If the latter is used, the DBE owner shall be actively involved in making the operational and managerial decisions of the firm; wherein the DBE owner can continue operations should the skilled and knowledgeable superintendent's employment be discontinued.

Regular Dealer - A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a regular dealer, the DBE firm shall engage in, as its principal business and in its own name, the purchase and sale of the products in question. A regular dealer in such items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock if it owns and operates distribution equipment. Any supplementing of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis, and such equipment shall be operated by

the DBE's own employees. Brokers and packagers shall not be regarded as regular dealers within the meaning of this definition.

Subcontract - A subcontracting arrangement is generally considered to exist when a person or firm assumes an obligation to perform a part of the contract work and the following conditions are present:

- Compensation for performance of work is on a unit price or lump sum basis.
- The subcontractor exercises full control and authority over the subcontracted work, including the furnishing of labor and equipment and choice of work methods, with only general supervision being exercised by the Contractor.
- Personnel involved in the operation are under the direct supervision of the subcontractor and are included on the subcontractor's payroll.
- ODOT has provided written consent to the subcontract arrangement, regardless of tier.

All conditions involved should be considered and no one condition alone will normally determine whether a subcontract actually exists. (See 00180.21.)

Type of Work - Specific descriptions of work which the DBE is certified in the Certification Directory of DBEs as having the expertise and resources necessary to perform.

03.00 Assigned DBE Contract Goal - For any project with an assigned DBE contract goal for DBE participation, the Contractor is required to select a portion of work available on the project for DBE participation. The Contractor may use DBE subcontractors, suppliers, manufacturers or professional service providers to fulfill the assigned DBE contract goal as long as the DBE is certified in the types of work selected. The assigned DBE contract goal on a project remains in effect throughout the life of the contract. Dollar values of participation shall be credited toward meeting the assigned DBE contract goal based on DBE gross earnings.

According to 49 CFR 26.87(j)(2), if a Contractor has executed a subcontract with a firm before COBID notifies the firm of its ineligibility, the Contractor may continue to use the firm on the contract and may continue to receive credit toward its assigned DBE contract goal for the firm's work. If ODOT awards the contract to a DBE prime Contractor that is later ruled ineligible, the portion of the ineligible firm's performance of the contract remaining after COBID issued the notice of ineligibility shall not count toward the ODOT overall goal, but may count toward the assigned DBE contract goal. There is an exception under 49 CFR 26.87(j)(3) if the DBE's ineligibility is caused solely by its having exceeded the size standard during the performance of the contract, ODOT may continue to count its participation on the contract toward overall and assigned DBE contract goals.

In determining whether a DBE Contractor has met an assigned DBE contract goal, only the work the DBE has committed with its own forces as well as the work that it has committed to be performed by DBE subcontractors and DBE suppliers will be counted.

According to 49 CFR 26.71(n), DBE firms are certified only for specific types of work. If a DBE firm has not been certified prior to Bid Opening, for the type of work it is intending to

perform on a given contract, then the firm's participation on that contract cannot count toward assigned DBE contract or overall goals.

The assigned DBE contract goal for the project is listed on the "Assigned DBE Contract Goal" sheet at the end of these provisions.

04.00 Subcontracting Limitations:

(a) DBE Subcontractors - All DBE subcontractors committed to perform a function or service as a condition of contract award, or for replacing the performance of a Committed DBE, shall perform a commercially useful function according to Section 09.00. If it is determined by ODOT that the DBE subcontractor is unable to perform a commercially useful function, ODOT will notify the Contractor prior to subcontract approval. The Contractor shall either provide evidence that the DBE subcontractor is able to perform a commercially useful function, or replace the DBE subcontractor with another DBE who has been certified to perform the bid item subcontracted according to Section 10.00(c). If the Contractor cannot provide sufficient evidence that the DBE subcontractor has the ability to perform a CUF, and/or refuses to replace the DBE, the Contractor may be declared in default and the contract could be terminated according to the Oregon Standard Specifications for Construction subsection 00180.90(a).

(b) Second Tier DBE Subcontracts - Second tier DBE subcontracts may be counted toward the Contractor's assigned DBE contract goal provided the subcontract was listed in the original DBE commitment prior to bid award. The proportion of participation or work performed by a second-tier DBE subcontract may not be double counted and may only be counted towards the DBE goal in accordance with 49 CFR Part 26.

05.00 DBE Subcontract, Sub-Subcontract(s), and Other Agreement Documents:

(a) Committed DBEs - All work committed to a DBE toward meeting an assigned DBE contract goal, including work to be performed by a substitute Committed DBE, shall be performed under a written agreement according to 00160.01 and 00180.21. The agreement shall fully describe any partial pay item work committed to be performed by DBE firms.

(b) Non-Committed DBEs - Work to be performed by a non-Committed DBE shall be in accordance with 00160.01, 00180.20, and 00180.21.

06.00 Good Faith Efforts Requirements - The Contractor is required to exercise good faith efforts during the entire life of the contract to meet the assigned DBE contract goal. Good faith efforts shall be made to secure DBE participation sufficient to meet the assigned DBE contract goal. The Contractor shall also make every reasonable effort during the course of the project to enable DBE firms to perform those portions of the contract work for which they have been committed.

If the Contractor determines that the committed DBE is unable or unwilling to perform under the subcontract, unable to perform a commercially useful function, or has changed its ownership and/or control, the Contractor shall make good faith efforts to replace with another

DBE. Section 10.00 discusses the procedures that shall be followed to terminate a Committed DBE and replace the firm with a substitute.

The Engineer may request the Contractor to submit evidence of Good Faith Efforts at any time during the course of the contract and the Contractor shall promptly submit such evidence.

07.00 DBE Work Plan Proposal Form - The Contractor shall require each DBE participating on the project as a subcontractor and each Committed DBE, regardless of work type or form of agreement, to complete the "Disadvantaged Business Enterprise Work Plan Proposal - Form 3A" (Form 734-2165A). The form shall be filled-in electronically, then printed, and signed by an authorized representative of the DBE and of the Contractor. The Contractor shall submit the completed form to the Engineer. Form 734-2165A is available on the ODOT Office of Equity and Civil Rights website at:

https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx

For Committed DBEs, the Contractor shall submit the completed DBE Work Plan Proposals to the Engineer at or before the pre-construction conference. For non-Committed DBE subcontractors, the Contractor shall submit the completed forms to the Engineer in time for review of the Contractor's request for consent to use the DBE subcontractor on the project.

The purpose of the DBE Work Plan Proposal is to preview whether the proposed activities and type of work identified will comply with DBE program regulations, particularly with respect to commercially useful function and crediting rules. The Contractor shall ensure the form is completed with sufficient information about the DBE's intended work, personnel, equipment, materials, and performance to allow the Agency to determine whether the DBE's proposed performance will meet commercially useful function requirements. Additional information and documentation may be requested by the Agency as needed to alleviate program compliance concerns and must be provided promptly according to 49 CFR 26.109.

The DBE Work Plan Proposal specifically solicits information regarding the following:

(a) Type of Work - List the types of work the DBE will perform.

(b) Personnel Required - List the names and/or craft classifications for personnel who will perform. Indicate whether the individual is regularly employed by the DBE, or the source from which the individual was or is to be recruited.

(c) Equipment Required - List the items of equipment that will be used on the project. Indicate whether the equipment is owned, rented or leased. If rented or leased, consent to the rental or lease shall be obtained from the Agency prior to beginning of the work.

(d) Supplies and Materials Required - List the supplies and materials that will be used on the project. Indicate the source, by name, address, and phone number, from which supplies and materials will be obtained. For a DBE supplier committed to meet an assigned DBE contract goal, attach documentation showing how the DBE meets manufacturer, regular dealer, or broker requirements, as applicable to the credit being claimed and provide any additional explanation needed regarding ordering, scheduling, and delivery according to subsection (f) below.

(e) Prime Contractor Resources - Discuss any plans for the DBE to share any resources of the Contractor, e.g. personnel, equipment, tools, or facilities.

(f) Additional Information - Provide comments or explanation of any of the information provided above. Include information related to joint check arrangements or any plans the DBE has to subcontract work to a lower tier or perform work through a specialty contractor.

The Engineer and Office of Equity and Civil Rights (OECR) Field Coordinator will review the proposals and may provide written comments as to whether the activities and type of work identified in the proposals complies with program regulations. In those instances where proposed activity and type of work violates applicable regulations, written comments will be offered as to corrective action required in order to comply with the regulations.

08.00 Contractor Pre-construction Conference Reporting - The Contractor shall deliver the following information to the Engineer at or before the Pre-construction Conference:

- The name of the DBE liaison officer who will administer the Contractor's DBE program. Said officer or the officer's designee shall attend the conference.
- Contractor's project schedule showing the work commencement date and estimated completion date for each DBE that will perform work on the project.
- "Disadvantaged Business Enterprise Work Plan Proposal - Form 3A" for all Committed DBEs that are performing work on the project regardless of contracting tier.

09.00 Commercially Useful Function - The Contractor is responsible for ensuring that DBE firms working on the project perform a commercially useful function (CUF). The Contractor shall receive credit toward meeting the assigned DBE contract goal and payment for DBE commercially useful function performed work only.

ODOT may perform an on-site review to ascertain whether the DBE is actively performing, managing, and supervising the work. All DBEs shall employ a labor force which is separate and apart from that employed by the Contractor, and which is independently recruited by the DBE according to standard industry practice. The DBE shall supervise and manage the work or independently hire a supervisor, who may not be a supervisor employed by the Contractor or any other subcontractor on the project.

With regard to the Federal-aid share, if an investigation reveals that there has been a violation of the CUF provisions, that portion of the work found to be in violation would not be counted toward goal achievement for either the Contractor or the Agency.

When a DBE is presumed not to be performing a CUF as described in this section, the DBE may present evidence through the Contractor to the Agency to rebut that presumption.

(a) The DBE (Not Some Other Business Entity) Shall Actually Perform the Subcontract - The DBE's utilization of labor, supervisory personnel, equipment and material in the performance of the subcontract shall be consistent with industry standards and shall demonstrate that the DBE and not some other business entity is actually performing the subcontract. For example, when a DBE associates itself too closely with

another business entity or entities, in acquiring a labor force, supervisors, equipment or materials to an extent inconsistent with industry standards, the DBE can no longer be said to be actually performing the subcontract because a partnership or joint venture, of which the DBE is a member, is the actual performer of the subcontract.

(b) DBE's Work Force - The DBE shall solicit, hire, place on its payroll, direct, and control all workers performing work under its contract. The DBE owner or its superintendent shall, on a full-time basis, supervise and control the work of the contract. The DBE may with the prior written consent of the Engineer augment its work force with personnel of another firm. The Engineer shall approve the request only when:

- Specialized skills are required, and
- The use of such personnel is for a limited time period.

(c) DBE Equipment - The DBE is expected to perform the work with equipment that is owned, being purchased, or leased by the DBE under a written lease agreement that has been consented to by the Engineer prior to the DBE starting work. No credit will be given, nor payment made for the cost of equipment leased or rented and used in the DBE firm's work when payment for those costs is made by a deduction from the Contractor's payment(s) to the DBE firm.

The DBE may lease specialized equipment, provided a written rental agreement, separate from the subcontract specifying the terms of the lease arrangement, is consented to by the Engineer prior to the DBE starting work. The Engineer will consent to the lease agreement only when:

- The equipment is of a specialized nature,
- The equipment is readily available at the job site,
- The operation of the equipment is under the full control of the DBE,
- The lease arrangement is for a short term,
- The lease arrangement for the specialized equipment in question is a normal industry practice, and
- The DBE shall hire, direct, supervise, control and carry the operator of the equipment on the DBE payroll.

(d) DBE Trucking Firms - Whenever a DBE trucking firm has been committed to meet an assigned DBE contract goal, the Contractor shall ensure that the Committed DBE individually identifies each truck intended for use on the Project on its "Disadvantaged Business Enterprise Work Plan Proposal - Form 3A" or an attached list.

The Contractor shall furnish a daily log of all trucking work performed under the Committed DBE's subcontract. The "Daily DBE Trucking Log" (Form 734-2916), (or an approved equal that contains all the information on the ODOT form, including the certification) shall be completed for each day work is performed under the DBE's subcontract. The Daily DBE Trucking Log shall identify all trucks under the management and supervision of the DBE subcontractor used on the Project.

The Contractor shall submit the Daily DBE Trucking Log to the Engineer on a weekly basis and no later than 14 Calendar Days after the first recorded date in the logs. For owner-operator trucks, the Contractor shall comply with 00170.65(b-4).

The following factors will be used to determine if a DBE Trucking firm is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- The DBE shall itself own and operate at least one fully licensed, insured and operational truck used on the contract.
- The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- According to 49 CFR 26.55(d)(5) the DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by the non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangements.
- For the purposes of this paragraph, a lease shall indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks shall display the name and identification number of the DBE.

(e) DBE Flagging Firms - DBE flagging firms shall be responsible for ensuring all their dispatched employees meet the required certification and licensing requirements and for furnishing their employees with equipment (in this case, paddles and radios) to perform the committed work. This does not preclude the DBE's employees from supplementing with their own equipment.

10.00 Termination and Substitution of DBEs - The Contractor must comply with the requirements and procedures under 49 CFR 26.53(f). The Contractor shall use the specific DBEs listed in response to a contract goal to perform the work and supply the materials for which each is listed unless the contractor obtains ODOT's prior written consent, coordinated with the ODOT Office of Equity and Civil Rights. Without ODOT consent, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE. Contractor must provide the DBE with written notice and supporting documentation of its good cause reasons they wish to terminate and/or substitute the DBE with a copy to the Engineer and the ODOT Office of Equity and Civil Rights. The DBE must be given 5 days to respond to the termination request, copying the ODOT Office of Equity and Civil Rights.

ODOT may provide such written consent only if it agrees, for reasons stated in its concurrence document, that the prime contractor has good cause to terminate the DBE firm because the DBE is unable, unwilling or ineligible to perform. To initiate the termination, substitution, removal or replacement process with a Committed DBE contractor/supplier (regardless of the tier), the Contractor or lower tier contractor/subcontractor must do the following:

(a) Contractor Notice of Termination of a Non-Committed DBE - The Contractor shall notify the Agency in writing of plans to terminate a non-Committed DBE. Include the name of the non-Committed DBE to be terminated, a brief explanation of the reason for termination, and the adjusted DBE subcontract or agreement amount.

(b) Contractor Written Request to Terminate a Committed DBE - All Contractor requests to terminate, substitute or replace a Committed DBE, including a partial termination or substitution of work committed to a DBE, shall be in writing and shall include the following information:

- Date the Contractor determined the DBE to be unwilling, unable or ineligible to perform.
- Projected date Contractor will require substitution or replacement DBE to commence work if consent is granted to the request.
- Brief statement of facts describing and citing specific actions or inaction by the DBE giving rise to the Contractor's assertion that the DBE is unwilling, unable or ineligible to perform.
- Brief statement of the affected DBE's capacity and ability to perform the work as determined by Contractor.
- Brief statement of facts regarding actions taken by Contractor that are believed to constitute good faith efforts toward enabling the DBE to perform.
- To date percentage of work completed on each bid item by the DBE.
- The total dollar amount paid, per bid item, to date for work performed by the DBE.
- The total dollar amount, per bid item, remaining to be paid to the Committed DBE for work completed, but for which the DBE has not received payment and with which the Contractor has no dispute.
- The total dollar amount, per bid item, remaining to be paid to the DBE for work completed, but for which the DBE has not received payment and over which the Contractor and/or the DBE have dispute.
- A written, signed statement from the DBE, provided the DBE concurs with request to terminate, indicating its unwillingness or inability to perform.

(c) Contractor Written Notice to Committed DBE of Pending Request to Terminate and Substitute with Another DBE - The Contractor shall send a copy of the request to terminate and substitute letter to the affected Committed DBE in conjunction to submitting the request to the Engineer. The affected DBE firm may submit a response letter to the Engineer within five Calendar Days of receiving the notice from the Contractor. The affected DBE firm may explain its position concerning performance on the committed work. The Engineer will consider both the Contractor's request and DBE's response and explanation before approving the Contractor's termination and substitution request. If the Contractor is unsuccessful in notifying the affected DBE firm, after trying its best to deliver

a copy of its request letter, the Agency may determine that the affected Committed DBE is unable or unwilling to continue the contract and a substitution will be immediately approved by the Engineer. Contractor must provide the DBE with written notice and supporting documentation of its good cause reasons they wish to terminate and/or substitute the DBE with a copy to the Engineer and the ODOT Office of Equity and Civil Rights. The DBE must be given 5 days to respond to the termination request, copying the ODOT Office of Equity and Civil Rights.

(d) Proposed Substitution of Another Certified DBE - When a Committed DBE substitution shall occur, the Contractor may submit another eligible DBE firm to replace the original committed firm in writing. The Contractor shall submit the name of the DBE firm, the proposed work to be performed, and the dollar amount of the work. The Contractor shall give pertinent information including bid item, item description, bid quantity and unit, unit price, and total price. In addition, the Contractor shall submit a written DBE Work Plan for the requested substitute DBE according to Section 07.00. The dollar value of work to be performed by the substitute DBE shall be in an amount equal to the dollar value of the amount committed to the terminated DBE, minus the value of work performed to date by the DBE, prior to the request for substitution. Should the Contractor be unable to commit the required dollar value to the substitute DBE, the Contractor shall provide written evidence of good faith efforts made to obtain the substitute value requirement. The Agency will review the quality and intensity of those efforts. Efforts that are merely superficial are not good faith efforts to meet the assigned DBE contract goal. The Contractor shall document the steps taken to obtain participation which demonstrate the good faith efforts outlined below:

- Evidence that the Contractor attended any pre-solicitation or prebid meetings that were scheduled by ODOT to inform DBE firms of contracting and subcontracting or material supply opportunities available on the project;
- Evidence that the Contractor identified and selected specific economically feasible units of the project to be performed by DBE firms in order to increase the likelihood of participation by DBE firms;
- Evidence that the Contractor advertised in general circulation, trade association, minority and trade oriented, women-focus publications, concerning the subcontracting or supply opportunities;
- Evidence that the Contractor provided written notice to a reasonable number of specific DBE firms, identified from the DBE Directory of Certified Firms for the selected subcontracting or material supply work, in sufficient time to allow the enterprises to participate effectively;
- Evidence that the Contractor followed up initial solicitations of interest by contacting the enterprises to determine with certainty whether the enterprises were interested. The Contractor should provide the following information as evidence:
    - The names, addresses, and telephone numbers of DBE firms who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacting the DBE firms to determine with certainty whether the DBE firms were interested;
    - A description of the information provided to the DBE firms regarding the plans and specifications and estimated quantities for portions of the work to be performed;

- Documentation of each DBE contacted, but rejected and the reasons for the rejection.

- Evidence that the Contractor provided interested DBE firms with adequate information about the plans, specifications and requirements for the selected subcontracting or material supply work;
- Evidence that the Contractor negotiated in good faith with the enterprises, and did not without justifiable reason reject as unsatisfactory bids prepared by any DBE;
- Evidence that the Contractor advised and made efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance required by ODOT or Contractor;
- Evidence that the Contractor's efforts to obtain DBE participation were reasonably expected to produce a level of participation sufficient to meet the assigned DBE contract goal or requirements of ODOT; and
- Evidence that the Contractor used the services of minority community organizations or minority organizations that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises.

11.00 Changes in Work Committed to DBEs - The Agency will consider the impact on DBE participation in instances where the Agency changes, reduces, or deletes work committed to a DBE at the time of contract award. In such instances, the Contractor shall not be required to replace the work but is encouraged to do so. If the prime Contractor proposes any changes that involve a Committed DBE, the Contractor shall notify the affected DBE of the proposed change, reduction, or deletion of any work committed at the time of contract award prior to executing the change order. The Contractor shall enable the affected DBE to participate in the change order request and will make every effort to maintain the Committed DBE percentage that was the condition of contract award. Documentation of this effort and a letter from the DBE agreeing to the change shall be included with the request.

12.00 Contractor Payments to Subcontractors and Suppliers:

(a) DBE-Related Records - The Contractor shall maintain records of all subcontracts or other agreements entered into with DBE firms and records of materials purchased from DBE suppliers. Such records shall show the name and business address of each DBE subcontractor or vendor and the total dollar amount actually paid to each DBE subcontractor or vendor.

(b) Prompt Payment and Release of Retainage - The Contractor shall pay each subcontractor for satisfactory performance of its contract no later than 10 Calendar Days from receipt of each payment the Contractor receives from ODOT. If retainage is withheld the Contractor shall also return retainage payments to each subcontractor within 10 Calendar Days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Engineer. This policy applies to both DBE and non-DBE contractors.

(c) Paid Summary Reports - The Contractor shall submit a "Paid Summary Report" (Form 734-2882) to the Engineer certifying payments made to all of the following:

- All subcontractors
- Committed DBE suppliers
- Non-Committed DBE suppliers and service providers with estimated total payments for the Project over $10,000.

The Contractor shall submit the completed and signed Paid Summary Report to the Engineer within 20 days of receipt of payment from the Agency for each month in which payments were made to each subcontractor, each Committed DBE supplier, and each non-Committed DBE supplier or service provider with estimated total payments for the Project over $10,000. At the completion of the project, submit Form 734-2882 recapping the total amounts paid to each subcontractor, and each Committed DBE supplier, and each non-Committed DBE supplier or service provider with estimated total payments for the Project over $10,000.

The Contractor shall require each subcontractor at every tier to comply with the requirement to submit Form 734-2882 within 20 days of receipt of payment from its controlling contractor and provide a recap of the total amounts paid at the completion of the project or completion of their Work.

Forms shall be submitted to an email address provided to the Contractor at the Preconstruction Conference.

The participation of a DBE subcontractor will not be credited towards the Contractor's assigned DBE contract goal, or the overall goal, until the amount being counted toward the goal, and any retainage held by the Contractor has been paid to the DBE.

13.00 Remedies - Failure of any Contractor to meet the requirements cited in Section 01.00(b) constitutes a breach of contract for which the imposition of the following sanctions could occur:

- Temporarily withholding progress payments until the Contractor complies with these provisions through future performance.
- Permanently withholding payment for work already performed in a manner that constitutes a breach of contract.
- Suspension of work according to the Oregon Standard Specifications for Construction, subsections 00150.00 and 00180.70.

Any Bidder or Contractor or subcontractor on a public contract that violates the provisions of ORS 200.075 shall have its right to bid on or participate in any public contract suspended for up to 90 days for a first violation, up to one year for a second violation and up to five years for a third violation.

Each violation shall remain on record for five years. After five years, the violation shall no longer be considered in reviewing future violations.

Failure of a Bidder, Contractor, or subcontractor to comply with the requirements cited in Section 01.00(b) when there appears to be evidence of criminal conduct, shall be referred to the Oregon Department of Justice and/or the FHWA Inspector General for criminal investigation, and if warranted, prosecution.

14.00 Records and Reports - The Contractor shall keep such project records as are necessary to determine compliance with these DBE Supplemental Required Contract Provisions, including but not limited to records on equipment usage, fuel consumption, invoicing, and payments. Such records shall include written reports from the DBE Liaison Officer to the Contractor as to the performance of the committed DBE and its performance of a commercially useful function. Contractor shall provide the Engineer with records on equipment and fuel logs and other records needed to verify compliance with commercially useful function and DBE crediting requirements.

15.00 Further Information - The Disadvantaged Business Enterprise Supplemental Required Contract Provisions shall be incorporated into and attached to all agreements and contracts on projects financed in whole or in part with federal funds.

For further information concerning Disadvantaged Business Enterprise participation, including confirmation of certification for type of work, contact, in writing, the DBE Program Manager not later than one week prior to the project Bid Opening at *ocrinforequest@odot.oregon.gov*.

Other requests may be directed to:

Oregon Department of Transportation
Office of Equity and Civil Rights
800 Airport Road SE
Salem, OR 97301
Phone: 503-986-4350
Fax: 503-986-6382
ocrinforequest@odot.oregon.gov

EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS

As used in these provisions, "Engineer" means the Chief Engineer of the Oregon Department of Transportation acting either directly or through authorized representatives. "Good Faith Efforts" means "affirmative action measures designed to implement the established objectives of an Affirmative Action Plan" 23 CFR 230.407(o).

Section 140 of Title 23, United States Code, EQUAL EMPLOYMENT OPPORTUNITY, as in effect on May 1, 1982, is incorporated by this reference and made a part of these provisions.

Written Notification

The Contractor shall provide to the Engineer within two weeks of award of any construction subcontract in excess of $10,000 at any tier for construction work under the Contract resulting from this solicitation written notification with the following information: the name, address and telephone number of the Subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

The Contractor shall provide immediate written notification to the Engineer when (1) the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor minorities or women that the Contractor sent to the union, or (2) the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its equal opportunity obligations. This is in addition to the notification required in item 7d in the "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts".

Monthly Report

The Contractor and each Subcontractor (on contracts that require certified payrolls) shall submit each month to the Engineer a "Monthly Employment Utilization Report" (Form 731-0668). The electronic form is available at:

https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx

Annual Report

Each July for the duration of the Project, each Contractor and Subcontractor shall submit Form FHWA-1391. This report shall be sent directly to the ODOT Office of Equity and Civil Rights.

PURSUANT TO 23 CFR PART 230, SUBPART D, THE STATE HIGHWAY AGENCY HAS A RESPONSIBILITY TO ASSURE COMPLIANCE BY CONTRACTORS WITH THE REQUIREMENTS OF FEDERAL-AID CONSTRUCTION CONTRACTS, 23 CFR 230.405(b). THEREFORE, THE STATE HIGHWAY AGENCY HAS THE FOLLOWING OBLIGATIONS CONCERNING MONITORING AND COMPLIANCE, INCLUDING SHOW CAUSE NOTICE REQUIREMENTS.

Monitoring and Compliance

The Agency will maintain a vigorous monitoring process to ensure nondiscrimination and affirmative action on all federally funded Projects. Monitoring shall include at a minimum, monthly meetings to review the "Monthly Employment Utilization Report" (Form 731-0668) with the Contractor's Equal Employment Opportunity (EEO) Officer and quarterly reviews of the Contractor's Good Faith Efforts as outlined in FHWA 1273.

The Agency shall determine the Contractor's compliance with equal opportunity requirements including:

- Non-discrimination in selection and retention of subcontractors, material suppliers and vendors;
- Maintenance of non-segregated facilities;
- Adequate representation and utilization of minorities and women (by craft and trade) in the Contractor's workforce;
- Good Faith Efforts in meeting on-the-job training and training special provisions contained in FHWA 1273;
- Fair treatment in all terms and conditions of employment; and,
- Adherence (where applicable) to Indian preference provisions.

If the Agency or the FHWA becomes aware of any possible violations of Executive Order 11246 or 41 CFR 60, each has the authority and the responsibility to notify the Office of Federal Contract Compliance Programs. The Contractor has the responsibility either to meet all the craft goals set forth in the applicable "Covered Area" of "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts" or demonstrate Good Faith Efforts to meet these goals (as specified in paragraphs 7a through 7p of the "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts").

Show Cause Notice

If an investigation or review reveals that a Contractor or Subcontractor has not complied with these EEO Provisions, the Agency shall issue a Show Cause Notice to initiate efforts to bring the Contractor or Subcontractor into compliance. This written notice shall state the deficiencies found during the review, and shall advise the Contractor or Subcontractor to show cause within 30 Calendar Days why the Agency shall not impose administrative

sanctions. The Contractor or Subcontractor must then show good cause or must provide an acceptable agreement for corrective action within 30 Calendar Days.

If the Contractor or Subcontractor does not provide this information by the end of the 30 Calendar Days, the Engineer shall withhold all project progress payments in process as of the date the Show Cause Notice was issued and will continue to withhold project progress payments until the Contractor or Subcontractor responds in an acceptable manner. If the Contractor or Subcontractor fails to meet the conditions of the corrective action agreement, no further Show Cause Notice is required; the Agency shall immediately initiate enforcement proceedings.

If a Contractor's prequalification certification is revoked or disqualified because the Contractor has been found on at least two occasions to be in breach of these EEO Provisions of Federal-Aid highway construction contracts, the Contractor must be determined to be in compliance with these EEO Provisions prior to the Contractor's prequalification certificate being reinstated.

EQUAL EMPLOYMENT OPPORTUNITY-ASPIRATIONAL TARGET PROVISIONS

See the EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS incorporated in this Contract for notifying the Engineer, monthly and annual reporting, monitoring, and compliance.

Aspirational Diversity Targets

ODOT Aspirational Diversity Targets - While Aspirational Diversity Targets are not requirements for this Contract and are not binding on the Contractor, ODOT desires to encourage the highest possible participation of minorities and women in the work force. Therefore, ODOT has established aspirational targets on all federally funded Projects:

Covered Areas

Area	Aspirational
ODOT Region 1	Women 14% - Minority 20%
ODOT Region 2, 3, 4, & 5	Women 14% - Minority 14%

Neither the Contractor nor its subcontractors are under any obligation to meet any aspirational targets.

ON-SITE WORKFORCE AFFIRMATIVE ACTION REQUIREMENTS FOR WOMEN AND MINORITIES ON FEDERAL-AID CONTRACTS

Pursuant to 41 CFR 60-4.6 (see also 41 CFR 60-4.2(a)) the following notice concerning Affirmative Action Requirements for Women and Minorities shall be included in, and shall be a part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of $10,000 to be performed in geographical areas designated by the United States Department of Labor (USDOL) Director. The USDOL, Office of Federal Contract Compliance Programs (OFCCP) has made the following statement concerning Goals, Timetables and Good Faith Efforts:

> "Numerical goals are established based on the availability of qualified applicants in the job market or qualified candidates in the employer's work force. Executive Order [E.O. 11246] numerical goals do not create set-asides for specific groups, nor are they designed to achieve proportional representation or equal results. Rather, the goal-setting process in affirmative action planning is used to target and measure the effectiveness of affirmative action efforts to eradicate and prevent discrimination. The Executive Order and its supporting regulations do not authorize OFCCP to penalize contractors for not meeting goals. The regulations at 41 CFR 60-2.12(e), 60-2.30 and 60-2.15, specifically prohibit quota and preferential hiring and promotions under the guise of affirmative action numerical goals. In other words, discrimination in the selection decision is prohibited."

For purposes of these "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts", "Good Faith Effort" means affirmative action measures designed to implement the established objectives of an Affirmative Action Plan 23 CFR 230.407(o).

A. AFFIRMATIVE ACTION REQUIREMENTS

Notice of Requirement for Affirmative Action To Ensure Equal Employment Opportunity (Executive Order 11246)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goal and Timetable for Female Utilization Statewide

Timetable	Goal (Percent)
From Apr. 1, 1980 until further notice	6.9

Goals for Minority Utilization by County

	Goal (Percent)
Clackamas, Multnomah, and Washington Counties	4.5
Marion and Polk Counties	2.9
Benton, Clatsop, Columbia, Crook, Deschutes, Hood River, Jefferson, Lincoln, Linn, Sherman, Tillamook, Wasco, and Yamhill Counties	3.8
Lane, Coos, Curry, Douglas, Jackson, Josephine, Klamath, and Lake Counties	2.4
Baker, Gilliam, Grant, Morrow, Umatilla, Union, Wallowa, and Wheeler Counties	3.6
Harney and Malheur Counties	4.4

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

2. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 business days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

3. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the county or counties shown in the Solicitation Documents. In cases where the work is two or more counties covered by different percentage goals, the highest percentage will govern.

B. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:

a. "Covered area" means the geographical area, described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian American and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitation from which this contract resulted.

3. A contractor participating, either individually or through an association, in an approved Hometown Plan (including heavy highway affirmative action plans) shall comply with its affirmative action obligations under Executive Order 11246 by complying with its obligations under the plan; provided, that each contractor or subcontractor participating in an approved plan is individually required to comply with the equal opportunity clause set forth in 41 CFR 60-1.4; to make a good faith effort to achieve the goals for each trade participating in the plan in which it has employees; and that the overall good performance by other contractors or subcontractors toward a goal in an approved plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the plan's goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minorities and female utilization the Contractor should

reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is performed. Goals are published periodically in the Federal Register in notice form, and such notices maybe obtained from any Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minorities and female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization’s responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or a community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the

Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc., by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the Contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject manner.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female employees for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and Contractor's activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor-community; or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor will designate an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so. Additionally, the contractor EEO Officer shall ensure that the company EEO policy is being carried out, to submit reports relating to the specifications hereof as may be required by the Agency and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws, which establish different standards of compliance, or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

16. The Office of Federal Contract Compliance Programs (OFCCP) may conduct compliance evaluations to determine if the contractor maintains nondiscriminatory hiring and employment practices and is taking affirmative action to ensure that applicants are employed and that employees are placed, trained, upgraded, promoted, and otherwise treated during employment without regard to race, color, religion, sex, or national origin. In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

> "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

General Conditions for Construction for CLACKAMAS COUNTY

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PART 00100 - GENERAL CONDITIONS

Section 00110 - Organization, Conventions, Abbreviations, and Definitions

Organization

00110.00 Organization of Specifications - The Specifications are comprised of the following:

- The "General Conditions for Construction for Clackamas County", published by the Agency, which contain Part 00100 "General Conditions", which deal with the solicitation process and contractual relationships;
- The "2024 Oregon Standard Specifications for Construction", Parts 00200 through 03000, published by the Oregon Department of Transportation which contain the detailed "Technical Specifications" involved in prosecution of the Work, organized by subject matter; and
- The Special Provisions.

In addition, throughout the Specifications:

- Each Part is divided into Sections and Subsections.
- Reference to a Section includes all applicable requirements of the Section.
- When referring to a Subsection, only the number of the Subsection is used; the word "Subsection" is implied.
- Where Section and Subsection numbers are not consecutive, the interval has been reserved for use in the Special Provisions or future expansion of the Standard Specifications.

Conventions

00110.05 Conventions Used throughout the Specifications Include:

(a) Grammar - The " General Conditions for Construction for Clackamas County", Part 00100 "General Conditions", is written in the indicative mood, in which the subject is expressed. The "2024 Oregon Standard Specifications for Construction", published by the Oregon Department of Transportation, Parts 00200 through 03000, the detailed "Technical Specifications", are generally written in the imperative mood, in which the subject is implied. Therefore, throughout Parts 00200 through 03000, and on the Plans:

- The subject, "the Contractor", is implied.
- "Shall" refers to action required of the Contractor, and is implied.
- "Will" refers to decisions or actions of the Agency and/or the Engineer.
- The following words, or words of equivalent meaning, refer to the actions of the Agency and/or the Engineer, unless otherwise stated: "allowed", "directed", "established", "permitted", "ordered", "designated", "prescribed", "required", "determined".
- The words "approved", "acceptable", "authorized", "satisfactory", "suitable", "considered", and "rejected", "denied", "disapproved", or words of equivalent meaning, mean by or to the Agency and/or the Engineer, subject in each case to Section 00150 of the General Conditions.
- The words "as shown", "shown", "as indicated", or "indicated" mean "as indicated on the Plans".
- Certain Subsections labeled "Payment" contain statements to the effect that the accepted quantities "will be paid for at the Contract unit price, per unit of measurement, for the following

items" (followed by a list of items). In such cases, the Agency will pay for only those Pay Items listed in the Schedule of Items.

(b) Capitalization of Terms - Capitalized terms, other than titles, abbreviations, and grammatical usage, indicate that they have been given a defined meaning in the Standard Specifications. Refer to 00110.20 "Definitions". Defined terms will always be capitalized in Part 00100; in Parts 00200 through 03000, defined terms will generally not be capitalized, with the notable exception of "the Contractor", "the Agency", and "the Engineer".

(c) Punctuation - In this publication the "outside method" of punctuation is employed for placement of the comma and the period with respect to quotation marks. Only punctuation that is part of the quoted matter is placed within quotation marks.

(d) References to Laws, Acts, Regulations, Rules, Ordinances, Statutes, Orders, and Permits - References are made in the text of the Specifications to "laws", "acts", "rules", "statutes", "regulations", "ordinances", etc. (collectively referred to for purposes of this Subsection as "Law"), and to "orders" and "permits" (issued by a governmental authority, whether local, state, or federal, and collectively referred to for purposes of this Subsection as "Permits"). Reference is also made to "applicable laws and regulations". The following conventions apply in interpreting these terms, as used in the Specifications.

- **Statutes and Rules** - Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OAR) referenced in the Specifications are accessible online, including through the Oregon Legislative Counsel Committee website (see 00110.05(e)) and through the Oregon Secretary of State Archives Division website (see 00110.05(e)). Clackamas County's Local Contract Review Board (LCRB) Rules are accessible online on the County's website (see 00110.05(e)).

- **Law** - In each case, unless otherwise expressly stated therein, the Law is to be understood to be the current version in effect. This also applies where a specific Law is referenced or cited, regardless of whether the text of the Law has been included in the Specifications or not, and regardless of whether the text of the Law has been summarized or paraphrased. In each case, the current version of the Law is applicable under any contract. The reader is therefore cautioned to check the actual text of the Law to confirm that the text included in the Specifications has not been modified or superseded.

- **Permits** - Orders and permits issued by a government agency may be modified during the course of performing the work under a contract. Therefore, wherever the term "order" or "permit" is used in the Specifications, it is intended to refer to the then-current version. That version may be embodied in a modified, superseding order or permit, or it may consist of all terms and conditions of prior orders or permits that have not been superseded, as well as the additional terms added by amendment or supplement. In certain cases, the orders and/or permits are identified by name in the Specifications; in other cases the terms are used in the generic sense. The reader is cautioned to check the text(s) of each order and permit identified either by name or by generic reference.

- **Applicable Laws and Regulations** - Where phrases such as "applicable law", "applicable laws and regulations", "applicable legal requirements" or similar phrases appear, they are to be understood as including all applicable laws, acts, regulations, administrative rules, ordinances, statutes, and orders and permits issued by a governmental or regulatory authority. The words "law" or "laws" may or may not be capitalized in such phrases.

(e) Reference to Websites - For Specifications that reference this Subsection, the Agency will identify the website addresses in the Special Provisions.

Abbreviations

00110.10 Abbreviations - Following are meanings of abbreviations used in the Standard Specifications, in the Special Provisions, on the Plans, and in other Contract Documents. Other abbreviations and meanings of abbreviations may be used in the individual Sections of the Standard Specifications to which they apply, in the Special Provisions, and in OAR 731-005 and OAR 731-007.

CCDA	-	Clackamas County Development Agency
DTD	-	Clackamas County Department of Transportation and Development
LCRB	-	Local Contract Review Board
NCPRD	-	North Clackamas Parks and Recreation District
ODFW	-	Oregon Department of Fish and Wildlife
UNS	-	Utility Notification System
WES	-	Water Environment Services of Clackamas County
AAR	-	Association of American Railroads
AASHTO	-	American Association of State Highway and Transportation Officials
ABC	-	Associated Builders and Contractors, Inc.
AC	-	Asphalt Concrete
ACI	-	American Concrete Institute
ACP	-	Asphalt Concrete Pavement
ACWS	-	Asphalt Concrete Wearing Surface
ADA	-	Americans with Disabilities Act
ADT	-	Average Daily Traffic
AGC	-	Associated General Contractors of America
AIA	-	American Institute of Architects
AISC	-	American Institute of Steel Construction
AISI	-	American Iron and Steel Institute
AITC	-	American Institute of Timber Construction
ANSI	-	American National Standards Institute
APA	-	Engineered Wood Association
APWA	-	American Public Works Association
AREMA	-	American Railway Engineering and Maintenance of Right-of-Way Association
ASCE	-	American Society of Civil Engineers
ASME	-	American Society of Mechanical Engineers
ASTM	-	American Society for Testing and Materials
ATPB	-	Asphalt Treated Permeable Base
ASTV	-	Actual Strength Test Value
AWG	-	American Wire Gauge
AWPA	-	American Wood Protection Association
AWS	-	American Welding Society
AWWA	-	American Water Works Association
CAgT	-	Certified Aggregate Technician
CAT-I	-	Certified Asphalt Technician I
CAT-II	-	Certified Asphalt Technician II
CBM	-	Certified Ballast Manufacturers
CCO	-	Contract Change Order
CCT	-	Concrete Control Technician
CDT	-	Certified Density Technician
CEBT	-	Certified Embankment and Base Technician
CFR	-	Code of Federal Regulations
CLSM	-	Controlled Low-Strength Materials

CMDT	-	Certified Mixture Design Technician
CPF	-	Composite Pay Factor
CRSI	-	Concrete Reinforcing Steel Institute
CS	-	Commercial Standard, Commodity Standards Division, U.S. Department of Commerce
CSTT	-	Concrete Strength Testing Technician
D1.1	-	Structural Welding Code - Steel, American Welding Society, current edition
D1.5	-	Bridge Welding Code, American Welding Society, current edition
DBE	-	Disadvantaged Business Enterprise
DEQ	-	Department of Environmental Quality, State of Oregon
DOGAMI	-	Department of Geology and Mineral Industries, State of Oregon
DSL	-	Department of State Lands, State of Oregon
EAC	-	Emulsified Asphalt Concrete
EPA	-	U.S. Environmental Protection Agency
ESCP	-	Erosion and Sediment Control Plan
FHWA	-	Federal Highway Administration, U.S. Department of Transportation
FSS	-	Federal Specifications and Standards, General Services Administration
GSA	-	General Services Administration
HDPE	-	High Density Polyethylene
ICEA	-	Insulated Cable Engineers Association (formerly IPCEA)
IES	-	Illuminating Engineering Society
IMSA	-	International Municipal Signal Association
ISO	-	International Standards Organization
ISSA	-	International Slurry Surfacing Association
ITE	-	Institute of Transportation Engineers
JMF	-	Job Mix Formula
MFTP	-	Manual of Field Test Procedures (ODOT)
MIL	-	Military Specifications
MSC	-	Minor Structure Concrete
MUTCD	-	Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA, U.S. Department of Transportation
NEC	-	National Electrical Code
NEMA	-	National Electrical Manufacturer's Association
NESC	-	National Electrical Safety Code
NIST	-	National Institute of Standards and Technology
NPDES	-	National Pollutant Discharge Elimination System
NPS	-	Nominal Pipe Size (dimensionless)
OAR	-	Oregon Administrative Rules
ODA	-	Oregon Department of Agriculture
ODOT	-	Oregon Department of Transportation
ORS	-	Oregon Revised Statutes
OR-OSHA	-	Oregon Occupational Safety and Health Division of the Department of Consumer and Business Services
OSHA	-	Occupational Safety and Health Administration, U.S. Department of Labor
PCA	-	Portland Cement Association
PCC	-	Portland Cement Concrete
PCI	-	Precast/Prestressed Concrete Institute
PCP	-	Pollution Control Plan
PF	-	Pay Factor of a constituent
PLS	-	Professional Land Surveyor
PMBB	-	Plant Mixed Bituminous Base

PTI	-	Post-Tensioning Institute
PUC	-	Public Utility Commission, State of Oregon
PVC	-	Polyvinyl Chloride
QA	-	Quality Assurance
QC	-	Quality Control
QCT	-	Quality Control Technician
QL	-	Quality Level
QPL	-	Qualified Products List
RAP	-	Reclaimed Asphalt Pavement
REA	-	Rural Electrification Administration, U.S. Department of Agriculture
RMA	-	Radio Manufacturers Association or Rubber Manufacturers Association
SAE	-	Society of Automotive Engineers
SI	-	International System of Units (Système Internationale)
SRCM	-	Soil and Rock Classification Manual (ODOT)
SSPC	-	Society for Protective Coatings
T	-	Tolerances, AASHTO Test Method
TCD	-	Traffic Control Devices
TCP	-	Traffic Control Plan
TCM	-	Traffic Control Measures
TM	-	Test Method (ODOT)
TPAR	-	Temporary Pedestrian Accessible Route
TV	-	Target Value
UBC	-	Uniform Building Code (as adopted by the State of Oregon)
UL	-	Underwriters Laboratory, Inc.
UPC	-	Uniform Plumbing Code (as adopted by the State of Oregon)
USC	-	United States Code
WAQTC	-	Western Alliance for Quality Transportation Construction
WCLIB	-	West Coast Lumber Inspection Bureau
WWPA	-	Western Wood Products Association

Definitions

00110.20 Definitions - Following are definitions of words and phrases used in the Standard Specifications, in the Special Provisions, on the Plans, and in other Contract Documents. Other definitions may be in the individual Sections of the Standard Specifications to which they apply, in the Special Provisions, and in OAR 731-005 and OAR 731-007.

3D Engineered Model - The Agency-prepared electronic file(s) that identify northing, easting, and elevation to represent the Work to be performed. The 3D Engineered Model may include the surface model(s) or other designed Work elements and is an electronic representation of the line, grade, and Cross Section applicable to the Project.

3D Construction Model - Supplemental unstamped 3D model, not furnished by the Agency, that the Contractor is required to submit to the Engineer.

Act of God or Nature - A natural phenomenon of such catastrophic proportions or intensity as would reasonably prevent performance.

Actual Strength Test Value (ASTV) - The ASTV at 28 Days is the average compressive strength of the three cylinders tested. All specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing shall be discarded. The average strength of the remaining cylinders shall then be considered the test result.

Addendum - A written or graphic modification, issued before the opening of Bids, which revises, adds to, or deletes information in the Solicitation Documents or previously issued Addenda.

Additional Work - Increased quantities of any Pay Item, within the scope of the Contract, for which a unit price has been established.

Advertisement - The public announcement (Notice to Contractors) inviting Bids for Work to be performed or Materials to be furnished.

Agency - The County, as defined below, which has entered into a Contract with the Contractor.

Agency-Controlled Lands - Lands owned by the Agency, or controlled by the Agency under lease or agreement, or under the jurisdiction and control of the Agency for the purposes of the Contract.

Aggregate - Rock of specified quality and gradation.

Agreement Form – The written agreement between the Agency and Contractor covering the work to be performed under the contract.

Amendment – A contract modification for Additional Work, Changed Work, Extra Work, Field Directives, or other changes. An Amendment changes the contract value, scope, and/or time. Amendments may require formal approval by the Board of County Commissioners prior to approval of such work.

Approved Equal - Materials or services proposed by the Contractor and approved by the County as equal or better substitutes for those materials or services specified.

Attorney-in-Fact - An Entity appointed by another to act in its place, either for some particular purpose, or for the transaction of business in general.

Award - Written notification to the Bidder that the Bidder has been awarded a Contract.

Base - A Course of specified Material of specified thickness placed below the Pavement.

BCC – The Clackamas County Board of County Commissioners

Bid - A competitive offer, binding on the Bidder and submitted in response to an invitation to bid.

Bid Bond - The Surety bond for Bid guaranty.

Bid Booklet - The bound paper version included in the Solicitation Documents, or the electronic version that is available to be downloaded from the Oregon Buys website that contain the information identified in 00120.10, (see 00110.05(e)).

Bid Closing - The date and time after which Bids, Bid modifications, and Bid withdrawals will no longer be accepted.

Bid Documents- Bid Documents include, but are not limited to::

- INVITATION TO BID
    - Class of Project
- INSTRUCTIONS TO BIDDERS
    - Description and location of the proposed Project
    - Time, date, and location for opening Bids

- BID SUPPLEMENTAL CHECK LIST
- BID PROPOSAL
    - Bid Signature page
- SCHEDULE OF PRICES
- FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
- AFFIDAVIT OF NON COLLUSION
- CERTIFICATE REGARDING INELIGIBLE CONTRACTORS
- CONFLICT OF INTEREST (COI) FORM
- BID BOND
- PERFORMANCE AND PAYMENT BONDS
- CERTIFICATE OF INSURANCE
- PREVAILING WAGE RATES
- GENERAL INFORMATION, STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS
- PLANS AND DRAWINGS
- AGREEMENT FORM
    - Project completion time
- DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENT REQUIREMENTS
- DBE INFORMATION PAGE
- DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM
- ASSIGNED DBE CONTRACT GOAL
- ODOT DBE POLICY STATEMENT
- DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS
- EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS
- ON-SITE WORKFORCE AFFIRMATIVE ACTION REQUIREMENTS FOR WOMEN AND MINORITIES ON FEDERAL-AID CONTRACTS
- REQUIRED CONTRACT PROVISION FEDERAL-AID CONSTRUCTION CONTRACTS (FHWA 1273)

Bid Opening - The date and time Bids are opened.

Bid Schedule - The list of Pay Items, their units of measurement, and estimated quantities. (When a Contract is awarded, the Bid Schedule becomes the Schedule of Items.)

Bid Section - The portion of the Bid Booklet containing all pages after the Bidder's checklist and before the appendix.

Bidder - An Entity that submits a Bid in response to an invitation to bid.

Bike Lane - A lane in the Traveled Way, designated by striping and Pavement markings for the preferential or exclusive use of bicyclists.

Borrow - Material lying outside of planned or required Roadbed excavation used to complete Project earthwork.

Boulders - Particles of Rock that will not pass a 12-inch square opening.

Bridge - A single or multiple span Structure, including supports, that carries motorized and non-motorized vehicles, pedestrians, or utilities on a Roadway, walk, or track over a watercourse, Highway, Railroad, or other feature.

Buttress - A Rock fill placed at the toe of a landslide or potential landslide in order to resist slide movement.

Calendar Day - Any Day shown on the calendar, beginning and ending at midnight.

Camber - A slight arch in a surface or Structure to compensate for loading.

Change Order - A written order issued by the Engineer to the Contractor modifying Work required by the Contract, or adding Work within the scope of the Contract, and, if applicable, establishing the basis of payment for the modified Work, or otherwise modifying the Contract.

Changed Work - Work included in a Pay Item and within the scope of the Contract that is different from that reflected in the Contract Documents. (See 00140.30.)

Class of Project - A designation based on a Project's funding source, (i.e., State or Federal-aid).

Class of Work - A designation referring to the type of Work in which Bidders must be prequalified. Classes of Work are limited to those listed in ODOT's Contractor's Prequalification Application.

Clay - Soil passing a No. 200 sieve that can be made to exhibit plasticity (putty-like properties) within a range of water contents.

Clear Zone - The total roadside border area, starting at the edge of the Traveled Way, available for safe use by errant vehicles. This area may consist of a shoulder, a recoverable slope, a non-recoverable slope, and/or a clear run-out area. The desired width is dependent upon the traffic volumes and speeds and on the roadside geometry.

Close Conformance - Where working tolerances are given on the Plans or in the Specifications, Close Conformance means compliance with those tolerances. Where working tolerances are not given, Close Conformance means compliance, in the Engineer's judgment, with reasonable and customary manufacturing and construction tolerances.

Coarse Aggregate - Crushed Rock or crushed Gravel retained on a 1/4-inch sieve, with allowable undersize.

Cobbles - Particles of Rock, rounded or not, that will pass a 12-inch square opening and be retained on a 3-inch sieve.

Commercial Grade Concrete - Concrete furnished according to Contractor proportioning, placed in minor Structures and finished as specified.

Contract - The written agreement between the Agency and the Contractor, including, without limitation, all Contract Documents, including amendments, signed by the Contractor and Clackamas County, describing the Work to be completed, the Contract Amount, and defining the rights and obligations of the County and the Contractor.

Contract Administration Engineer - The Agency representative presiding over Agency-level claims review under 00199.40.

Contract Amount - Sum of the Pay Item amounts computed by multiplying the Pay Item quantities by the unit prices in the Schedule of Items.

Contract Documents - The Invitation to Bid, the Instructions to Bidders, the accepted Bid Proposal and Schedule of Prices, the Subcontractor List, the Bid Bond, the Performance and Payment Bond, the Certificate of Insurance, the Prevailing Wage Rates, the Standard Specifications and Special Provisions, Amendments, the Plans and Drawings, the Contract, the Disadvantaged Business Enterprise Provisions, the Federal Contract Provisions, as well as all documents incorporated by reference therein, and any and all addenda prepared by or at the direction of and adopted by the County and further identified by the signature of the parties and all modifications thereof incorporated

in the documents before their execution,, Specifications, Plans, Contract booklet (titled Clackamas County Public Improvement Contract Opportunity), Change Orders, Force Account Work orders, pay documents issued by the Agency, Materials certifications, Project Work schedules, final estimate, written orders and authorizations issued by the Agency, Material source development and reclamation plans, and permits, orders and authorizations obtained by the Contractor or Agency applicable to the Project, as well as all documents incorporated by reference therein

Contract Time - The amount of time allowed to complete the Work under the Contract.

Contractor - The Entity awarded the Contract according to the solicitation.

County - The term "County" shall mean Clackamas County, including its Department of Transportation and Development, its Board of County Commissioners, and its officers, employees and agents of the County authorized to administer the conditions of these Contract Documents.

Course - A specified Surfacing Material placed in one or more Lifts to a specified thickness.

Coverage - One Pass by a piece of Equipment over an entire designated area.

Cross Section - The exact image formed by a plane cutting through an object, usually at right angles to a central axis, to determine area.

Day - A Calendar Day including weekdays, weekends, and holidays, unless otherwise specified.

Department – A subdivision of the Agency.

Durable Rock - Rock that has a slake durability index of at least 90% based on a two-cycle slake durability test, according to ASTM D4644. In the absence of test results, the Engineer may evaluate the durability visually.

Emulsified Asphalt - Emulsified asphalt cement.

Emulsified Asphalt Concrete - A mixture of Emulsified Asphalt and graded Aggregate.

Engineer - The Engineer who represents the Agency and who is designated by the Agency to administer the Contract.

Entity - A natural person capable of being legally bound, sole proprietorship, limited liability company, corporation, partnership, limited liability partnership, limited partnership, for-profit or nonprofit unincorporated association, business trust, two or more persons having a joint or common economic interest, or any other person with legal capacity to contract, or a government or governmental subdivision.

Equipment - All machinery, tools, manufactured products, and fabricated items needed to complete the Contract or specified for incorporation into the Work.

Establishment Period - The time specified to assure satisfactory establishment and growth of planted Materials.

Existing Surfacing - Pavements, slabs, curbs, gutters, walks, driveways, and similar constructions of bricks, blocks, portland cement concrete, bituminous treated materials, and granular Surfacing materials on existing Highways.

Extra Work - Work not included in the Contract, but deemed by the Engineer to be necessary to complete the Project.

Final Acceptance - Written confirmation by the Agency that the Project has been completed according to the Contract, with the exception of latent defects and Warranty obligations, if any, and has been accepted.

Final Inspection - The inspection conducted by the Engineer to determine that the Project has been completed according to the Contract.

Fine Aggregate - Crushed Rock, crushed Gravel, or Sand that passes a 1/4-inch sieve, with allowable oversize.

First Notification - Written acknowledgment by the Engineer of the date on which workers employed by the Contractor or a Subcontractor have begun performance of the Contract, including Aggregate source development or erection of a plant, but not including installation of covered temporary signs according to Section 00222.

Force Account Work - Items of Extra Work ordered by the Engineer that are to be paid according to Section 00197.

Granular Material - Graded and selected free-draining material composed of particles of Rock, Sand, and Gravel.

Gravel - Particles of Rock, rounded or not, that will pass a 3-inch sieve and be retained on a No. 4 sieve.

Highway - Every road, street, thoroughfare and place, including Bridges, viaducts and other Structures within the boundaries of the State, open, used or intended for use by vehicular traffic.

Incidental - A term identifying those acts, services, transactions, property, Equipment, labor, Materials, or other items for which the Agency will make no separate or additional payment.

Inspector - The representative of the Engineer authorized to inspect and report on Contract performance.

Invitation to Bid - The public announcement (Notice to Contractors) inviting bids for work to be performed or materials to be furnished.

Leveling - Placing a variable-thickness Course of Materials to restore horizontal and vertical uniformity to existing Pavements, normally continuous throughout the Project.

Lift - The compacted thickness of material placed by Equipment in a single Pass.

Mandatory Source - A material source provided by the Agency from which the Contractor is required to obtain Materials. (See 00160.00(b) and 00160.40.)

Materials - Any natural or manmade substance specified for use in the construction of the Project or for incorporation into the Work.

Median - The portion of a divided Highway separating traffic traveling in opposite directions.

Multiple Course Construction - Two or more Courses, exclusive of Patching or Leveling, placed over the entire Roadway width.

Multi-Use Path - That portion of the Highway Right-of-Way or a separate Right-of-Way, physically separated from motor vehicle traffic and designated for use by pedestrians, bicyclists and other non-motorized users.

Neat Line - Theoretical lines specified or indicated on the Plans for measurement of quantities.

Nondurable Rock - Rock that has a slake durability index of less than 90% based on a two-cycle slake durability test, as tested by ASTM D4644, or Rock that is observed to readily degrade by air, water, and mechanical influence.

Notice of Intent to Award - A written notice from the County notifying bidders that the County intends to award to the responsible bidder submitting lowest responsive bid.

Notice to Contractors - The public announcement inviting Bids for Work to be performed or Materials to be provided.

Notice to Proceed - Written notice authorizing the Contractor to begin performance of the Work.

On-Site Work - Any Work taking place on the Project Site, including designated staging areas adjacent to the Project Site, except for installation of covered temporary signs according to Section 00222.

Oregon Buys – The web-based eProcurement system in which the Agency places Bid Documents and Notices of Public Improvement Contract Opportunities.

Organic Soil - A Soil with sufficient organic content to influence the Soil properties.

Panel - The width of specified Material being placed by Equipment in a single Pass.

Pass - One movement of a piece of Equipment over a particular location.

Patching - Placing a variable-thickness Course of Materials to correct sags, dips, and/or bumps to the existing grade and Cross Section, normally intermittent throughout the Project.

Pavement - Asphalt concrete or portland cement concrete placed for the use of motor vehicles, bicycles, or pedestrians on Roadways, Shoulders, Multi-Use Paths and parking areas.

Pay Item (Contract Item) - A specific unit of Work for which a price is provided in the Contract.

Payment Bond - The approved security furnished by the Contractor's Surety as a guaranty of the Contractor's performance of its obligation to pay promptly in full all sums due for Materials, Equipment, and labor furnished to complete the Work.

Peat - A Soil composed primarily of vegetative matter in various stages of decomposition, usually with an organic odor, dark brown to black color, and a spongy consistency.

Performance Bond - The approved security furnished by the Contractor's Surety as a guaranty of the Contractor's performance of the Contract.

Plan Holder's List – A list of contractor's names, contact names, phone and fax numbers that are listed on the project-specific solicitation on the OregonBuys website that is created during Bidding of the Project.

Plans - Standard and Supplemental Drawings, and approved unstamped and reviewed stamped Working Drawings. (See 00150.10 and 00150.35.)

Project - The sum of all Work to be performed under the Contract.

Project Manager - The Engineer's representative who directly supervises the engineering and administration of a Contract.

Project Site - The geographical dimensions of the real property on which the Work is to be performed, including designated contiguous staging areas.

Prospective Source - A Material source provided by the Agency, from which the Contractor has the option of obtaining Materials. (See 00160.00(a) and 00160.40.)

Publicly-Owned Equipment - Equipment acquired by a state, county, municipality or political subdivision primarily for use in its own operations.

Public Traffic - Vehicular or pedestrian movement, not associated with the Contract Work, on a public way.

Quality Assurance Program - A program included in section 2 of the MFTP defined as planned and systematic actions necessary to provide confidence that a product or service will satisfy given requirements for quality.

Railroad - Publicly or privately owned rail carriers, including passenger, freight, and commuter rail carriers, their tenants, and licensees. Also, Utilities that jointly own or use such facilities.

Right-of-Way - Land, property, or property interest, usually in a strip, acquired for or devoted to transportation or other public works purposes.

Roadbed - Completed excavations and embankments for the Subgrade, including ditches, side slopes, and slope rounding, if any.

Roadside - The area between the outside edges of the Shoulders and the Right-of-Way boundaries. Unpaved Median areas between inside Shoulders of divided Highways and infield areas of interchanges are included.

Roadway - That portion of a Highway improved, designed, or ordinarily used for vehicular travel, exclusive of the berm or Shoulder. If a Highway includes two or more separate Roadways, the term "Roadway" refers to any such Roadway separately, but not to all such Roadways collectively. (See Traveled Way.)

Rock - Natural deposit of solid material composed of one or more minerals occurring in large masses or fragments.

Sand - Particles of Rock that will pass a No. 4 sieve and be retained on a No. 200 sieve.

Schedule of Items - The list of Pay Items, their units of measurement, estimated quantities, and prices.

Schedule of Values - The breakdown of the values of the component elements comprising a lump sum Pay Item.

Second Notification - Written acknowledgment by the Engineer of the end of Contract Time according to 00180.50(g).

Shoulder - The part of a Roadbed contiguous to the Traveled Way or Roadway, whether paved or unpaved, for accommodating stopped vehicles, for emergency use and for lateral support of Base and surface Courses.

Silt - Soil passing a No. 200 sieve that is nonplastic or exhibits very low plasticity.

Single Course Construction - A wearing Course only, not including patching or Leveling Courses or partial width Base Course.

Slope - Vertical distance to horizontal distance, unless otherwise specified.

Soil - Accumulations of particles produced by the disintegration of Rock, which sometimes contains organic matter. Particles may vary in size from Clay to Boulders.

Solicitation Document - Documents which define the procurement of a public improvement Project, including, but not limited to, the Bid Booklet, Agency-provided Plans, Standard Specifications, Special Provisions, Addenda, and which includes all documents incorporated by reference. May also be called Bid Documents.

Special Provisions - The special directions, provisions, and requirements specific to a Project that supplement or modify the Standard Specifications. Permits and orders governing the Project that are issued directly to the Agency by a governmental or regulatory authority are considered to be part of the Special Provisions, to the extent and under the conditions stipulated in the Special Provisions. This includes any amended or supplemental permits or orders issued during the course of performing the Work under a Contract.

Special Services - Work services that the Contractor and Engineer agree cannot be satisfactorily performed by the Contractor's and Subcontractors' forces, (e.g., fabrication and machining work that is most effectively performed away from the Project Site, or rental of operated Equipment as defined in 00180.20(c)).

Specifications - The Standard Specifications and Special Provisions, together with all provisions of other documents incorporated therein by reference.

Standard Drawings - The Agency-prepared detailed drawings for Work or methods of construction that normally do not change from project to project.

Standard Specifications - The "General Conditions for Construction for Clackamas County" published by the Agency, and the "2024 Oregon Standard Specifications for Construction", Parts 00200 through 03000, "Technical Specifications", published by the Oregon Department of Transportation as amended by the Agency. It provides directions, provisions, and requirements necessary for performing public improvement projects.

State - The State of Oregon.

Structures - Bridges, retaining walls, endwalls, cribbing, buildings, culverts, manholes, catch basins, drop inlets, sewers, service pipes, underdrains, foundation drains, and other similar features which may be encountered in the Work.

Subbase - A Course of specified material of specified thickness between the Subgrade and a Base.

Subcontractor - An Entity having a direct contract with the Contractor or another Subcontractor, at any tier, to perform a portion of the Work.

Subgrade - The top surface of completed earthwork on which Subbase, Base, Surfacing, Pavement, or a Course of other Material is to be placed.

Substructure - Those parts of a Structure which support the Superstructure, including bents, piers, abutments, and integrally built wingwalls, up to the surfaces on which bearing devices rest. Substructure also includes portions above bearing surfaces when those portions are built integrally with a Substructure unit (e.g., backwalls of abutments). When Substructure and Superstructure elements are built integrally, the division between Substructure and Superstructure is considered to be at the bottom soffit of the longitudinal or transverse beam, whichever is lower. Culverts and rigid frames are considered to be entirely Substructure.

Superstructure - Those parts of a Structure above the Substructure, including bearing devices.

Supplemental Drawings - The Agency-prepared detailed drawings for Work or methods of construction that are Project specific, and are denoted by title in the Project title block.

Supplier - The Entity that furnishes goods to be incorporated into the Work.

Surety - The Entity that issues the bond.

Surfacing - The Course or Courses of Material on the Traveled Way, auxiliary lanes, Shoulder, or parking areas for pedestrian, bicycle or vehicle use.

Temporary Pedestrian Accessible Route - An area within a Work Zone, marked by signing, delineation and TCD, for the use of pedestrians to navigate through or around the work area. The TPAR is included as part of the Traffic Control Plan.

Temporary Pedestrian Accessible Route Plan - A written and drawn plan within the TCP that identifies requirements for providing safe, effective and accessible routes for pedestrians through or around the Work Zone including TPAR details, advance public notification; and, construction and maintenance responsibilities.

Third Notification - Written acknowledgment by the Engineer, subject to Final Acceptance, that as of the date of the notification the Contractor has completed the Project according to the Contract, including, without limitation, completion of all minor corrective work, Equipment and plant removal, site clean-up, and submittal of all certifications, bills, forms and documents required under the Contract.

Ton - One short ton of 2,000 pounds (Ton, ton, Tn, or T).

Topsoil - Soil ready for use in a planting bed.

Traffic Control Devices - Signs, signals, markings, and other devices placed on, over, or adjacent to a Roadway used to regulate, warn, or guide Public Traffic by authority of a public body or official having jurisdiction.

Traffic Control Measures - Elements of the TCP including, but not limited to, TCD, personnel, Materials and Equipment used to control Public Traffic through a Work Zone.

Traffic Control Plan - A written and drawn plan for providing the safe and efficient movement of Public Traffic through or around a Work Zone, while providing protection for workers, incident responders, and Equipment.

Traffic Lane - That part of the Traveled Way marked for moving a single line of vehicles.

Traveled Way - That part of the Highway for moving vehicles, exclusive of berms and Shoulders.

Typical Section - That Cross Section established by the Plans or the 3D Engineered Model which represents in general the lines to which the Contractor shall work in the performance of the Contract.

Unsuitable Material - Frozen material, or material that contains organic matter, muck, humus, Peat, sticks, debris, chemicals, toxic matter, or other deleterious materials not normally suitable for use in earthwork.

Utility - A line, facility, or system for producing, transmitting, or distributing communications, power, electricity, heat, gas, oil, water, steam, waste, stormwater not connected with highway drainage, or any other similar commodity which directly or indirectly serves the public. The term may also mean the utility company, district, or cooperative owning and operating such facilities, including any wholly-owned or controlled subsidiary.

Warranty Bond - The approved security furnished by the Contractor's, Subcontractor's, or Supplier's Surety as a guaranty of the Contractor's performance of its warranty obligations.

Wetlands - Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, vegetation typically adapted for life in saturated Soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Work - The furnishing of all Materials, Equipment, labor, and Incidentals necessary to successfully complete any individual Pay Item or the entire Contract, and the discharge of duties and obligations imposed by the Contract.

Work Day or Working Day - Every Calendar Day excluding Saturdays, Sundays and legal holidays as listed in ORS 187.010.

Work Zone - An area within Highway construction, maintenance, or Utility Work activities which extends from the first road Work, Bridge Work, or Utility Work warning sign to the last sign or the last TCD.

Working Drawings - Supplemental Plans, not furnished by the Agency, that the Contractor is required to submit to the Engineer. (See 00150.35.)

Section 00120 - Bidding Requirements and Procedures

00120.00 Prequalification of Bidders -

The Agency requires Contractors to be prequalified with the Oregon Department of Transportation (ODOT), which will prequalify Bidders according to ODOT's Oregon Administrative Rules and prequalification procedures. A Bidder must file for prequalification. Bidders shall make application for prequalification, and for required renewals, on standard forms available from the ODOT Procurement Office - Construction Contracts Unit website (see 00110.05(e)). Bidders shall return the completed application to the ODOT Procurement Office - Construction Contracts Unit by one of the following methods:

- If hand delivered, the application shall be date stamped with the provided date stamping device and the application shall be placed in the ODOT Procurement Office Bid Box located in the 1st floor lobby at the following address:

  Oregon Department of Transportation
  355 Capitol Street NE
  Salem, OR 97301

- If delivered by mail or parcel delivery service, the application shall be sent to:

  Oregon Department of Transportation
  Procurement Construction Contracts, MS #33
  355 Capitol Street NE
  Salem, OR 97301

- If delivered by electronic mail, the application shall be sent to:

  ODOTProcurementOfficeConstruction@odot.oregon.gov

Contracts will only be awarded to Bidders who, at the time of Bid Opening, are prequalified in the Class or Classes of Work specified in the Special Provisions, except that a Bidder whose prequalification has been revoked or revised as provided in ORS 279C.430(4) may also be eligible for Award under that statute if the Project was advertised prior to the revocation or revision. The Agency will consider a Bid from a Bidder whose complete application for prequalification has been received by the ODOT Procurement Office - Construction Contracts Unit at least 10 Calendar Days before the opening of Bids. Bidders shall submit Bids in the same company name used on the prequalification application; provided however, if Bidder's legal name has changed since the submittal of its application for prequalification, it shall submit its Bid under its current legal name with the former name referenced by "formerly known as".

The Agency will regularly evaluate the performance of Contractors on its projects for purposes of responding to reference checks, future prequalification and determinations of responsibility.

Also See Section 2, Instructions to Bidders.

00120.01 General Bidding Requirements - See Bid Documents, Notice of Public Improvement Contract Opportunity, and when applicable, the Contractor shall maintain the certifications required by ORS 279A.107.

00120.05 Request for Plans, Special Provisions, and Bid Booklets - See Notice of Public Improvement Contract Opportunity. Anyone requesting Solicitation Documents will receive electronic versions of the Bid Documents, Construction Plans and Drawings, referenced environmental permits and subsurface investigations.

Electronic version of the 2024 Oregon Standard Specifications for Construction can be found on the Oregon Department of Transportation's website (see 00110.05(e)).

00120.10 Bid Booklet - The Bid Booklet is synonymous with the Bid Documents (see definition in Section 00110.020).

00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered - Before submitting a Bid, Bidders shall carefully examine the site of the proposed Work, the Bid Booklet, Plans, and Specifications. Bidders shall also contact Utility owners to verify all Utilities' anticipated involvement on the Project Site. Bidders are also encouraged to review any subsurface investigation material referenced in 00120.25 that may be available. Submission of a Bid will constitute confirmation that the Bidder has examined the Project Site and Solicitation Documents, finds the Plans and Specifications to be sufficiently detailed and accurate to enable Bidder to properly perform the Work, and understands the conditions to be encountered in performing the Work and all requirements of the Contract.

The Bidder is responsible for loss or unanticipated costs suffered by the Bidder because of the Bidder's failure to fully examine the site and become fully informed about all conditions of the Work, or failure to request clarification of Plans and Specifications Bidder believes to be erroneous or incomplete.

Any clarification of Plans and Specifications needed by the Bidder shall be requested in writing through the Engineer. Requests shall be made in sufficient time for the Agency's reply to reach all Bidders before Bid Closing. Oral explanations or interpretations given before receiving Bids for a Project will not be binding. To be binding, interpretation of the Plans and Specifications by the Agency must be made by written Addendum furnished to all Holders of Bidding Plans according to 00120.30. Notification of erroneous or incomplete Plans or Specifications shall also be submitted to the Engineer. Such notification shall also be made in sufficient time for the Agency to make any necessary modifications and issue Addenda to Bidders prior to Bid Closing.

00120.16 Material, Equipment, and Method Substitutions - When the Contract specifies certain Materials, Equipment, products, and/or methods, the Bidder shall include those Materials, Equipment, products, and/or methods in the Bid unless the Engineer has issued an Addendum granting approval to substitute. Unless the Engineer has approved substitutions of Materials, Equipment, products, and/or methods prior to opening of Bids, the Bidder shall furnish the items specified in the Contract. Substitution after Award is specified in 00180.31(b), 00180.31(c), and 00180.31(d). The procedure for requesting approval is as follows:

(a) Written Request - Unless specified as the subject of an exemption per ORS 279C.345, if a Bidder proposes to use Materials, Equipment, products, and/or methods other than those specified, the Bidder shall send a written request to the Engineer, at least 7 Calendar Days prior to Bid Opening, including complete descriptive and technical information on the proposed Materials, Equipment, products, and/or methods.

(b) Functional Similarity - Materials, products, and Equipment proposed for substitution shall be similar in design, and equal or better in quality and function to those specified.

(c) Manufacturer's Information - If manufacturers' brochures or information is needed, the Bidder shall submit three copies of each with all pertinent information clearly marked.

(d) Differences - The Bidder shall specifically note all differences between the specified Materials, Equipment, products, and/or methods and the proposed substitutes.

(e) Cost - Where a substitute will result in alteration of the design or space requirements, or any other modifications to the Plans, the Bidder shall include in the substitution request all items of cost for the revised design and construction.

(f) Notification of Holders of Bidding Plans - If the Engineer approves any proposed substitution, such approval, and any modifications necessitated to the design and construction by the substitution, will be acknowledged by Addenda.

00120.17 Use of Agency-Owned Land for Staging or Storage Areas - The Contractor may use Agency-owned property for staging or storage areas, subject to the following limitations:

(a) Within Normal Right-of-Way Limits - If approved by the Engineer, the Contractor may use available property within the normal Right-of-Way limits for the purpose of constructing improvements under the Contract. Where the Agency owns, or has rights to, other adjacent properties in the Project area, "normal Right-of-Way" is limited to a line drawn across that property connecting the normal Right-of-Way limits on either side of the property.

(b) Outside Normal Right-of-Way Limits - The Contractor may not use Agency-owned property outside of normal Right-of-Way limits for the Project without the approval of the Engineer.

If a Bidder obtains approval before submitting a Bid, use of the property will be at no cost to the Contractor, or at a cost stated by the Engineer upon granting approval, as confirmed by Addendum.

If approval is not obtained before submitting a Bid, and the Contractor proposes to use Agency-owned property outside the normal Right-of-Way limits, then use of the property may be approved by the Engineer, but the Contractor will be assessed fair market value, as determined by the Engineer, for use of the property.

(c) Restrictions on Use - Contractors shall comply with all applicable laws, ordinances, and regulations pertaining to use of Agency-owned property, and shall:

- Not cause unreasonable impacts on traffic and other facility users.
- Clean up all hazardous materials deposited by, or resulting from, Contractor operations.
- Be responsible for all costs associated with use of the property.

00120.20 Interpretation of Quantities in Bid Schedule - Quantities appearing in the Bid Schedule are approximate and are provided only for comparison of Bids. The Agency does not warrant that the actual individual items, amount of Work, or quantities will correspond to those shown in the Bid Schedule. Payment to the Contractor will be made only for actual quantities of Work performed and accepted or Materials furnished and accepted, as required by the Contract. Quantities of Work to be performed and Materials to be furnished may each be increased, decreased, or omitted as provided in 00120.30 and 00140.30.

00120.25 Subsurface Investigations - If the Agency or its consultant has conducted subsurface or geologic investigations of the proposed Project Site, the results of the investigations may be included in written reports. If reports have been prepared, copies will be available at the Engineer's office. If the Agency has retained subsurface samples, they will also be available for inspection. Bidders and the Contractor may make arrangements for viewing the samples through the Engineer's office.
The availability of subsurface information from the Agency is solely for the convenience of the Bidder and shall not relieve the Bidder or the Contractor of any risk, duty to make examinations and

investigations as required by 00120.15, or other responsibility under the Contract Documents. It is mutually agreed to by all parties that:

- The written report(s) are reference documents and not part of the Contract Documents.
- The subsurface investigations made by the Agency are for the purpose of obtaining data for planning and design of the Project.
- The data for individual test boring logs apply only to that particular boring and is not intended to be conclusive as to the character of any material between or around test borings.
- If Bidders use this information in preparing a Bid, it is used at their own risk, and Bidders are responsible for all conclusions, deductions, and inferences drawn from this information.

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids - The Agency reserves the right to issue Addenda making changes or corrections to the Plans, Specifications, or quantities. Addenda can be downloaded from the State of Oregon procurement website (OregonBuys at https://oregonbuys.gov/bso/view/login/login.xhtml) for the specific project solicitation. Prospective Bidders are responsible for obtaining any Addenda from the website.

The Agency will not be responsible for failure of Bidders to obtain Addenda as described in the preceding paragraph. Bids shall incorporate all Addenda. Bids may be rejected if opened and found by the Agency to not be based on all Addenda issued before Bid Closing.

00120.40 Preparation of Bids - Bids not in compliance with the requirements of this Subsection will be considered non-responsive.

(a) General:

(1) Electronic Bids - See, Section 2, Instructions to Bidders, Article 6 Execution of the Bid Proposal Form and Bid Schedule of Prices. Bids shall be submitted through Bid Locker, a secure online bid submission service. Bidders shall not alter, in any manner, the PDF documents within the Bid Section. Bidders shall complete the certifications and statements included in the Bid Section of the Bid Booklet according to the instructions. Signature of the Bidder's authorized representative thereon constitutes the Bidder's confirmation of and agreement to all certifications and statements contained in the Bid Booklet. Entries on PDF documents in the Bid Section shall be in ink or typed. Signatures and initials shall be in ink.

The Bidder shall properly complete and provide all the documents in the Bid Section, as specified in 00120.10, together with all other required documents that are part of the Bid Booklet, between the front and back covers of the Bid Booklet, except that the Bid Bond is not required if another permissible type of Bid guaranty is provided. (See 00120.40(e)).

Email bids and paper bids will not be accepted.

(b) Bidding Considerations - Bidders may refer to the following Subsections for requirements that may affect bidding considerations:

Subsection	Requirements
00120.80	Reciprocal Preference for Oregon Resident Bidders
00130.80	Project Site Restrictions
00150.55	Cooperation with Other Contractors
00150.75	Protection and Maintenance of Work during Construction
00160.20(a)	Buy America
00160.20(b)	Buy Oregon
00160.20(d)	Build America Buy America Act Requirements

00170.07	Record Requirements
00180.20	Subcontracting Limitations
00180.21	Subcontracting
00195.00(a)	Cost of Insurance and Bonds
00195.50(a)(1)	Progress Estimates
00199.30	Claims Procedure

(c) Bid Schedule Entries:

(1) Bid Schedule Entries - Using figures, Bidders shall fill in all blank spaces in the paper Bid Schedule. For each item in the Bid Schedule, Bidders shall enter the unit price and the product of the unit price multiplied by the quantity given. The unit price shall be greater than zero, shall contain no more than two decimal places to the right of the decimal point, and shall be expressed in U.S. dollars and cents (for example, $150.25 or $0.37). Bidders shall also enter the total amount of the Bid obtained by adding amounts for all items in the Bid Schedule. Corrections or changes of item entries shall be in ink, with incorrect entry lined out and correct entry entered and initialed.

(d) Bidder's Address and Signature Pages - See Section 2, Instructions to Bidders, Article 6.

(e) Bid Guaranty - See Section 2, Instructions to Bidders, Article 4.

(f) Disclosure of First-Tier Subcontractors - See Section 2, Instructions to Bidders, Article 16.

(g) Disclosure of Conflict of Interest - Agency has adopted the ODOT Conflict of Interest Guidelines and disclosure requirements. Bidders shall review the Agency's Conflict of Interest Guidelines, and if any disclosures are required (with the exception of any required disclosures for Subcontractors, which are addressed under 00180.21), Bidders shall complete the Conflict of Interest Disclosure Form(s) and submit to the Agency, before the time Bids are due to be submitted, according to 00120.45(a). The ODOT Conflict of Interest Guidelines and Conflict of Interest Disclosure Form are available on the ODOT Procurement Office website (see 00110.05(e)).

If disclosures are not required under the Agency's Conflict of Interest Guidelines, no disclosures need be submitted.

00120.45 Submittal of Bids: See Section 2, Instructions to Bidders, Article 8.

00120.60 Revision or Withdrawal of Bids: See Section 2, Instructions to Bidders, Article 11.

00120.65 Opening and Comparing Bids - Bids will be opened and the total price for each Bid will be read publicly at the time and place specified in the Invitation to Bid. Bidders and other interested parties are invited to be present.

Bids for each Project will be compared on the basis of the total amount of each Bid. The total amount of the Bid will be the total sum computed from quantities listed in the Bid Schedule and unit prices entered by the Bidder.

In case of conflict between the unit price and the corresponding extended amount, the unit price shall govern, and the Agency may make arithmetic corrections on extension amounts.

00120.70 Rejection of Non-responsive Bids - A Bid will be considered irregular and will be rejected if the irregularity is deemed by the Agency to render the Bid non-responsive. Examples of irregularities include, without limitation:

- The Bid Section documents provided are not properly used or contain unauthorized alterations.

- The Bid is incomplete or incorrectly completed.
- The Bid contains improper additions, deletions, alternate Bids, or conditions.
- The Bid is submitted on documents not obtained directly from the Agency, or is submitted by a Bidder who has not been identified by the Agency as a Holder of Bidding Plans, as required by 00120.05.
- The Bid or Bid modifications are not signed by a person authorized to submit Bids or modify Bids, as required by 00120.01.
- A member of a joint venture and the joint venture submit Bids for the same Project. Both Bids may be rejected.
- The Bid has entries not typed or in ink, or has signatures or initials not in ink (save for changes received by FAX or email as provided by 00120.60).
- Each change or correction is not individually initialed.
- White-out tape or white-out liquid is used to correct item entries.
- The price per unit cannot be determined.
- The Bid guaranty is insufficient or improper.
- The original Bid Bond form is not used or is altered.
- The Oregon Construction Contractors Board registration number and expiration date are not shown on the Bid if required in the Solicitation Document. This requirement applies to Agency and State-funded Projects, with the exception of Aggregate production and landscape Projects. (Not required on Federal-aid Projects.)
- A disclosure of first-tier Subcontractors, if required under 00120.40(f), is not received within 2 working hours of the time Bids are due to be submitted, or the disclosure form is not complete.
- The Bidder has not complied with the DBE requirements of the solicitation.
- The Bid does not acknowledge all issued Addenda.
- The Bid contains entries that are not greater than zero.
- The Bid contains entries with more than two decimals to the right of the decimal point.
- The Bid entries are not expressed in U.S. dollars and cents.
- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.
- The Bidder has not submitted required Conflict of Interest Disclosure Form(s), if any. (See 00120.40(g).)

In addition, the Agency may reject all Bids for good cause upon its finding that it is in the public interest to do so. The Agency may also waive minor informalities or irregularities.

00120.80 Reciprocal Preference for Oregon Resident Bidders - This Subsection applies only to Contracts for Projects financed without federal funds.

Bidders shall complete the certificate of residency provided by the Agency in the Bid Booklet. Failure to properly complete the form will be cause to reject the Bid.

As used in the certificate of residency and this Subsection, "Resident Bidder" means a Bidder who has:

- Paid unemployment taxes or income taxes in the State of Oregon during any of the 12 calendar months immediately preceding submission of the Bid;

- A business address in the State of Oregon; and
- Certified in the Bid that the Bidder qualifies as a Resident Bidder.

"Nonresident Bidder" means a Bidder who is not a Resident Bidder as defined above.

In determining the lowest Bid, the Agency will, for the purpose of awarding the Contract, add a percentage increase to the Bid of a Nonresident Bidder equal to the percentage, if any, of the preference given to that Bidder in the state in which the Bidder resides (ORS 279A.120). The percentage preference applied in each state will be published on or before January 1 of each year by the Oregon Department of Administrative Services. The Agency may rely on these percentages without incurring liability to any Bidder (ORS 279A.120).

This increase will only be applied to determine the lowest Bid, and will not cause an increase in payment to the Contractor after Award of the Contract.

00120.90 Disqualification of Bidders - The Bid(s) of a disqualified Bidder will be rejected. Any of the following reasons is sufficient to disqualify a Bidder:

- More than one Bid is submitted for the same Work by an Entity under the same or different name(s).
- Evidence of collusion among Bidders. Participants in collusion will be found not responsible, and may be subject to criminal prosecution.
- Any of the grounds for disqualification cited in ORS 279C.440.

A Bidder will be disqualified if the Bidder has:

- Not been prequalified as required by 00120.00;
- Been declared ineligible by the Commissioner of the Bureau of Labor and Industries under ORS 279C.860;
- Not been registered (licensed) by the Oregon Construction Contractors Board (CCB) or has not been licensed by the State Landscape Contractors Board before submitting a Bid (ORS 279C.365(1)(k), ORS 701.021, ORS 701.026, and ORS 671.530). The Bidder's registration number and expiration date shall be shown in the Bid form, if requested. Failure to furnish the registration number, if requested, will render the Bid non-responsive and subject to rejection. (Not required on Federal-aid projects.); or
- Been determined by the CCB under ORS 701.227 not to be qualified to hold or participate in a public contract for a public improvement.

00120.91 Rejection of Bid on Grounds of Nonresponsibility of Bidder - The Bid of a Bidder who is found to be nonresponsible according to the criteria listed in Section 00130.10, Clackamas County LCRB Rule C-049-0390, or ORS 279C.375(3) will be rejected.

Section 00130 - Award and Execution of Contract

00130.00 Consideration of Bids - After opening and reading Bids, the Agency will check them for correct extensions of unit prices and totals. (See 00120.65.) The total of extensions, corrected where necessary, will be used by the Agency for Award purposes.

The Agency reserves the right to waive minor informalities and irregularities, seek clarification of any Bid or response that, in its sole discretion, it deems necessary or advisable, and to reject any or all Bids for irregularities under 00120.70 or for good cause after finding that it is in the public interest to do so (ORS 279C.395). An example of good cause for rejection in the public interest is the Agency's determination that any of the unit Bid prices are significantly unbalanced to the Agency's potential detriment. The Agency may correct obvious clerical errors, when the correct information can be determined from the face of the documents, if it finds that the best interest of the Agency and the public will be served thereby.

Bids will be considered and a Contract awarded, if at all, within 30 Calendar Days from the date of Bid Opening, unless an extension beyond that time is agreed to by both parties and acknowledged in writing by the Bidder.

00130.10 Award of Contract - After the Bids are opened and a determination is made that a Contract is to be awarded, the Contract will be awarded to the lowest responsible Bidder. For the purposes of this Section, "lowest responsible Bidder" means the responsible Bidder who submitted the lowest responsive Bid, who is not on the list created by the Construction Contractors Board according to ORS Chapter 701, and who has:

- Substantially complied with all prescribed public bidding procedures and requirements.
- Available the appropriate financial, Materials, Equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise, necessary to indicate the capability of the prospective Bidder to meet all contractual responsibilities.
- A satisfactory record of performance. In evaluating a Bidder's record of performance, the Agency may consider, among other things, whether the Bidder completed previous contracts of a similar nature with a satisfactory record of performance. For purposes of evaluating a Bidder's performance on previous contracts of a similar nature, a satisfactory record of performance means that to the extent that the costs associated with and time available to perform a previous contract remained within the Bidder's control, the Bidder stayed within the time and budget allotted for the procurement and otherwise performed the contract in a satisfactory manner. Satisfactory performance of the Contract also includes compliance with the requirements for records in 00170.07 for Contracts with the Agency.
- A satisfactory record of integrity. In evaluating a Bidder's record of integrity, the Agency may consider, among other things, whether the Bidder has previous criminal convictions for offenses related to obtaining or attempting to obtain a contract or subcontract or in connection with the Bidder's performance of a contract or subcontract.
- Qualified legally to contract with the Agency.
- Supplied all necessary information in connection with the inquiry concerning responsibility. If a prospective Bidder fails to promptly supply information requested by the Agency concerning responsibility, the Agency will base the determination of responsibility upon any available information, or may find the prospective Bidder not to be responsible.
- Not been disqualified by the public contracting agency under ORS 279C.440.
- An unexpired certificate issued by the Oregon Department of Administrative Services (under ORS 279A.167) upon completion of the curriculum and assessment that the Bidder understands the prohibitions set forth in ORS 652.220 and in other laws or rules that prohibit discrimination in compensation or wage payment. The certificate is only required if the Bidder employs 50 or

more full-time workers and submitted a Bid for a procurement with an estimated contract price that exceeds $500,000.

If the Bidder is found not to have a satisfactory record of performance or integrity, the Agency will document the record and the reasons for the unsatisfactory finding.

The Agency will mail the Notice of Intent to Award to Bidders, and may provide Notice of Intent to Award on the Agency's website (see 00110.05(e)).

The Award will not be final until the later of the following:

- Three Working Days after the Notice of Intent to Award has been posted as specified in the advertised solicitation or Addendum thereto; or
- The Agency has provided a written response to each timely protest, denying the protest and affirming the Award.

If the Agency accepts a Bid and awards a Contract, the Agency will send the successful Bidder written notice of acceptance and Award.

Notice of Award and Contract booklets ready for execution will be sent within 60 Calendar Days of the opening of Bids or within the number of Calendar Days specified in the Special Provisions or a written mutual agreement.

00130.15 Right to Protest Award - See Section 2, Instructions to Bidders, Article 15.

00130.20 Cancellation of Award - Without liability to the Agency, the Agency may for good cause cancel Award at any time before the Contract is executed by all parties to the Contract, as provided by ORS 279C.395 for rejection of Bids, upon finding it is in the public interest to do so.

00130.30 Contract Booklet - The Contract booklet may include, but is not limited to:

- General Conditions for Construction for Clackamas County
- Special Provisions
- Addenda
- Schedule of Items
- Contract
- Performance Bond
- Payment Bond
- Certification of workers' compensation coverage
- Other documents are part of the Contract Documents by reference. These include, but are not limited to:
    - The "Oregon Standard Specifications for Construction", 2024 Edition, Parts 00200 through 03000, as published by the Oregon Department of Transportation (ODOT).
    - "Oregon Standard Drawings" latest edition, as published by ODOT.
    - Clackamas County "Roadway Standards", latest edition, as published by Clackamas County.
    - Public Right-of-Way Accessibility Guidelines, latest edition of final rule, as published by the U.S. Access Board.

00130.40 Contract Submittals - See Section 2, Instructions to Bidders. The instructions include the following items to be furnished by the Contractor:

- Performance and Payment Bonds – See Section 2, Article 12.
- Certificates of Insurance – See Section 11, Paragraph 5 of the Agreement Form.
- Workers Compensation – See Section 5, Paragraph 12 of the Bid Form.
- Registration Requirements – See Section 5, Paragraphs 10 and 11 of the Bid Form.
- Tax Identification Number – See Section 11, Paragraph 11 of the Agreement Form.

00130.50 Execution of Contract and Bonds - The Agency, in its sole discretion, may require execution of documents identified in subsection (a) with a form of electronic signature (including but not limited to sealing and signing) acceptable to the Agency.

(a) By the Bidder - See Section 2, Instructions to Bidders, Article 12, Section 5, Paragraph 12 of the Bid Form, and Section 11, Paragraph 5 of the Agreement Form.

(b) By the Agency - Within 10 Working Days after the Agency has received and verified the properly executed documents specified in Section 11, Public Improvement Contract Agreement Form and, and received legal sufficiency approval from the Agency's attorney (if required), the Agency will request Clackamas County Board of Commissioner's or the County Administrator's Approval of the Contract. Approval will occur within 21 Calendar Days after the Agency has received and verified the properly executed documents. The Agency will then send a fully-executed Public Improvement Contract (Agreement Form) to the successful Bidder, who then officially becomes the Contractor.

00130.60 Failure to Execute Contract and Bonds - Failure of the successful Bidder to execute the Contract and provide the required certificates, certifications, and bonds may be cause for cancellation of the Award, and may be cause for forfeiture of the Bid guaranty under ORS 279C.385.

Award may then be made to the next lowest responsible Bidder, the Project may be re-advertised, or the Work may be performed otherwise as the Agency decides.

The forfeited Bid guaranty will become the Agency's property, not as a penalty but as liquidation of damages resulting from the Bidder's failure to execute the Contract and provide the certificates, certifications, and bonds as required by these Specifications.

00130.70 Release of Bid Guaranties - Bid guaranties will be released and checks returned 7 Calendar Days after Bids are opened, except for those of the three apparent lowest Bidders on each Project. The guaranties of the three apparent lowest Bidders will be released and checks returned to unsuccessful Bidders within 7 Days of the Agency's execution of the Contract.

00130.80 Project Site Restriction - Until the Agency sends the Contractor written Notice to Proceed with the Work, and the Contractor has filed the public works bonds required in 00170.20, the Contractor shall not go onto the Project Site on which the Work is to be done, nor move Materials, Equipment, or workers onto that Project Site.

The Contractor will not automatically be entitled to extra compensation because the commencement of Work is delayed by failure of the Agency to send the Contract for execution. However, if more than 60 Calendar Days elapse between the date the Bid is opened and the date the Agency sends the Contract to be executed, the Agency will consider granting an adjustment of time for completion of the Work to offset any actual delay to Contract completion resulting directly from delay in commencement.

00130.90 Notice to Proceed - Notice to Proceed will be issued within 5 Calendar Days after the Contract is executed by the Agency.

Should the Agency fail to issue the Notice to Proceed within 5 Calendar Days of Contract execution, the Contractor may apply for an adjustment of Contract Time according to 00180.80(c).

The Engineer will issue a First Notification recording the date the performance of the Contract has begun.

Section 00140 - Scope of Work

00140.00 Purpose of Contract - The purpose of the Contract is to set forth the rights and obligations of the parties and the terms and conditions governing completion of the Work. The Contractor's obligations shall include without limitation the following:

- The Contractor shall furnish all Materials, Equipment, labor, transportation, and Incidentals required to complete the Work according to Plans, Specifications, and terms of the Contract.
- The Contractor shall perform the Work according to the lines, grades, Cross Section data, Typical Sections, dimensions, and other details shown on the Plans or in the 3D Engineered Model, as modified by written order, or as directed by the Engineer.
- The Contractor shall perform all Work determined by the Engineer to be necessary to complete the Project.
- The Contractor shall contact the Engineer for any necessary clarification or interpretation of the Contract.

00140.10 Typical Sections - The Typical Sections are intended to apply in general. At other locations where the Typical Section is not appropriate, the Contractor shall perform construction to the identified alignment as directed by the Engineer.

00140.20 Thickness - The thickness of Courses of Materials shown on the Plans, given in the Specifications, or established by the Engineer is considered to be the compacted thickness. Minor variations are acceptable when within tolerances specified in the Specifications or Plans, or when approved by the Engineer.

00140.30 Agency-Required Changes in the Work - Changes to the Plans, quantities, or details of construction are inherent in the nature of construction and may be necessary or desirable during the course of Project construction.

Without impairing the Contract, the Agency reserves the right to require changes it deems necessary or desirable within the scope, which in the Specifications means general scope, of the Project. These changes may modify, without limitation:

- Specifications and design
- Grade and alignment
- Cross Sections and thicknesses of Courses of Materials
- 3D Engineered Model
- Method or manner of performance of Work
- Project Limits

or may result in:

- Increases and decreases in quantities
- Additional Work
- Elimination of any Contract item of Work
- Acceleration or delay in performance of Work

Upon receipt of a Change Order, the Contractor shall perform the Work as modified by the Change Order, which may be subject to approval as an Amendment. If the Amendment increases the Contract Amount, the Contractor shall notify its Surety of the increase and shall provide the Agency with a copy of any resulting modification to bond documents. The Contractor's performance of Work according to

Amendments shall neither invalidate the Contract nor release the Surety. Payment for changes in the Work will be made according to 00195.20. Contract Time adjustments, if any, will be made according to 00180.80.

00140.31 "As-Built" Records – The Contractor shall maintain a current and accurate record of the work completed during the course of this Contract. This may be in the form of "as-built" drawings kept by accurately marking a designated set of the contract plans with the specified information as the Work proceeds. Accurate, complete and current "as-built" drawings are a specified requirement before final Release of Retainage. At project completion and as a condition of final payment, the Contractor shall deliver to the Engineer or Project Manager a complete and legible set of "as-built" drawings.

The "as-built" drawings must show the information listed below. Where the term "locate" or "location" is used, it shall mean record of position with respect to both the construction vertical datum and either construction horizontal datum or a nearby permanent improvement.

1) Record location of underground services and utilities as installed.

2) Record location of existing underground utilities and services that are to remain and that are encountered during the course of the work.

3) Record changes in dimension, location, grade or detail to that shown on the plans.

4) Record changes made by Change Order or approved Amendment.

5) Record details not in the original plans.

6) Provide fully completed shop drawings reflecting all revisions.

00140.40 Differing Site Conditions - The following constitute differing Project Site conditions provided such conditions are discovered at the Project Site after commencement of the Work:

- **Type 1** - Subsurface or latent physical conditions that differ materially from those indicated in the Contract Documents; or
- **Type 2** - Unknown physical conditions of unusual nature that differ materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in the Contract.

The party discovering such a condition shall promptly notify the other party, in writing, of the specific differing conditions before they are disturbed and before the affected Work is performed. The Contractor shall not continue Work in the affected area until the Engineer has inspected such condition according to 00195.30 to determine whether an adjustment to Contract Amount or Contract Time is required.

Payment adjustments due to differing Project Site conditions, if any, will be made according to 00195.30. Contract Time adjustments, if any, will be made according to 00180.80.

00140.50 Environmental Pollution Changes - ORS 279C.525 will apply to any increases in the scope of the Work required as a result of environmental or natural resources laws enacted or amended after the submission of Bids for the Contract. The Contractor shall comply with the applicable notice and other requirements of ORS 279C.525. The applicable rights and remedies of that statute will also apply.

In addition to ORS 279C.525, the Agency has compiled a list at 00170.01 of those federal, State, and local agencies, of which the Agency has knowledge, that have enacted ordinances, rules, or

regulations dealing with the prevention of environmental pollution and the preservation of natural resources that may affect the performance of Agency contracts.

00140.60 Extra Work - If directed by the Engineer's written order, the Contractor shall perform work not included in the Contract. The Contractor shall perform this work according to:

- Standard Specifications
- Other Plans and Specifications issued by the Engineer

Payment for Extra Work will be made according to Section 00196. Contract Time adjustments, if any, will be made according to 00180.80.

00140.65 Disputed Work - The Contractor may dispute any part of a Change Order, written order, or an oral order from the Engineer by the procedures specified in Section 00199.

00140.70 Cost Reduction Proposals - The Contractor may submit written proposals to the Engineer that modify Plans, Specifications, or other Contract Documents for the sole purpose of reducing the total cost of construction. Unless otherwise agreed to in writing by the Agency, a proposal that is solely or primarily a proposal to reduce estimated quantities or delete Work, as determined by the Engineer, is not eligible for consideration as a cost reduction proposal and will instead be addressed under 00140.30, whether proposed or suggested by the Agency or the Contractor.

(a) Proposal Requirements - The Agency will not adopt a cost reduction proposal that impairs essential functions or characteristics of the Project, including, but not limited to, service life, economy of operation, ease of maintenance, designed appearance, or design and safety standards.

To conserve time and funds, the Contractor may first submit a written request for a feasibility review by the Engineer. The request should contain a description of the proposal together with a rough estimate of anticipated dollar and time savings. The Engineer will, within a reasonable time, advise the Contractor in writing whether or not the proposal would be considered by the Agency, should the Contractor elect to submit a detailed cost reduction proposal.

A detailed cost reduction proposal shall include without limitation the following information:

- A description of existing Contract requirements for performing the Work and the proposed change;
- The Contract items of Work affected by the proposed change, including any quantity variation caused by the proposed change;
- Pay Items affected by the proposed change including any quantity variations;
- A detailed cost estimate for performing the Work under the existing Contract and under the proposed change. Cost estimates shall be made according to Section 00197. Costs of re-design, which are incurred after the Agency has accepted the proposal, shall be included in the cost of proposed work; and
- A date by which the Engineer must accept the proposal in order to accept the proposed change without impacting the Contract Time or cost reduction amount.

(b) Continuing to Perform Work - The Contractor shall continue to perform the Work according to Contract requirements until the Engineer issues a Change Order incorporating the cost reduction proposal. If the Engineer fails to issue a Change Order by the date specified in the proposal, the proposal shall be deemed rejected.

(c) Consideration of Proposal - The Engineer is not obligated to consider any cost reduction proposal. The Agency will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted.

The Engineer will determine in its sole discretion whether to accept a cost reduction proposal as well as the estimated net savings in construction costs from the adoption of all or any part of the proposal. In determining the estimated net savings, the Engineer may disregard the Schedule of Items. The Engineer will establish prices that represent a fair measure of the value of Work to be performed or to be deleted as a result of the cost reduction proposal.

(d) Sharing Investigation Costs - As a condition for considering a Contractor's cost reduction proposal, the Agency reserves the right to require the Contractor to share in the Agency's costs of investigating the proposal. If the Agency exercises this right, the Contractor shall provide written acceptance of the condition to the Engineer. Such acceptance will authorize the Agency to deduct its share of investigation costs from payments due or that may become due to the Contractor under the Contract.

(e) Acceptance of Proposal Requirements - If the Contractor's cost reduction proposal is accepted in whole or in part, acceptance will be made by a Change Order that will include without limitation the following:

- Statement that the Change Order is made according to 00140.70;
- Revised Contract Documents that reflect all modifications necessary to implement the approved cost reduction measures;
- Any conditions to which the Agency's approval is subject;
- Estimated net savings in construction costs attributable to the approved cost reduction measures; and
- A payment provision according to which the Contractor will be paid 50% of the estimated net savings amount as full and adequate consideration for performance of the Work of the Change Order.

The Contractor's cost of preparing the cost reduction proposal and the Agency's costs of investigating the proposal, including any portion paid by the Contractor, will be excluded from determination of the estimated net savings in construction costs. Costs of re-design, which are incurred after the Agency has accepted the proposal, will be included in the cost of the Work attributable to cost reduction measures.

If the Agency accepts the cost reduction proposal, the Change Order that authorizes the cost reduction measures will also address any Contract Time adjustment.

(f) Right to General Use - Once submitted, the cost reduction proposal becomes the property of the Agency. The Agency reserves the right to adopt the cost reduction proposal for general use without additional compensation to the Contractor when it determines that a proposal is suitable for application to other contracts.

00140.80 Use of Publicly Owned Equipment - The Contractor is prohibited from using publicly-owned Equipment except in the case of emergency. In an emergency, the Contractor may rent publicly-owned Equipment provided that:

- The Engineer provides written approval that states that such rental is in the public interest; and
- Rental does not increase the Project cost.

00140.90 Final Trimming and Cleanup - Before Final Inspection as described in 00150.90, the Contractor shall neatly trim and finish the Project and remove all remaining unincorporated Materials and debris. Final trimming and cleanup shall include without limitation the following:

- The Contractor shall retrim and reshape earthwork, and shall repair deteriorated portions of the Project Site.
- Where the Work has impacted existing facilities or devices, the Contractor shall restore or replace those facilities to their pre-existing condition.
- The Contractor shall clean all drainage facilities and sanitary sewers of excess Materials or debris resulting from the Work.
- The Contractor shall clean up and leave in a neat, orderly condition, Rights-of-Way, Materials sites, and other property occupied in connection with performance of the Work.
- The Contractor shall remove temporary buildings, construction plants, forms, falsework and scaffolding, surplus and discarded Materials, and rubbish.
- The Contractor shall dispose of Materials and debris, including, without limitation, forms, falsework, scaffolding, and rubbish resulting from clearing, grubbing, trimming, clean-up, removal, and other Work. These Materials and debris become the property of the Contractor. The Contractor shall dispose of these Materials and debris immediately.

Unless the Contract specifically provides for payment for this item, the Agency will make no separate or additional payment for final trimming and cleanup.

Section 00150 - Control of Work

00150.00 Authority of the Engineer - The Engineer has full authority over the Work and its suspension. (See Section 00180.) The Contractor shall perform all Work to the complete satisfaction of the Engineer. The Engineer's determination shall be final on all matters, including, but not limited to, the following:

- Quality and acceptability of Materials and workmanship
- Measurement of unit price Work
- Timely and proper prosecution of the Work
- Interpretation of Contract Documents
- Payments due under the Contract

The Engineer's decision is final and, except as provided in 00180.80 for adjustments of Contract Time and Section 00199 for claims for additional compensation, may be challenged only through litigation.

Work performed under the Contract will not be considered complete until it has passed Final Inspection by the Engineer and has been accepted in writing by the Agency.

Interim approvals issued by the Engineer, including, but not limited to, Third Notification, will not discharge the Contractor from responsibility for errors in prosecution of the Work, for improper fabrication, for failure to comply with Contract requirements, or for other deficiencies, the nature of which are within the Contractor's control.

00150.01 Project Manager's Authority and Duties - The Engineer may designate a Project Manager as its representative on the Project with authority to enforce the provisions of the Contract.

When the Engineer has designated a Project Manager, the Contractor should direct all requests for clarification or interpretation of the Contract, in writing, to the Project Manager. The Project Manager will respond within a reasonable time. Contract clarification or interpretation obtained from persons other than the Project Manager will not be binding on the Agency.

The Project Manager shall have the authority to appoint Inspectors and other personnel as required to assist in the administration of the Contract.

00150.02 Inspector's Authority and Duties - To the extent delegated under 00150.01, Inspectors are authorized to represent the Engineer and Project Manager to perform the following:

- Inspect Work performed and Materials furnished, including, without limitation, the preparation, fabrication, or manufacture of Materials to be used;
- Orally reject defective Materials and to confirm such rejection in writing;
- By oral order, temporarily suspend the Work for improper prosecution pending the Engineer's decision; and
- Exercise additional delegated authority.

Inspectors are not authorized to:

- Accept Work or Materials.
- Alter or waive provisions of the Contract.
- Give instructions or advice inconsistent with the Contract Documents.

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00150.10 Coordination of Contract Documents - The Contract Documents, including, but not limited to, Contract Change Orders, the Special Provisions, the Plans, and the Standard Specifications are intended to collectively describe all of the items of Work necessary to complete the Project.

(a) Order of Precedence - The Engineer will resolve any discrepancies between these documents in the following order of precedence:

- Approved Amendments;
- Addenda;
- Schedule of Prices;
- Special Provisions;
- Stamped Agency-prepared drawings specifically applicable to the Project and bearing the Project title;
- Reviewed and accepted, stamped Working Drawings;
- 3D Engineered Models and supplemental Agency-prepared line, grade and Cross Section data applicable to the Project;
- Standard Drawings;
- Approved unstamped Working Drawings and 3D Construction Models;
- Standard Specifications; and
- All other Contract Documents not listed above, including permits from governmental agencies, and bid documents.

Notes on a drawing shall take precedence over drawing details.

Dimensions shown on the drawings, or that can be computed, shall take precedence over scaled dimensions.

(b) Immaterial Discrepancies - The Contract Documents specify details for the construction and completion of the Work. If Contract Documents describe portions of the Work in sufficient detail but are silent in some minor respect, the Contractor may proceed utilizing the current best industry practices.

(c) Material Discrepancies - If the Contractor identifies a discrepancy, error, or omission in the Contract Documents that cannot be resolved by the approach specified in (b) above, the Contractor shall immediately request clarification from the Engineer.

00150.15 Construction Stakes, Lines, and Grades:

(a) General - The Contractor shall perform no Work until the Engineer establishes field controls. Work performed without field controls will be subject to removal at no additional cost to the Agency.

(b) Agency's Responsibilities - The Engineer will:

- Lay out and set construction stakes and marks to establish the lines, grades, Slopes, Cross Sections, and curve super-elevations for roadwork;
- Provide one set of construction stakes for line and grade for each additional phase of the Work;

- Set bench marks and stakes for centerline of Bridges and bents;
- Calculate and provide finish deck grades; and
- Deduct from payments due the Contractor all costs incurred to replace stakes and marks negligently or intentionally damaged, removed, or destroyed by the Contractor.

(c) Contractor's Responsibilities - The Contractor shall:

- Inform the Engineer of staking requirements at least 5 Calendar Days before the staking needs to begin;
- Coordinate construction to provide sufficient area for the Engineer to perform surveying work efficiently and safely;
- Accurately measure detailed dimensions, elevations, and Slopes from the Engineer's stakes and marks;
- Perform the Work in such a manner as to preserve stakes and marks; and
- Set any reference lines for automatic control from the control stakes provided by the Engineer.

00150.20 Inspection:

(a) Inspection by the Engineer - The Engineer may test Materials furnished and inspect Work performed by the Contractor to ensure Contract compliance.

If the Contractor performs Work without the Engineer's inspection or uses Materials that the Engineer has not approved, the Engineer may order affected portions of the Work removed at the Contractor's expense. The foregoing sentence shall not apply if the Engineer fails to inspect the Work within a specific period of time required in the Contract or, in the absence of a specific period of time, within a reasonable period of time after receiving the Contractor's timely written request for inspection or testing.

At the Engineer's direction, any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore these portions of Work to the standard required by the Contract. If the Engineer rejects Work due to Materials or workmanship, or if the Contractor performed such Work without providing sufficient advance request for inspection to the Engineer, the Contractor shall bear all costs of uncovering and restoring the Work. If the Engineer accepts the uncovered Work, and the Contractor performed the Work only after providing the Engineer with sufficient advance notice, the costs of uncovering and restoring the Work will be paid for by the Agency according to 00195.20.

(b) Inspection Facilities - The Contractor shall furnish walkways, railings, ladders, shoring, tunnels, platforms, and other facilities necessary to permit the Engineer to have safe access to the Work to be inspected. The Contractor shall require producers and fabricators to provide safe inspection access as requested by the Engineer.

(c) Sampling - The Contractor shall furnish the Engineer with samples of Materials that the Engineer will test. All of the Contractor's costs related to this required sampling are Incidental.

(d) Inspection by Third Parties - Where third parties have the right to inspect the Work, the Contractor shall coordinate with the Engineer and shall provide safe inspection access.

(e) Contractor's Duty to Make Corrections - The Contractor shall perform all Work according to the Contract Documents. The Contractor shall correct Work that does not comply with the Contract Documents at its own expense. Inspection of the Work by the Engineer does not relieve the Contractor of responsibility for improper prosecution of the Work.

00150.25 Acceptability of Materials and Work - The Contractor shall furnish Materials and shall perform Work in Close Conformance to the Contract Documents. If the Engineer determines that the Materials furnished or the Work performed are not in Close Conformance with the Contract Documents, the Engineer may:

- Reject the Materials or Work and order the Contractor, at the Contractor's expense, to remove, replace, or otherwise correct any non-conformity; or
- Accept the Materials or Work as suitable for the intended purpose, adjust the amount paid for applicable Pay Items to account for diminished cost to the Contractor or diminished value to the Agency, document the adjustment, and provide written documentation to the Contractor regarding the basis of the adjustment.

The Engineer's decisions concerning acceptability of Materials or Work will be final.

00150.30 Delivery of Notices - Written notices to the Contractor by the Engineer or the Agency will be delivered:

- In person;
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- By email to the email address provided by the Contractor at the Preconstruction Meeting;
- By U.S. Postal Service first class mail or priority mail (which at the sender's option may include certified or registered mail return receipt requested), to the current office address as shown in the records of the Agency; or
- By overnight delivery service of a private industry courier, to the current office address as shown in the records of the Agency.

Notices shall be considered as having been received by the Contractor:

- At the time of actual receipt when delivered in person;
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- At the time which the email transmittal is electronically received by the Contractor's email inbox;
- At the time of actual receipt or 7 Calendar Days after the postmarked date when deposited for delivery by first class or priority mail, whichever is earlier; or
- At the time of actual receipt or 3 Calendar Days after deposit with a private industry courier for overnight delivery service, whichever is earlier.

Written notices to the Engineer or the Agency by the Contractor shall be delivered to the Agency address shown in the Special Provisions, unless a different address is agreed to by the Engineer, and shall be delivered:

- In person;
- By email to the email address provided by the Engineer at the Preconstruction Meeting;
- By U.S. Postal Service first class mail or priority mail (which at the sender's option may include certified or registered mail return receipt requested); or
- By overnight delivery service of a private industry courier.

Notices will be considered as having been received by the Agency:

- At the time of actual receipt when delivered in person;
- At the time which the email transmittal is electronically received by the Agency's email inbox;

- At the time of actual receipt or 7 Calendar Days after the postmarked date, when deposited for delivery by first class or priority mail, whichever is earlier; or
- At the time of actual receipt or 3 Calendar Days after deposit with a private industry courier for overnight delivery service, whichever is earlier.

For purposes of this Subsection, the time zone is Pacific Standard Time (PST) to determine time of receipt of notices and other documents. For purposes of this Subsection, non-business days are Saturdays, Sundays and legal holidays as defined by ORS 187.010 and 187.020.

Claims must be submitted on paper documents according to Section 00199.

00150.35 Plans, 3D Engineered Models, Working Drawings, and 3D Construction Models:

(a) Plans and 3D Engineered Models - The Agency-prepared Plans and 3D Engineered Models will show details of lines, grades, Cross Sections, and Typical Section of the Roadway, and locations and design details of Structures.

(b) Working Drawings and 3D Construction Models - The Contractor shall supplement the Agency-prepared Plans and 3D Engineered Models with stamped Working Drawings, unstamped Working Drawings, or 3D Construction Models that show all information necessary to complete the Work. The applicable Section or Subsection of the Standard Specifications will indicate the supplemental information required and whether the drawings are to be stamped or unstamped. Stamped Working Drawings, unstamped Working Drawings, and 3D Construction Models are defined as follows:

(1) Stamped Working Drawings - Working Drawings, calculations, and other data which are prepared by or under the direction of a Professional Engineer licensed in the State of Oregon, and which bear the engineer's signature, seal, and expiration date.

(2) Unstamped Working Drawings - Working Drawings, calculations, and other data that do not bear an engineering seal.

(3) 3D Construction Models - See 00110.20.

(c) Number, Size, and Format of Working Drawings and 3D Construction Models - The Contractor shall submit Working Drawings and 3D Construction Models according to one of the following methods:

(1) Paper Submittal - The Contractor shall submit to the Engineer seven copies of Working Drawings for steel Structures and six copies of Working Drawings for other Structures. The submitted copies shall be clear and readable. Drawing dimensions shall be 8 1/2 by 11 inches, 11 by 17 inches, or 22 by 36 inches in size. One copy of the submitted Working Drawings will be returned to the Contractor after processing. The Contractor shall submit such additional number of copies to the Engineer for processing that the Contractor would like to have returned.

The Contractor shall not submit 3D Construction Model data in paper format.

(2) Electronic Submittal - The Contractor shall submit electronic Working Drawings as directed by the Engineer. The Contractor shall submit 3D Construction Model data in LandXML format or as directed by the Engineer.

(d) Processing Working Drawings and 3D Construction Models - The Engineer will process Working Drawings and 3D Construction Models as follows:

(1) Stamped Working Drawings - Stamped Working Drawings will be designated as "accepted", "accepted with comments", or "returned for correction" by the Engineer. If stamped Working Drawings are returned for correction by the Engineer, the Contractor shall address all comments and resubmit the stamped Working Drawings.

(2) Unstamped Working Drawings - Unstamped Working Drawings will be designated as "approved", "approved as noted", or "returned for correction" by the Engineer. If unstamped Working Drawings are returned for correction by the Engineer, the Contractor shall address all comments and resubmit the unstamped Working Drawings.

(3) 3D Construction Models - 3D Construction Models will be designated as "approved", "approved as noted", or "returned for correction" by the Engineer. If 3D Construction Models are returned for correction by the Engineer, the Contractor shall address all comments and resubmit the 3D Construction Models.

The Contractor shall not fabricate or construct any structural components until the stamped or unstamped Working Drawings are returned by the Engineer with a written designation of "accepted", "accepted with comments", "approved", or "approved as noted", as applicable for the Working Drawings.

The Contractor shall not begin construction activities that will utilize a 3D Construction Model until the Engineer has processed the model and designated it as "approved" or "approved as noted".

The Engineer's processing of the Working Drawings and 3D Construction Models does not amend any contractual obligations of the parties.

The Engineer will process and return Working Drawings and 3D Construction Models within 21 Calendar Days (65 Calendar Days if Railroad approval is required) after receipt by the Engineer. If the Engineer fails to return such drawings or models within this period of time, the Engineer will consider granting a Contract Time extension according to 00180.80. If the Contractor is required to resubmit Working Drawings or 3D Construction Models to the Engineer, the Engineer will process and return the Working Drawings or 3D Construction Models within 21 Calendar Days (65 Calendar Days if Railroad approval is required) after receipt of the resubmitted Working Drawings or 3D Construction Models by the Engineer.

00150.37 Equipment Lists and Other Submittals - The Contractor shall submit Equipment lists, and other required submittals for approval by the Engineer. The Engineer will respond to requests for approval within 21 Calendar Days (65 Calendar Days if Railroad approval is required) after receipt by the Engineer unless otherwise specified in the Section of the Specifications requiring such approval.

00150.40 Cooperation and Superintendence by the Contractor - The Contractor is responsible for full management of all aspects of the Work, including superintendence of all Work by Subcontractors, Suppliers, and other providers. The Contractor shall appoint a single Superintendent and may also appoint alternate Superintendents as necessary to control the Work. The form of appointment of the alternate shall state, in writing, the alternate's name, duration of appointment in the absence of the Superintendent, and scope of authority. The Contractor shall:

- Provide for the cooperation and superintendence on the Project by:
  - Furnishing the Engineer all data necessary to determine the actual cost of all or any part of the Work, added Work, or Changed Work.
  - Allowing the Engineer reasonable access to the Contractor's books and records at all times. To the extent permitted by public records laws, the Engineer will make reasonable efforts to honor the Contractor's request for protection of confidential information.

- Keeping one complete set of Contract Documents on the Project Site at all times, available for use by all the Contractor's own organization, and by the Engineer if necessary.

- Appoint a single Superintendent, and any alternate Superintendent, who shall meet the following qualifications:
  - Appointees shall be competent to manage all aspects of the Work.
  - Appointees shall be from the Contractor's own organization.
  - Appointees shall have performed similar duties on at least one previous project of the size, scope and complexity as the current Contract.
  - Appointees shall be experienced in the types of Work being performed.
  - Appointees shall be capable of reading and thoroughly understanding the Contract Documents.
- The appointed single Superintendent, or any alternate Superintendent, shall:
  - Be present for all On-Site Work, regardless of the amount to be performed by the Contractor, Subcontractors, Suppliers, or other providers, unless the Engineer provides prior approval of the Superintendent's or alternate Superintendent's absence.
  - Be equipped with a two-way radio or cell phone capable of communicating throughout the Project during all the hours of Work on the Project Site and be available for communication with the Engineer.
  - Have full authority and responsibility to promptly execute orders or directions of the Engineer.
  - Have full authority and responsibility to promptly supply the Materials, Equipment, labor, and Incidentals required for performance of the Work.
  - Coordinate and control all Work performed under the Contract, including, without limitation, the Work performed by Subcontractors, Suppliers, and owner/operators.
  - Diligently pursue progress of the Work according to the schedule requirements of Section 00180.
  - Cooperate in good faith with the Engineer, Inspectors, and other contractors in performance of the Work.
  - Provide all assistance reasonably required by the Engineer to obtain information regarding the nature, quantity, and quality of any part of the Work.
  - Provide access, facilities and assistance to the Engineer in establishing such lines, grades and points as the Engineer requires.
  - Carefully protect and preserve the Engineer's marks and stakes.

Any Superintendent or alternate Superintendent who repeatedly fails to follow the Engineer's written or oral orders, directions, instructions, or determinations, shall be subject to removal from the Project.

If the Contractor fails or neglects to provide a Superintendent, or an alternate Superintendent, and no prior approval has been granted, the Engineer has the authority to suspend the Work according to 00180.70. Any continued Work by the Contractor, Subcontractors, Suppliers, or other providers may be subject to rejection and removal. The Contractor's repeated failure or neglect to provide the superintendence required by these provisions constitutes a material breach of the Contract, and the Engineer may impose any remedies available under the Contract, including, but not limited to, Contract termination.

00150.50 Cooperation with Utilities:

(a) General - Unless otherwise specified in the Special Provisions or on the Plans, existing Utilities requiring adjustment may be adjusted by the Utility before, during, or after Project construction. "Adjustment of Utilities" shall mean the alteration, improvement, connection, disconnection,

relocation, or removal of existing Utility lines, facilities, or systems in temporary or permanent manner.

(b) Agency's Responsibilities - Before Bids are received, the Agency will make preliminary arrangements for planned Adjustment of Utilities. The Agency will list in the Special Provisions the estimated completion dates or times for adjustment work by the Utility owner, and will include a general statement describing any relocation. The Plans will not normally show the anticipated new location of Utilities that have been or will be adjusted.

(c) Contractor's Responsibilities - The Contractor shall:

- Follow applicable rules adopted by the Oregon Utility Notification Center;
- Contact Utility owners during Bid preparation and after the Contract is awarded to verify all Utilities' involvement on the Project Site;
- Coordinate Project construction with the Utilities' planned adjustments, take all precautions necessary to prevent disruption of Utility service, and perform its Work in the manner that results in the least inconvenience to the Utility owners;
- Include all Utility adjustment work, whether to be performed by the Contractor or the Utilities, on the Contractor's Project Work schedule submitted under 00180.41;
- Protect from damage or disturbance any Utility that remains within the area in which Work is being performed. Maintain and re-establish location marks according to OAR 952-001-0090(3)(a). Coordinate re-establishment of the location marks with the associated Utility;
- Not disturb an existing Utility if it requires an unanticipated adjustment, but shall protect the Utility from damage or disturbance and promptly notify the Engineer;
- Determine the exact location before excavating within the tolerance zone according to OAR 952-001-0090(3)(c);
- Backfill any exposed Utilities as recommended and approved by the Utility representative. Obtain Utility locate warning tape from the Utility and replace damaged or removed warning tape. Utility locate warning tape may not be present at all existing Utilities;
- Stake, place warning tape, and maintain no work limits around critical Utility facilities as shown or directed by the Engineer and the Utility;
- In addition to the notification required in OAR 952-001-0090(6), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown Utility issues; and
- Report to the Engineer any Utility owner who fails to cooperate or fails to follow the planned Utility adjustment.

Subject to the Engineer's approval, the Contractor may adjust the Utilities by asking the Utility owners to move, remove, or alter their facilities in ways other than as shown on the Plans or in the Special Provisions. The Contractor shall conduct all negotiations, make all arrangements, and assume all costs that arise from such changes.

(d) Delays - If the Contractor complies with 00150.50(c), and if Utility adjustments are completed later than the date specified in the Special Provisions, thus causing Project completion to be delayed (provide notification under 00180.60), additional Contract Time will be considered under 00180.80, and additional compensation, if applicable, will be considered under 00195.40.

(e) Notification - Unless otherwise specified in the Special Provisions, the Project is located within the area served by the Oregon Utility Notification Center, which operates a Utilities notification

system for notifying owners of Utilities about Work being performed in the vicinity of their facilities. The Contractor shall notify owners of Utilities prior to the performance of Work in the vicinity of their facilities. The Utilities notification system telephone number is 811 or 1-800-332-2344.

The Contractor shall comply with the rules of the Oregon Utility Notification Center, OAR 952-001-0010 through OAR 952-001-0090, and ORS 757.993. The Contractor may contact the Oregon Utility Notification Center at 503-232-1987 about these rules.

00150.55 Cooperation with Other Contractors - The Agency reserves the right to perform other work on or near the Project Site, including, without limitation, any Materials site, with forces other than those of the Contractor.

If such work takes place on or near the Project Site, the Contractor shall have the following obligations:

- The Contractor shall coordinate Work with other contractors or forces.
- The Contractor shall cooperate in good faith with all other contractors or forces.
- The Contractor shall perform the Work specified in the Contract in a way that will minimize interference and delay for all forces involved.
- The Contractor shall place and dispose of the Materials being used so as not to interfere with the operations of other forces.
- The Contractor shall join the Work with that of other forces in a manner acceptable to the Engineer or the Agency, and shall perform it in the accepted sequence with the work of the other force.

The Engineer will resolve any disagreements under this Subsection that may arise among the Contractor and other work forces, or between the Contractor and the Agency. The Engineer's decision in these matters is final, as provided in 00150.00.

When the schedules for Work of the Contractor and the work of other forces overlap, each contractor involved shall submit a current, realistic progress schedule to the Engineer. Before the Engineer accepts the schedule, each party shall have the opportunity to review all schedules. After this review and any necessary consultations, the Engineer will determine acceptable schedules.

The Contractor waives any right it may have to make claims against the Agency for any damages or claims that may arise because of inconvenience, delay, or loss due solely to the presence of other contractors working on or near the Project Site.

If the Contract gives notice of work to be performed by other forces that may affect the Contractor's Work under the Contract, the Contractor shall include any costs associated with coordination of the Work in the appropriate Pay Item or as a portion of a Pay Item.

In an emergency, the Contractor most immediately able to respond may repair a facility or Utility of another contractor in order to prevent further damage to the facility, Utility, or other Structure as a result of the emergency.

00150.60 Construction Equipment Restrictions:

(a) Load and Speed Restrictions for Construction Vehicles and Equipment - The Contractor shall comply with legal weight and speed restrictions when moving Materials or Equipment beyond the limits of the Project Site.

The Contractor shall control vehicle and Equipment loads and speeds within the Project Site according to the following restrictions, unless the Special Provisions provide otherwise:

- The Contractor shall restrict loads and speeds as necessary to avoid displacement or loss of Materials on Subgrades and Aggregate Bases.
- The Contractor shall restrict weights to legal loads, and shall travel at speeds of no more than 45 mph or the posted construction speed, whichever is less, on treated Bases, Pavement, or wearing Courses.
- The Contractor shall not cross Bridges or other Structures with Equipment or vehicles exceeding the legal load limit without prior written permission of the Engineer. The Contractor shall make any such request in writing, describing the loading details and the arrangement, movement, and position of the Equipment on the Structure. The Contractor shall comply with any restrictions or conditions included in the Engineer's written permission.

(b) Protection of Buried Items - The Contractor shall use temporary fill or other methods to avoid overload of pipes, box culverts, and other items that are covered, or to be covered, by fill or backfill.

(c) Responsibility for Damages - The Contractor shall assume responsibility for damages caused by excessive Equipment speed or loads while performing the Work, both inside and outside the Project Site. The Engineer's permission to cross Bridges and other Structures, according to 00150.60(a), will not relieve the Contractor from responsibility for load-caused damages.

00150.70 Detrimental Operations - The Contractor shall avoid operations whose methods, conditions, or timing may injure people or damage property or the Work. Damage may include, without limitation, staining surfaces with mud or asphalt or damaging Utilities and foundations. (See also 00150.60, 00150.75, and Section 00170.)

When any such damage occurs, the Engineer will determine if it is to be corrected by repair, replacement, or compensatory payment by the Contractor. If compensatory payment is required, the Engineer will determine the amount. Compensatory payment may be deducted from monies due or to become due to the Contractor under the Contract.

Contractor is solely responsible for damages outside the Project limits. Contractor shall record any private property which may be disturbed during construction prior to commencing construction. Contractor shall provide to the Engineer a copy of the video recording of the private property prior to Construction.

00150.75 Protection and Maintenance of Work During Construction - The Contractor shall protect and maintain the Work during construction and until Third Notification has been issued, unless otherwise provided in the Contract. For the purposes of this Subsection, "maintenance" shall include measures to prevent deterioration of Roadway and Structures at the Project Site, and to keep them in good condition at all times during the prosecution of the Work. The Contractor shall continuously allocate sufficient Equipment and workers to achieve such maintenance.

If the Contract requires the placement of a Course upon a previously constructed Course or Subgrade, the Contractor shall maintain the previous Course or Subgrade during all construction operations.

The Contractor shall include costs of protecting and maintaining the Work during construction in the unit prices bid for the various Pay Items. The Contractor will not be paid an additional amount for this Work, unless otherwise specified.

The Engineer will notify the Contractor of the Contractor's noncompliance with this Subsection. If the Contractor fails to remedy unsatisfactory protection or maintenance within 24 hours after receipt of such notice, the Engineer may proceed to remedy the deficiency, and deduct the entire cost from monies due or to become due the Contractor under the Contract.

00150.80 Removal of Unacceptable and Unauthorized Work - The Contractor shall correct or remove unacceptable Work and remove unauthorized work, as directed by the Engineer in writing. The Contractor shall replace such work with Work and Materials conforming to the requirements of the Contract.

For the purposes of this Subsection, "unauthorized work" shall include without limitation the following:

- Work that extends beyond lines shown on the Plans or otherwise established by the Engineer;
- Work that is contrary to the Engineer's instructions; and
- Work that is conducted without the Engineer's written authorization.

The Agency will not pay the Contractor for unacceptable Work, except as provided in 00150.25, or for unauthorized work. The Engineer may issue a written order for the correction or removal of such work at the Contractor's sole expense.

If, when ordered by the Engineer, the Contractor fails to correct or remove unacceptable Work or remove unauthorized work, the Engineer may have the correction, removal or removal and replacement, done by others and deduct the entire cost from monies due or to become due the Contractor under the Contract.

00150.90 Final Inspection:

(a) On-site Construction Work - The Engineer will inspect the Project at a time close to the completion of On-Site Work.

When all On-Site Work on the Project is completed, including, but not limited to, Change Order Work and Extra Work, the Engineer will issue Second Notification as specified in 00180.50(g).

Within 15 Calendar Days after the Engineer receives the Contractor's written notification that all punch list items, final trimming and cleanup according to 00140.90 have been completed, the Engineer will review the Project and notify the Contractor that all Work is complete, or will give the Contractor written instruction regarding incomplete or unsatisfactory Work.

(b) All Contract Work - The Engineer will issue the Third Notification when the Contractor has satisfactorily accomplished all of the following:

- The Contractor has completed all On-Site Work required under the Contract, including the punch list items from (a) above;
- The Contractor has removed all Equipment, other than that incorporated into the Work; and
- The Contractor has submitted all required certifications, bills, forms, warranties and other documents.

00150.91 Post-Construction Review - The Contractor or the Engineer may request a Post-Construction Review meeting, to be held at a time prior to issuance of Third Notification but not earlier than 45 Days following the date of Second Notification. The meeting may be held if agreed to by both parties. The party making the request will conduct the meeting, and will announce the time and place of the meeting at least 15 Days prior to the meeting date. The purpose of this meeting is to examine the Project for possible process improvements that may benefit future projects.

00150.95 Final Acceptance - After the Engineer completes Final Inspection of all Work and sends Third Notification to the Contractor, the Agency will acknowledge Final Acceptance. The Agency will notify the Contractor in writing of the date of Final Acceptance within 7 Calendar Days after Final Acceptance, or as soon thereafter as is practicable.

00150.96 Maintenance Warranties and Guarantees - Prior to Third Notification, the Contractor shall transfer to the Agency all unexpired manufacturers' warranties and guarantees for Materials and Equipment installed on the Project. Such warranties and guarantees shall recite that they are enforceable by the Agency.

00150.97 Responsibility for Materials and Workmanship:

(a) The Contractor shall perform the Work according to the terms, conditions, and requirements of the Contract.

(b) Whether before or after the Agency's acceptance of the Work, the Contractor shall be responsible for:

- Correcting or repairing any defects in, or damage to, the Work that results from the use of improper or defective materials or workmanship; or
- Replacing, in its entirety, the Work affected by the use of improper or defective materials or workmanship to the extent provided by law; and
- Correcting or repairing any Work, Materials, Structures, Existing Surfacings, Pavement, Utilities, or sites, including, without limitation, Wetlands, damaged or disturbed in that correction, repair, or replacement. (See 00170.80 to 00170.85.)

(c) Full or partial termination of the Contract under 00180.90 shall not relieve the Contractor of responsibility for completed or performed Work, or relieve the Contractor's Surety of the obligation for any just claims arising from the completed or performed Work.

Section 00160 - Source of Materials

00160.00 Definitions - The following definitions apply to Section 00160:

(a) Prospective Source - Agency-furnished Materials source, use of which by the Contractor is optional. The Agency makes no guarantee or representation, by implication or otherwise, of the land use status, quantity, quality, or acceptability of Materials available from it, except as may be stated in the Special Provisions.

(b) Mandatory Source - Agency-furnished Materials source, use of which by the Contractor is required.

(c) Blue Sheets - Prequalified products and submittals for qualification of electrical equipment and materials.

(d) Green Sheets - Conditionally prequalified products and submittals for conditional qualification of controller equipment.

(e) Red Sheets - Statewide list of certification exempt traffic management systems components pursuant to ORS 479.540 and OAR 918-261-0037.

00160.01 Notification of Source of Supply and Materials:

(a) All Materials - The Contractor shall notify the Engineer in writing of all proposed Materials sources of supply, including, without limitation, any steel or other fabricators within the following time frames:

- At least 15 Calendar Days before using or fabricating Materials, if the source is within the State; or
- At least 45 Calendar Days before using or fabricating Materials, if the source is outside the State

The Contractor shall identify if the material source is a DBE or non-DBE. For DBE Suppliers, the Contractor shall identify an estimated value of the materials to be supplied. For each committed DBE Supplier, the Contractor shall submit a copy of the materials purchase order or supply agreement. For non-committed DBE suppliers, when the estimated value is over $10,000, the Contractor shall submit a copy of the materials purchase order or supply agreement.

For this purpose, a committed DBE firm is one that was identified by the Contractor to meet an assigned DBE goal, including DBE firms substituting for DBE firms committed as a condition of Contract Award.

(b) Prospective Source Materials - When given an option to use Prospective Sources of Materials to be incorporated into the Work, the Contractor shall notify the Engineer in writing of the option selected within 15 Calendar Days from date of Notice to Proceed. Otherwise, such Materials sources may become unavailable.

(c) Approval Required - Before allowing production or delivery of Materials to begin from any source, the Contractor must obtain the Engineer's approval. Approval to use any source does not imply that Materials from that source will be accepted. If approved sources do not provide Materials that meet Specifications, the Materials will be rejected. The Contractor will then be responsible for locating other sources and obtaining the Engineer's approval.

(d) Terms Required - The Contractor shall comply with 00170.07.

00160.05 Qualified Products List (QPL) - The QPL is a listing of manufactured products available on the market (shelf items) that ODOT has evaluated and found suitable for a specified use in highway construction. The QPL is available from ODOT's Construction Section website (see 00110.05(e)).

The most current published PDF version of the QPL on ODOT's Construction Section website at the time of Advertisement is the version in effect for the Project. When the Contract specifies the use of the QPL, unless specified as the subject of an exemption per ORS 279C.345, the Agency may approve for use a conditionally qualified product, a product qualified for inclusion in a later edition of the QPL, or other equivalent product that meets the requirements of the QPL, following the Standard Guidelines for Product Review, if the Agency finds the product acceptable for use on the Project.

Use of listed products shall be restricted to the category of use for which they are listed. The Contractor shall install all products as recommended by the manufacturer. The Contractor shall replace qualified products not conforming to Specifications or not properly handled or installed at no additional cost to the Agency.

00160.07 Electrical Equipment and Materials - The Blue Sheets and Green Sheets are a listing of manufactured products available on the market (shelf items) that ODOT has evaluated and found suitable for use as electrical and controller equipment and materials for highway construction. The Blue Sheets and Green Sheets are available on the ODOT Traffic-Standards website (see 00110.05(e)). The most current version of the Blue Sheets and Green Sheets on the date of Advertisement is the version in effect for the Project.

When the Contract specifies the use of the Blue Sheets and Green Sheets, unless specified as the subject of an exemption per ORS 279C.345, the Agency may approve for use a product qualified for inclusion in a later edition of the Blue Sheets and Green Sheets or other equivalent product that meets the requirements of the Blue Sheets, following the Blue Sheet Qualification/Specification Information, or the Green Sheets, following the Green Sheet Qualification/Specification Information , if the Agency finds the product acceptable for use on the Project.

Use of listed products shall be restricted to the category of use for which they are listed. The Contractor shall install all products as recommended by the manufacturer. The Contractor shall replace qualified products not conforming to the Specifications or not properly handled or installed at no additional cost to the Agency.

00160.10 Ordering, Producing, and Furnishing Materials - The Contractor shall not place orders for or produce full quantities of Materials anticipated to be required to complete the Work until the Work has advanced to a stage that allows the quantities to be determined with reasonable accuracy. Upon request, the Engineer will notify the Contractor in writing of the quantities required. Quantity estimates by the Engineer before this notification are only approximate.

(a) Contractor's Duties - In purchasing, producing, or delivering Materials, the Contractor shall take into account the following:

- Kind of work involved;
- Amount of work involved;
- Time required to obtain Materials; and
- Other relevant factors.

(b) Approval of Quantity of Materials Ordered - Materials quantities shown on the Plans, or indicated by quantities and Pay Items, are subject to change or elimination. Therefore, the Contractor is cautioned to order or produce Materials only after having received the approval of the Engineer. The Contractor is responsible for payment for excess Materials delivered to the Project

Site or storage sites without advance authorization from the Engineer. Unless otherwise specified in the Contract, the Agency will not be responsible for:

- Materials the Contractor may deliver or produce in excess of Contract requirements;
- Extra expense the Contractor may incur because Materials were not ordered or produced earlier; or
- The Contractor's expenses related to Materials ordered by the Contractor that are not subsequently approved for use.

Excess Materials ordered or produced by the Contractor without approval of the Engineer may be purchased by the Agency at the sole discretion of the Agency. (See 00195.80.)

00160.20 Preferences for Materials:

(a) Buy America - If $500,000 or more of federal highway funds are involved on the Project, the Contractor shall limit the quantity of foreign Materials incorporated into the Work as follows. Section 635.410 of Title 23, Code of Federal Regulations, and the Intermodal Surface Transportation Efficiency Act require that all iron or steel manufacturing processes, including, without limitation, the casting of ingots, for iron or steel Materials permanently incorporated into the Project shall occur in the United States, unless the cost of foreign-origin iron or steel Materials does not exceed one-tenth of one percent (0.1%) of the Contract Amount or $2,500, whichever is greater. Buy America requirements apply to any steel or iron component of a manufactured product regardless of the overall composition of the manufactured product (e.g., Buy America applies to the steel wire mesh or steel reinforcing components of a precast reinforced concrete pipe). The Contractor shall not incorporate foreign-origin iron or steel Materials in excess of this amount into the Project. All foreign-origin iron or steel Materials incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic iron or steel Materials at the Contractor's expense. For purposes of this Specification, the cost of foreign-origin iron or steel Materials shall be the value of the iron or steel products as of the date they are delivered to the Project Site.

Manufacturing processes include without limitation the casting of ingots and the application of coatings to finished iron or steel products or components. Coatings include epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the steel or iron product or component.

The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any iron or steel products into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all domestic iron or steel Materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

The Contractor shall include this provision in all subcontracts.

(b) Buy Oregon - According to ORS 279A.120, the Contractor shall give preference to goods or services produced in Oregon if price, fitness, availability, and quality are equal. This provision does not apply to contracts financed wholly or in part by federal funds.

(c) Recycled Materials - According to ORS 279A.010, ORS 279A.125, ORS 279A.145, ORS 279A.150, and ORS 279A.155, and subject to the approval of the Engineer, the Contractor shall use recycled products to the maximum extent economically feasible.

(d) Build America Buy America Act Requirements - If federal highway funds are involved on the Project, the Contractor shall comply with the Build America Buy America Act and implementing regulations (Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, Sections 70901-70941).

The Build America Buy America Act requirements apply to construction materials permanently incorporated in the Project. All construction materials permanently incorporated in the Project must be produced in the United States.

Construction materials include an article, Material, or supply that is or consists primarily of only one of the following, with the standard for the material to be considered ''produced in the United States'':

- **Non-ferrous metals** - All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
- **Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)** - All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
- **Glass (including optic glass)** - All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
- **Fiber optic cable (including drop cable)** - All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
- **Optical fiber** - All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
- **Lumber** - All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
- **Drywall** - All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
- **Engineered wood** - All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

The classification of an article, material, or supply as construction material is based on its status at the time it is brought to the work site for incorporation in the Project. In general, the work site is the location of the Project at which the construction materials will be incorporated.

Manufactured products assembled outside the Project Site are not subject to the Build America Buy America requirements. Manufactured products means articles, materials, or supplies that have been:

- Processed into a specific form and shape; or
- Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

The USDOT issued a Public Interest Waiver for De Minimis Costs and Small Grants. The final waiver can be viewed here:
https://www.federalregister.gov/documents/2023/08/16/2023-17602/waiver-of-buy-america-requirements-for-de-minimis-costs-and-small-grants and this waiver applies to Materials covered by the Build America Buy America Act.

The public interest waiver is for manufactured products and construction materials for which:

- The total value of the non-compliant products (foreign or unknown origin) is no more than the lesser of $1,000,000 or 5% of total applicable costs for the project*; or
- The total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

*The “total value of the non-compliant products” includes construction materials only. The “total applicable costs” includes construction materials, iron and steel, and manufactured products. The value of materials are the actual cost of the materials, not the anticipated cost of materials. Furthermore, this bullet does not apply to iron and steel subject to the requirements of 23 U.S.C. 313. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for steel and iron. (See 00160.20(a).)

Strict compliance with the Build America, Buy America domestic preferences is required, except to the extent the above public interest waiver applies. The Contractor shall not incorporate construction materials in excess of this amount into the Project. All foreign origin construction Materials incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic construction Materials at the Contractor's expense.

The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any applicable construction materials into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the products and Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all applicable construction materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

Iron and steel Materials and manufactured products that are predominately iron or steel are subject to 00160.20(a).

The Contractor shall include this provision in all subcontracts.

00160.21 Cargo Preference Act Requirements - If federal highway funds are involved on the Project, the Contractor shall comply with the Cargo Preference Act and implementing regulations (46 CFR Part 381) for use of United States flag ocean vessels transporting materials or equipment acquired specifically for the Project. Strict compliance is required, including, but not limited to, the clauses in 46 CFR 381.7(a) and (b), which are incorporated by reference. The Contractor shall also include this provision in all subcontracts.

00160.30 Agency-Furnished Materials - Unless otherwise specified in the Special Provisions, Materials listed as Agency-furnished will be available to the Contractor free of charge.

The Contractor shall be responsible for all Materials furnished by the Agency and shall pay all demurrage and storage charges. The Contractor shall replace at its expense Agency-furnished Materials lost or damaged due to any cause.

The locations at which Agency-furnished Materials are available will be specified in the Special Provisions. If the locations are not listed in the Special Provisions, the Agency-furnished Materials will be furnished to the Contractor at the Project Site. In either case, all costs of handling, hauling, unloading, and placing Agency-furnished Material shall be considered included in the price paid for the Pay Item involving such Material.

All Agency-furnished Materials not incorporated into the Work remain the property of the Agency. The Contractor shall deliver such Materials as directed by the Engineer.

00160.40 Agency-Furnished Sources - The Agency may list in the Special Provisions, or show on the Plans, Borrow pits or Aggregate sources from which the Contractor may, or shall, obtain Materials. These sources will be identified and referred to as Prospective or Mandatory Sources. A development plan will be included in Section 00235 of the Special Provisions when such sources are shown on the Plans.

(a) Working in a Different Area of the Materials Source - If the Contractor desires to work in a different area of the Materials source than that shown on the development plan, the Contractor must submit a written request stating the reasons for the requested change. If a new land use permit, development plan, or reclamation plan is needed, the Contractor must submit it and obtain approval from the Engineer before starting work in any area other than that shown on the Plans. Approval for work in a different area will not entitle the Contractor to any added compensation or adjustment of Contract Time.

The Agency will not be responsible for the availability of sources other than as stated in the Special Provisions. If the Contractor has given notice of intent to use, but does not use the source(s) on the Project, the Contractor shall reimburse the Agency for any costs the Agency incurs in making such source(s) available.

(b) Cost of Sources - Unless otherwise specified in the Special Provisions, any Prospective or Mandatory Source will be provided by the Agency for use without payment of royalty or other charge. (See 00160.50.)

(c) Exhaustion of Sources - If the Engineer determines that the quantities of specified Materials that can be produced from a Mandatory Source are insufficient for the Work, and it becomes necessary to move to another source, the Agency will pay for the reasonable cost of moving the plant to, and erecting it at, a new approved source from which specified Materials can be produced. Adjustment in hauling costs, other costs, and Contract Time will be determined as provided in 00140.30.

No allowance, reimbursement, compensation, or adjustment will be made for changes in the use of sources, or for moving from one source to another, except as provided above.

00160.50 Agency-Controlled Land; Limitations and Requirements:

(a) General - The Contractor shall have no property rights in, or right of occupancy on, Agency-Controlled Land. Nor shall the Contractor have the right to sell, use, remove, or otherwise dispose of any material from Agency-Controlled Land, areas, or property, except as specified or by the written authorization of the Engineer.

Unless authorized in the Contract, the Contractor shall not disturb any material within Rights-of-Way without written authorization from the Engineer.

Unless otherwise specified in the Contract, the ownership of all materials originating on Agency-Controlled Lands will at all times vest in, and remain within the control of, the Agency.

(b) Waste, Excess, and By-Product Materials - All waste, excess, and by-product materials, collectively referred to in this Subsection as "By-Products", from the manufacture or production of Aggregate Materials from Agency-Controlled Lands shall remain Agency property. Unless otherwise ordered by the Engineer in writing, By-Products shall be placed as required by the development plan:

- In stockpiles at designated locations;
- At locations and in shapes that are readily accessible; and

- In such a manner as to avoid fouling areas containing useable materials, or interfering with future plant setups to use materials from the property.

The Agency will not compensate the Contractor for handling and stockpiling By-Products according to the development plan requirements. If by written order the Engineer directs the Contractor to stockpile or place designated By-Products at alternate sites, the By-Products designated shall be loaded, hauled, and placed as directed, and this work will be paid for according to 00195.20.

00160.60 Contractor-Furnished Materials and Sources:

(a) General - The Contractor shall furnish, at its own expense, all products and Materials required for the Project from sources of its own choosing, unless such sources have been specified in the Special Provisions or Plans as Prospective or Mandatory Sources.

(b) Acquisition of Sources - The Contractor shall acquire, at its own expense, the rights of access to, and the use of, all sources the Contractor chooses that are not Agency-controlled and made available by the Agency to the Contractor.

(c) Additional Requirements - Except for continuously-operated commercial sources, Work shall not begin, nor will any Materials be accepted by the Engineer, until the Contractor has:

(1) Given to the Engineer a copy of permits from, or proof that permits are not required from:

- The Department of Geology and Mineral Industries, as required under ORS 517.790;
- The Department of State Lands, as required under ORS 196.815 (when removing material from the bed or banks of any waters or from any Wetland); and
- Local governmental authorities having jurisdiction over land use at the source location.

(2) Furnished to the Engineer written approval of the property owner, if other than the Contractor, for the Contractor's proposed plans of operation in, and reclamation of, the source.

00160.70 Requirements for Plant Operations - Before operating mixing plants, Rock crushers, or other Equipment, the Contractor shall provide the Engineer copies of all applicable discharge permits for noise, air contaminants, and water pollutants from DEQ or applicable local jurisdictions, or a letter from DEQ or the local jurisdiction stating that no permits are required for the use of the Equipment and sites.

00160.80 Requirements for Sources of Borrow and Aggregate - The Contractor shall conduct operations according to all applicable federal, State, and local laws (including, without limitation, ORS Chapter 517 and OAR 632-030) when developing, using, and reclaiming all sources of Borrow Material and Aggregate. The Contractor shall provide erosion control at Borrow sources that are not within the Project Site. The Contractor shall not operate in Wetlands except as allowed by permit. The Contractor shall comply with all requirements for pollution and sediment control, including, without limitation, the National Pollutant Discharge Elimination System where applicable.

Except for continuously-operated commercial sources, the Contractor shall also conform to the following:

(a) If a natural growth of trees or shrubs is present, preserve a border of such to conceal land scars.

(b) Excavate Borrow sources and Aggregate sources, except for those in streams and rivers, to provide:

- Reasonably uniform depths and widths;
- Natural drainage so no water stands or collects in excavated areas, when practicable;
- Slopes trimmed to blend with the adjacent terrain upon completion of operations;
- Slopes covered with native Soil, or acceptable plant rejects to support plant growth, if required by Specifications, Plans, or permits; and
- A vegetative cover that blends with the adjacent natural growth.

(c) Excavate in quarries so that:

- Faces will not be steeper than vertical (no overhang);
- Vertical faces conform to Oregon OSHA standards, Division 3, and as shown on an approved development plan;
- Floors or benches are excavated to a uniform Slope free of depressions and will drain and not interfere with the downland owner's property; and
- Upon completion, the quarry is left appearing neat and compatible with surrounding terrain.

(d) Obliterate haul roads specifically built for access to sources, and restore the areas disturbed by these roads as nearly as practicable to the conditions that existed before the roads were built, unless otherwise directed by the landowner or regulatory body.

Section 00165 - Quality of Materials

Description

00165.00 General - The Contractor shall incorporate into the Work only Materials conforming to the Specifications and approved by the Engineer. The Contractor shall incorporate into the Work only manufactured products made of new materials unless otherwise specified in the Contract. The Agency may require additional testing or retesting to determine whether the Materials or manufactured products meet Specifications.

Materials or manufactured products not meeting the Specifications at the time they are to be used are unacceptable and must be removed immediately from the Project Site, unless otherwise directed by the Engineer.

00165.01 Rejected Materials - The Engineer may reject any Materials that appear to be defective (see 00150.25) or that contain asbestos. The Contractor shall not incorporate any rejected Materials into the Work. Rejected Materials whose defects have been corrected may not be incorporated into the Work until the Engineer has approved their use. The Engineer may order the removal and replacement by the Contractor, at the Contractor's expense, of any defective Materials. (See also 00150.20.)

00165.02 Materials Conformance and Quality Compliance Documents - For purposes of this Section, "Materials Conformance Documents" means the Contractor's quality control, the Agency's verification, and the independent assurance test results, and the identity of the testing facility, as specified in the ODOT *Manual of Field Test Procedures* (MFTP), section 2, Quality Assurance Program, unless otherwise specified in the Contract.

For purposes of this Section, "Quality Compliance Documents" means those documents specified in ODOT's *Nonfield-Tested Materials Acceptance Guide*, unless otherwise specified in the Contract.

00165.03 Testing by Agency - When testing Materials, the Agency will have tests conducted in laboratories designated by the Engineer, even though certain AASHTO, ASTM, and other materials specifications may require testing at the place of manufacture. Results of the Agency's tests will be made available to the Contractor.

00165.04 Costs of Testing - When the Contract requires that the Agency perform the testing, the testing will be at the Agency's expense. The Agency will pay the cost of Contractor-requested source-review tests on unprocessed Aggregates from no more than two sources for each Project, and on no more than three unprocessed samples from each source. Additional source-review tests performed at the Contractor's request shall be at the Contractor's expense.

Unless otherwise provided in the Contract, all testing required to be performed by the Contractor will be at the Contractor's expense.

Provisions and Requirements

00165.10 Materials Acceptance Guides - Unless otherwise specified elsewhere in the Contract, Materials will be accepted according to the following guides:

(a) Field-Tested Materials - Field-tested Materials will be accepted according to the MFTP. The MFTP is published once per year and is available from the ODOT Construction Section; 800 Airport Road SE; Salem, OR 97301-4798; phone 503-986-3000. The MFTP is also available on the ODOT Construction Section website (see 00110.05(e)). The most current version of the MFTP on the date of Advertisement is the version in effect for the Project.

(b) Nonfield-Tested Materials - Nonfield-tested Materials will be accepted according to the ODOT *Nonfield Tested Materials Acceptance Guide* (NTMAG), unless otherwise specified in the Contract. The NTMAG is available on the ODOT Construction Section website (see 00110.05(e)). The most current version of the NTMAG on the date of Advertisement is the version in effect for the Project.

00165.20 Materials Specifications and Test Method References - References to materials specifications and test methods of ODOT, WAQTC, AASHTO, ASTM, other governmental agencies, or other recognized organizations mean those officially adopted and in current use by the agency or organization on the date of Advertisement.

If there are conflicting references, or if no reference is made to materials specifications, sampling and testing frequencies, or test method, the Engineer will resolve any discrepancies between these documents in the following orders of precedence:

Field-Tested Materials:

- Amendments
- Contract Change Orders;
- Special Provisions;
- ODOT *Laboratory Manual of Test Procedures*;
- MFTP; and
- Standard Specifications.

Nonfield-Tested Materials:

- Amendments
- Contract Change Orders;
- Special Provisions;
- ODOT *Laboratory Manual of Test Procedures*; and
- Standard Specifications.

Material test methods:

- ODOT;
- WAQTC;
- AASHTO;
- ASTM;
- Other recognized national organizations, such as ANSI, AWPA, IMSA, ISSA, and UL; and
- Industry standards in the location where the Work is being performed.

Sampling and testing frequencies:

- Amendments
- Contract Change Orders;
- Special Provisions;
- MFTP; and
- Standard Specifications.

If the Contractor identifies conflicting references or if no reference is made, the Contractor shall immediately request a clarification from the Engineer.

00165.30 Field-Tested Materials:

(a) Contractor's Duties - The Contractor shall:

- Furnish Materials of the quality specified in the Contract;
- Provide and administer a quality control program as described in the Quality Assurance Program portion of the MFTP. Upon request, the Contractor shall provide to the Engineer the names, telephone numbers, and copies of certifications for all personnel performing field testing; and
- Perform other testing as required by the Contract.

(b) Types of Tests - The types of tests and testing methods generally required by the Agency are described in the MFTP.

(c) Acceptance of Field-Tested Materials - The Contractor's test results for field-tested Materials will be verified by the Agency according to the Quality Assurance Program in the MFTP. If the Agency's QA test results verify the Contractor's results, the Materials will be analyzed for acceptance according to one of the following methods before the Engineer will accept them for incorporation into the Work:

- Statistically, according to 00165.40, to determine "Pay Factors" for produced Aggregate;
- Statistically, according to 00165.40, to determine "Composite Pay Factors" for mixtures; or
- Other methods determined by the Engineer.

If the Agency's QA verification test results do not verify the Contractor's test results, the Agency may require additional testing to determine whether the Materials meet Specifications. The Contractor shall perform additional testing or provide samples to the Agency for testing as directed. If the Materials do not meet Specifications, the Contractor shall reimburse the Agency for the cost of the additional testing, which may be deducted from monies due or to become due the Contractor under the Contract. Incorporated Materials that do not meet Specifications will be evaluated according to 00165.01 and 00150.25. If the Materials meet Specifications, the Agency will pay the cost for the additional testing.

00165.35 Nonfield-Tested Materials - The Contractor shall furnish Materials meeting Specifications, along with all Materials Conformance and Quality Compliance Documents.

Materials will be subject to acceptance testing if the Engineer so elects. The Engineer may reject damaged or non-specification materials regardless of the Materials Conformance Documents furnished.

(a) Test Results Certificate - The certificate shall:

- Be from the manufacturer, verifying that the Material furnished has been sampled and tested and the test results meet the Specifications.
- Include, or be accompanied by, a copy of the specified test results (ODOT, AASHTO, ASTM, UL or other).
- Identify the testing agency and the representative responsible for the test results.

- Permit positive determination that Material delivered to the Project is the same Material covered by the test results.
- Be delivered to the Engineer with the shipment of the material.

(b) Quality Compliance Certificate - The certificate shall be from the manufacturer and shall:

- Verify that the Material meets the Specifications, and identify by number the specified test methods used, (ODOT, AASHTO, ASTM, UL, or other).
- Permit positive determination that Material delivered to the Project is the same Material covered by the certificate.
- Be delivered to the Engineer with the shipment of the Material, or be an identification plate or mark, decal, sticker, label, or tag attached to the container or Material.

(c) Equipment List and Drawings - These consist of lists of proposed Equipment and Materials, such as:

- Shop drawings
- Material lists
- Equipment lists
- Catalog description sheets
- Manufacturer's brochures

Submit these lists to the Engineer for review of conformance with the Specifications.

(d) Certificate of Origin of Steel Materials - When a certificate of material origin for steel or iron Materials is specified, complete ODOT Form 734-2126 as required by 00160.20(a) for Federal-aid projects.

(e) Certificate of Origin of Construction Materials - When a certificate of material origin for construction materials is specified, complete the form furnished by the Engineer as required by 00160.20(d) for Federal-aid projects.

00165.40 Statistical Analysis - When 00165.30(c) or 00165.50 applies, the Contractor shall divide the Materials into lots and sublots, randomly sample and test them as required, and analyze the results statistically to determine whether the Materials conform to the Specifications.

All acceptance test results of lots and sublots will be analyzed collectively using the Quality Level Analysis procedure set out in this Subsection. This procedure shall not be used for a lot with less than three sublots. Sampling of Material for a lot that contains two or fewer sublots shall be increased to obtain at least three sublots. The Engineer has discretion to either accept or reject lots originating with two or fewer sublots, even after sampling is increased.

(a) Lot - A lot is the quantity of Materials produced by a single process or JMF that is sampled, tested, and statistically evaluated, as specified in this Subsection.

(b) Sublot - A sublot is a portion of a lot, for which a sample test value may be normally obtained.

(c) Quality Level Analysis - Quality Level Analysis is a statistical procedure to determine, for each lot:

- The percentage of each constituent of the Materials meeting Specifications;
- The Pay Factor for each constituent; and

- The Composite Pay Factor, when specified.

(d) Pay Factor and Composite Pay Factor Computation - Procedures for determining the percent meeting Specifications, Pay Factors, and Composite Pay Factor for a lot of Materials are as follows:

(1) Compute lot arithmetic mean ($\overline{X}$) for each constituent:

$$\overline{X} = \frac{\Sigma X}{n}$$

Where ΣX = summation of sample test values
n = total number of samples

(2) Compute standard deviation (sd) for each constituent:

$$sd = \sqrt{\frac{\Sigma X^2 - n\overline{X}^2}{n-1}}$$

Where ΣX^2 = summation of the squares of each sample test value
$\overline{X}^2$ = square of the lot arithmetic mean

(3) Compute the upper quality index (Q_U) for each constituent:

$$Q_U = \frac{USL - \overline{X}}{sd}$$

Where USL (upper specification limit) is the target value plus allowable tolerance

(4) Compute the lower quality index (Q_L) for each constituent:

$$Q_L = \frac{\overline{X} - LSL}{sd}$$

Where LSL (lower specification limit) is the target value minus allowable tolerance

(5) From Table 00165-1, for each constituent, determine the percent within the upper specification limit (P_U) which corresponds to a given Q_U. If USL is 100% or is not specified, P_U will be 100.

(6) From Table 00165-1, for each constituent, determine the percent within the lower specification limit (P_L) which corresponds to a given Q_L. If LSL is 0 or not specified, P_L will be 100.

(7) Compute the quality level, or total percent within Specification limits (P_T), for each constituent:

$$P_T = (P_U + P_L) - 100$$

(8) Using the P_T from Step 7, determine the Pay Factor (PF) from Table 00165-2 for each constituent tested. A minimum PF of 1.00 will be used when all sublot test values are within the upper and lower Specification limits, regardless of the calculated PF.

(9) Compute the Weighted Pay Factor (WPF) for each constituent:

$$WPF = (PF) \times (f_i)$$

Where f_i = weighting factor listed in the Specifications for each constituent tested.

(10) Compute the Composite Pay Factor (CPF) for the lot and report the results to three decimal places.

$$CPF = \frac{\sum WPF}{\sum f_i}$$

Where $\sum WPF$ = sum of the weighted pay factors for each constituent

$\sum f_i$ = sum of the weighting factors listed in the Specifications

Table 00165-1

QUALITY LEVEL ANALYSIS BY THE STANDARD DEVIATION METHOD								
P_U or P_L PERCENT WITHIN LIMITS FOR POSITIVE VALUES OF Q_U or Q_L	UPPER QUALITY INDEX Q_U OR LOWER QUALITY INDEX Q_L							
	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9	n = 10 to n = 11
100	1.16	1.50	1.79	2.03	2.23	2.39	2.53	2.65
99	-	1.47	1.67	1.80	1.89	1.95	2.00	2.04
98	1.15	1.44	1.60	1.70	1.76	1.81	1.84	1.86
97	-	1.41	1.54	1.62	1.67	1.70	1.72	1.74
96	1.14	1.38	1.49	1.55	1.59	1.61	1.63	1.65
95	-	1.35	1.44	1.49	1.52	1.54	1.55	1.56
94	1.13	1.32	1.39	1.43	1.46	1.47	1.48	1.49
93	-	1.29	1.35	1.38	1.40	1.41	1.42	1.43
92	1.12	1.26	1.31	1.33	1.35	1.36	1.36	1.37
91	1.11	1.23	1.27	1.29	1.30	1.30	1.31	1.31
90	1.10	1.20	1.23	1.24	1.25	1.25	1.26	1.26
89	1.09	1.17	1.19	1.20	1.20	1.21	1.21	1.21
88	1.07	1.14	1.15	1.16	1.16	1.16	1.16	1.17
87	1.06	1.11	1.12	1.12	1.12	1.12	1.12	1.12
86	1.04	1.08	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.04	1.04	1.04	1.04	1.04
84	1.01	1.02	1.01	1.01	1.00	1.00	1.00	1.00
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96	0.96
82	0.97	0.96	0.95	0.94	0.93	0.93	0.93	0.92
81	0.96	0.93	0.91	0.90	0.90	0.89	0.89	0.89
80	0.93	0.90	0.88	0.87	0.86	0.86	0.86	0.85
79	0.91	0.87	0.85	0.84	0.83	0.82	0.82	0.82
78	0.89	0.84	0.82	0.80	0.80	0.79	0.79	0.79
77	0.87	0.81	0.78	0.77	0.76	0.76	0.76	0.75
76	0.84	0.78	0.75	0.74	0.73	0.73	0.72	0.72
75	0.82	0.75	0.72	0.71	0.70	0.70	0.69	0.69
74	0.79	0.72	0.69	0.68	0.67	0.66	0.66	0.66
73	0.76	0.69	0.66	0.65	0.64	0.63	0.63	0.62
72	0.74	0.66	0.63	0.62	0.61	0.60	0.60	0.59
71	0.71	0.63	0.60	0.59	0.58	0.57	0.57	0.57
70	0.68	0.60	0.57	0.56	0.55	0.55	0.54	0.54
69	0.65	0.57	0.54	0.53	0.52	0.52	0.51	0.51
68	0.62	0.54	0.51	0.50	0.49	0.49	0.48	0.48
67	0.59	0.51	0.47	0.47	0.46	0.46	0.46	0.45
66	0.56	0.48	0.45	0.44	0.44	0.43	0.43	0.43
65	0.52	0.45	0.43	0.41	0.41	0.40	0.40	0.40
64	0.49	0.42	0.40	0.39	0.38	0.38	0.37	0.37
63	0.46	0.39	0.37	0.36	0.35	0.35	0.35	0.34
62	0.43	0.36	0.34	0.33	0.32	0.32	0.32	0.32
61	0.39	0.33	0.31	0.30	0.30	0.29	0.29	0.29
60	0.36	0.30	0.28	0.27	0.27	0.27	0.26	0.26
59	0.32	0.27	0.25	0.25	0.25	0.24	0.24	0.24
58	0.29	0.24	0.23	0.22	0.21	0.21	0.21	0.21
57	0.25	0.21	0.20	0.19	0.19	0.19	0.18	0.18
56	0.22	0.18	0.17	0.16	0.16	0.16	0.16	0.16
55	0.18	0.15	0.14	0.14	0.13	0.13	0.13	0.13
54	0.14	0.12	0.11	0.11	0.11	0.11	0.10	0.10
53	0.11	0.09	0.08	0.08	0.08	0.08	0.08	0.08
52	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05
51	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE: For negative values of Q_U or Q_L, P_U or P_L is equal to 100 minus the table value for P_U or P_L. If the value of Q_U or Q_L does not correspond exactly to a figure in the table, use the next higher figure.

Table 00165-1

QUALITY LEVEL ANALYSIS BY THE STANDARD DEVIATION METHOD							
P_U or P_L PERCENT WITHIN LIMITS FOR POSITIVE VALUES OF Q_U OR Q_L	UPPER QUALITY INDEX Q_U OR LOWER QUALITY INDEX Q_L						
	n = 12 to n = 14	n = 15 to n = 18	n = 19 to n = 25	n = 26 to n = 37	n = 38 to n = 69	n = 70 to n = 200	n = 201 to n = ∞
100	2.83	3.03	3.20	3.38	3.54	3.70	3.83
99	2.09	2.14	2.18	2.22	2.26	2.29	2.31
98	1.91	1.93	1.96	1.99	2.01	2.03	2.05
97	1.77	1.79	1.81	1.83	1.85	1.86	1.87
96	1.67	1.68	1.70	1.71	1.73	1.74	1.75
95	1.58	1.59	1.61	1.62	1.63	1.63	1.64
94	1.50	1.51	1.52	1.53	1.54	1.55	1.55
93	1.44	1.44	1.45	1.46	1.46	1.47	1.47
92	1.37	1.38	1.39	1.39	1.40	1.40	1.40
91	1.32	1.32	1.33	1.33	1.33	1.34	1.34
90	1.26	1.27	1.27	1.27	1.28	1.28	1.28
89	1.21	1.22	1.22	1.22	1.22	1.22	1.23
88	1.17	1.17	1.17	1.17	1.17	1.17	1.17
87	1.12	1.12	1.12	1.12	1.12	1.13	1.13
86	1.08	1.08	1.08	1.08	1.08	1.08	1.08
85	1.04	1.04	1.04	1.04	1.04	1.04	1.04
84	1.00	1.00	1.00	1.00	0.99	0.99	0.99
83	0.96	0.96	0.96	0.96	0.95	0.95	0.95
82	0.92	0.92	0.92	0.92	0.92	0.92	0.92
81	0.88	0.88	0.88	0.88	0.88	0.88	0.88
80	0.85	0.85	0.85	0.84	0.84	0.84	0.84
79	0.81	0.81	0.81	0.81	0.81	0.81	0.81
78	0.78	0.78	0.78	0.78	0.77	0.77	0.77
77	0.75	0.75	0.75	0.74	0.74	0.74	0.74
76	0.71	0.71	0.71	0.71	0.71	0.71	0.71
75	0.68	0.68	0.68	0.68	0.68	0.68	0.67
74	0.65	0.65	0.65	0.65	0.65	0.64	0.64
73	0.62	0.62	0.62	0.62	0.62	0.61	0.61
72	0.59	0.59	0.59	0.59	0.59	0.58	0.58
71	0.56	0.56	0.56	0.56	0.56	0.55	0.55
70	0.53	0.53	0.53	0.53	0.53	0.53	0.52
69	0.50	0.50	0.50	0.50	0.50	0.50	0.50
68	0.48	0.48	0.47	0.47	0.47	0.47	0.47
67	0.45	0.45	0.45	0.44	0.44	0.44	0.44
66	0.42	0.42	0.42	0.42	0.41	0.41	0.41
65	0.39	0.39	0.39	0.39	0.39	0.39	0.39
64	0.37	0.37	0.36	0.36	0.36	0.36	0.36
63	0.34	0.34	0.34	0.34	0.33	0.33	0.33
62	0.31	0.31	0.31	0.31	0.31	0.31	0.31
61	0.29	0.29	0.28	0.28	0.28	0.28	0.28
60	0.26	0.26	0.26	0.26	0.26	0.25	0.25
59	0.23	0.23	0.23	0.23	0.23	0.23	0.23
58	0.21	0.21	0.20	0.20	0.20	0.20	0.20
57	0.18	0.18	0.18	0.18	0.18	0.18	0.18
56	0.15	0.15	0.15	0.15	0.15	0.15	0.15
55	0.13	0.13	0.13	0.13	0.13	0.13	0.13
54	0.10	0.10	0.10	0.10	0.10	0.10	0.10
53	0.08	0.08	0.08	0.08	0.08	0.08	0.08
52	0.05	0.05	0.05	0.05	0.05	0.05	0.05
51	0.03	0.03	0.03	0.03	0.03	0.03	0.02
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE: For negative values of Q_U or Q_L, P_U or P_L is equal to 100 minus the table value for P_U or P_L. If the value of Q_U or Q_L does not correspond exactly to a figure in the table, use the next higher figure.

Table 00165-2

	REQUIRED QUALITY LEVEL FOR A GIVEN SAMPLE SIZE (n) AND A GIVEN PAY FACTOR							
PAY FACTOR	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9	n = 10 to n = 11
1.05	100	100	100	100	100	100	100	100
1.04	90	91	92	93	93	93	94	94
1.03	80	85	87	88	89	90	91	91
1.02	75	80	83	85	86	87	88	88
1.01	71	77	80	82	84	85	85	86
1.00	68	74	78	80	81	82	83	84
0.99	66	72	75	77	79	80	81	82
0.98	64	70	73	75	77	78	79	80
0.97	62	68	71	74	75	77	78	78
0.96	60	66	69	72	73	75	76	77
0.95	59	64	68	70	72	73	74	75
0.94	57	63	66	68	70	72	73	74
0.93	56	61	65	67	69	70	71	72
0.92	55	60	63	65	67	69	70	71
0.91	53	58	62	64	66	67	68	69
0.90	52	57	60	63	64	66	67	68
0.89	51	55	59	61	63	64	66	67
0.88	50	54	57	60	62	63	64	65
0.87	48	53	56	58	60	62	63	64
0.86	47	51	55	57	59	60	62	63
0.85	46	50	53	56	58	59	60	61
0.84	45	49	52	55	56	58	59	60
0.83	44	48	51	53	55	57	58	59
0.82	42	46	50	52	54	55	57	58
0.81	41	45	48	51	53	54	56	57
0.80	40	44	47	50	52	53	54	55
0.79	38	43	46	48	50	52	53	54
0.78	37	41	45	47	49	51	52	53
0.77	36	40	43	46	48	50	51	52
0.76	34	39	42	45	47	48	50	51
0.75	33	38	41	44	46	47	49	50
REJECT	QUALITY LEVELS LESS THAN THOSE SPECIFIED FOR A 0.75							

NOTE: If the computed QUALITY LEVEL does not correspond exactly to a figure in the table, use the next lower value.

Table 00165-2

	REQUIRED QUALITY LEVEL FOR A GIVEN SAMPLE SIZE (n) AND A GIVEN PAY FACTOR						
PAY FACTOR	n = 12 to n = 14	n = 15 to n = 18	n = 19 to n = 25	n = 26 to n = 37	n = 38 to n = 69	n = 70 to n = 200	n = 201 to n = ∞
1.05	100	100	100	100	100	100	100
1.04	95	95	96	96	97	97	99
1.03	92	93	93	94	95	95	97
1.02	89	90	91	92	93	94	95
1.01	87	88	89	90	91	93	94
1.00	85	86	87	89	90	91	93
0.99	83	85	86	87	88	90	92
0.98	81	83	84	85	87	88	90
0.97	80	81	83	84	85	87	89
0.96	78	80	81	83	84	86	88
0.95	77	78	80	81	83	85	87
0.94	75	77	78	80	81	83	86
0.93	74	75	77	78	80	82	84
0.92	72	74	75	77	79	81	83
0.91	71	73	74	76	78	80	82
0.90	70	71	73	75	76	79	81
0.89	68	70	72	73	75	77	80
0.88	67	69	70	72	74	76	79
0.87	66	67	69	71	73	75	78
0.86	64	66	68	70	72	74	77
0.85	63	65	67	69	71	73	76
0.84	62	64	65	67	69	72	75
0.83	61	63	64	66	68	71	74
0.82	60	61	63	65	67	70	72
0.81	58	60	62	64	66	69	71
0.80	57	59	61	63	65	67	70
0.79	56	58	60	62	64	66	69
0.78	55	57	59	61	63	65	68
0.77	52	56	57	60	62	64	67
0.76	51	55	56	58	61	63	66
0.75	51	53	55	57	59	62	65
REJECT	QUALITY LEVELS LESS THAN THOSE SPECIFIED FOR A 0.75						

NOTE: If the computed QUALITY LEVEL does not correspond exactly to a figure in the table, use the next lower value.

00165.50 Statistical Acceptance Sampling and Testing - The Contractor shall sample and test Materials for acceptance, as required by the Contract. The Contractor may statistically evaluate test results for purposes of quality control or to predict a Pay Factor or Composite Pay Factor. The following apply:

(a) Statistical Acceptance - The Engineer will perform statistical analysis according to 00165.40 for acceptance and to determine a Pay Factor (PF) or Composite Pay Factor (CPF). The Engineer's determination of the PF or CPF shall be controlling.

(b) Pay Adjustments - As an incentive to produce quality Materials, the Engineer's acceptance will be based upon the following:

(1) Specification Materials - For Materials accepted by a PF, when all constituents of a Material have a PF of 1.00 or greater, that Material will be considered specification Materials. For Materials accepted by a CPF, all Materials with a CPF of 1.0000 or greater will be considered specification Materials. Materials with a CPF greater than 1.0000, when specified, may earn a CPF adjustment of greater than 1.0000, up to a maximum of 1.0500.

(2) Non-specification Materials - For Materials accepted by a PF, when any constituent of a Material has a PF of less than 1.00, that Material will be considered non-specification Material. For Materials accepted by a CPF, all Materials with a CPF less than 1.0000 will be considered non-specification Materials. A lot containing non-specification Materials will be evaluated as described in 00165.50(c).

(c) Non-specification Materials:

(1) Isolation of a Partial Sublot - The Engineer may isolate from a sublot or adjoining sublots any Material that the Contractor's test results show to be non-specification. The Contractor shall perform additional testing or provide samples to the Agency as directed. The Engineer will accept or reject the Material according to 00150.25.

(2) Isolation of an Entire Sublot - The Engineer may isolate a sublot or a series of sublots in which the Contractor's test results show the Material to be non-specification. The Contractor shall perform additional testing or provide samples to the Agency as directed. The isolated Material will be evaluated as a separate lot. The Engineer will accept or reject the Material according to 00150.25.

(3) A Lot-in-Progress - The Contractor shall shut down production when any of the following occurs:

- The CPF for a lot-in-progress drops below 1.0000, and the Contractor is taking no corrective action;
- The CPF is less than 0.7500; or
- Any constituent test is continually out of Specification limits, regardless of whether or not the CPF is below 0.7500.

The Contractor shall not resume production until the Engineer has determined that Specification Materials can be produced, and has given approval to resume.

(4) An Entire Lot - The Engineer may reject an entire lot of Materials with a CPF between 0.7500 and 1.0000, or may take action according to 00150.25.

For a lot of Material with a CPF below 0.7500, the Engineer will take one or more of the following actions:

a. Remain in Place - Allow Materials to remain in place with an appropriate price reduction that may range from 25% to 100% (no payment);

b. Corrective Work - Require corrective work, at the Contractor's expense, with an appropriate price reduction that may range from zero (full payment) to 100% (no payment); or

c. Remove and Replace - Require complete removal and replacement with Specification Materials. No payment will be made for the rejected Materials, the cost of removal, or for the costs of sampling and testing.

00165.70 Use of Materials without Acceptable Materials Conformance Documents:

(a) General - The Contractor shall not incorporate Materials into the Project prior to submittal of Materials Conformance Documents acceptable to the Engineer. The Engineer may waive this requirement temporarily if Materials are necessary for immediate traffic safety.

(b) Materials Incorporated for Immediate Traffic Safety - If Materials are incorporated into the Project for immediate traffic safety before acceptable Materials Conformance Documents are available, no payment will be made for the value of the Materials, or the costs of incorporating them, until Materials Conformance Documents have been submitted to and approved by the Engineer, or the Materials are otherwise found through testing to comply with Specifications.

(c) Contractor's Request for Testing Assistance - If acceptable Materials Conformance Documents are not available, the Contractor may either have the necessary tests performed at a private laboratory or request in writing that the Engineer:

- Determine if the Agency or its agents can sample and test;
- Estimate the cost to the Contractor for the testing service; and
- Estimate the time required to obtain the test results.

The Engineer will provide this information to the Contractor in writing. If the Contractor requests the Engineer, in writing, to proceed, the Engineer will arrange for the sampling and testing, at the Contractor's expense. If these tests determine the Material complies with the Specifications, the Materials may be incorporated into the Project, or for Materials previously incorporated according to (b) above, payment will be authorized.

00165.75 Storage and Handling of Materials - The Contractor shall store and handle Materials so as to preserve their quality and fitness for incorporation into the Work. The Contractor shall restore all storage sites to their original condition according to 00140.90, or to comply with any applicable permits, orders, or agreements, at the Contractor's expense.

Stored Materials:

- Shall be readily accessible for inspection;
- May be stored on approved parts of the Right-of-Way; and
- May be stored on private property if written permission of the owner or lessor is obtained.

Measurement

00165.80 Measurement - No separate measurement will be made of Work performed under this Section.

Payment

00165.90 Incidental Basis - No separate or additional payment will be made for sampling, testing, certification, or other associated Work performed under this Section, whether performed by the Contractor, manufacturer, producer or Supplier. No payment will be made for providing quality control personnel.

00165.91 Fabrication Inspection Expense - Fabrication of certain items outside of the State creates additional shop and plant inspection expense to the Agency. It is impractical, and extremely difficult, to determine the actual additional expenses incurred. Therefore, each time that inspection by or on behalf of the Agency is necessary, payment to the Contractor will be reduced by an amount computed at the following rates:

Zone	Place of Fabrication	Reduction in Payment
1	All of State of Oregon, and those portions of adjacent states within 50 airline miles of the Oregon border	$0
2	Outside of Zone 1, and up to 300 airline miles from the Oregon border	$200 per Calendar Day
3	Outside of Zone 2, up to 3,000 airline miles from the Oregon border, and within the continental United States.	Round trip coach airfare from Portland, Oregon plus $200 per Calendar Day
4	Outside of Zone 3, or outside of the continental United States.	Round trip coach airfare from Portland, Oregon plus $250 per Calendar Day

Calendar Day charges begin on the first day the Agency's Inspector begins travel to begin work at the fabrication site, and continue without interruption through the final day of travel back to the State. The Contractor will be notified in writing of the beginning and ending dates of the Calendar Days used in computing payment reduction.

This Subsection applies to all fabricated items or manufactured Materials that are inspected by or on behalf of the Agency, which include, but are not limited to:

- Structural steel fabrication;
- Prestressed concrete members;
- Precast concrete;
- Signs;
- Preservative treatment of wood products;
- Epoxy coating of reinforcing steel; and
- Other items specifically identified in the Specifications as requiring fabrication site or in-plant inspection by the Agency.

Section 00170 - Legal Relations and Responsibilities

Description

00170.00 General - The Contractor shall comply with all laws, ordinances, codes, regulations, executive orders and administrative rules (collectively referred to as "Laws" in this Section) that relate to the Work or to those engaged in the Work. Where the provisions of the Contract are inconsistent or in conflict with applicable Laws, the Contractor shall comply with the more stringent standard.

The Contractor shall indemnify, defend, and hold harmless the Agency and its representatives from liability arising from or related to the violation of Laws by those engaged in any phase of the Work. This provision does not apply to Work performed by Agency employees.

In any litigation, the entire text of any order or permit issued by a governmental or regulatory authority, as well as any documents referenced or incorporated therein by reference, shall be admissible for the purpose of Contract interpretation.

The characterization of provisions of the Contract as material provisions or the failure to comply with certain provisions as a material breach of the Contract shall in no way be construed to mean that any other provisions of the Contract are not material or that failure to comply with any other provisions is not a material breach of the Contract.

All rights and remedies available to the Agency under applicable Laws are incorporated herein by reference and are cumulative with all rights and remedies under the Contract.

The Contract shall not be construed against either party regardless of which party drafted it. Other than as modified by the Contract, the applicable rules of contract construction and evidence shall apply. This Contract shall be governed by and construed and enforced according to the laws of the State of Oregon without regard to principles of conflict of laws.

Any dispute between the Agency and the Contractor that arises from or relates to this Contract and that is not resolved under the provisions of Section 00199 shall be brought and conducted solely and exclusively within the Circuit Court for the State of Oregon in the county where the Agency's main office is located; provided, however, if a dispute must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this Subsection be construed as a waiver by the State of Oregon on any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States, or otherwise, from any claim or from the jurisdiction of any court. CONTRACTOR BY EXECUTION OF THE CONTRACT HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF THE COURTS REFERENCED IN THIS SECTION.

It is the Agency’s intention to make all payments due under the Contract if funds are legally available for such purpose. The Agency reasonably believes that at the time of entering into the Contract sufficient funds are available and authorized for expenditure to finance the cost of the Contract within the Agency’s appropriation or limitation, or other funding sources. Agency’s payment of amounts under the Contract is contingent on the Agency receiving adequate appropriations, limitations or other expenditure authority or funds to allow the Agency to continue to make payments under the Contract. In the event the Agency becomes aware that sufficient funds are not available and authorized, the Agency will provide prompt written notice to the Contractor, and the Agency may terminate the Contract as provided in 00180.90(c).

Provisions and Requirements

00170.01 Other Agencies Affecting Agency Contracts - Representatives of regulatory bodies or units of government whose Laws may apply to the Work shall have access to the Work according to 00150.20(d). These may include but are not limited to those in the following (a), (b), (c), and (d).

(a) Federal Agencies:

Agriculture, Department of
- Forest Service
- Natural Resource Conservation Service

Army, Department of the
- Corps of Engineers

Commerce, Department of
- National Marine Fisheries Service

Defense, Department of

Energy, Department of

Environmental Protection Agency

Federal Energy Regulatory Commission

Geology Survey

Health and Human Services, Department of

Homeland Security, Department of
- U.S. Coast Guard

Housing and Urban Development, Department of

Interior, Department of
- Heritage, Conservation, and Recreation Service
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Mines
- Bureau of Reclamation
- Geological Survey
- Minerals Management Service
- Office of Surface Mining, Reclamation, and Enforcement

Minerals Management Service

National Oceanic and Atmospheric Administration

Solar Energy and Energy Conservation Bank

U.S. Fish and Wildlife Service

Labor, Department of
- Mine Safety and Health Administration
- Occupational Safety and Health Administration

Transportation, Department of
- Federal Highway Administration

Water Resources Council

(b) State of Oregon Agencies:

Administrative Services, Department of

Agriculture, Department of
- Natural Resources Division
- Soil and Water Conservation District

Columbia River Gorge Commission

Consumer and Business Services, Department of
- Insurance Division
- Oregon Occupational Safety and Health Division

Energy, Office of

Environmental Quality, Department of

Fish and Wildlife, Department of

Forestry, Department of

Geology and Mineral Industries, Department of
Human Resources, Department of
Labor and Industries, Bureau of
Land Conservation and Development Department
Parks and Recreation, Department of
State Lands, Department of
Water Resources Department

(c) Local Agencies:

City Councils
County Courts
County Commissioners, Boards of
Design Commissions
Historical Preservation Commissions
Lane Regional Air Pollution Authority
Planning Commissions
Port Districts
Special Districts

(d) Oregon Federally Recognized Tribal Governments:

Burns Paiute Tribe
Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians
Confederated Tribes of Grand Ronde
Confederated Tribes of Siletz
Confederated Tribes of Umatilla Indian Reservation
Confederated Tribes of Warm Springs
Coquille Tribe
Cow Creek Band of Umpqua Indians
Klamath Tribe

00170.02 Permits, Licenses, and Taxes - As required to accomplish the Work, the Contractor shall do the following:

- Obtain all necessary permits and licenses, except for those noted in 00170.03;
- Pay all applicable charges, fees and taxes, except for those noted in 00170.03;
- Give all notices required by applicable Laws, or under the terms of the Contract;
- Comply with ORS 274.530 relating to lease of stream beds by Oregon Division of State Lands;
- License, in the State of Oregon, all vehicles subject to licensing;
- Comply with ORS 477.625 and ORS 527.670 relating to clearing and fire hazards on forest lands; and
- Comply with all orders and permits issued by a governmental authority, whether local, State, or federal.

00170.03 Furnishing Right-of-Way and Permits - Unless required to be obtained in the name of the Contractor, the Agency will obtain and pay for the following when they are required by the applicable Laws or by Plans or Specifications:

- All necessary Rights-of-Way;
- Permits required for crossing or encroaching upon navigable streams;
- Permits required for removing materials from or depositing materials in waterways;
- Permits required for operating in Agency-controlled source of Materials or disposal area;
- System development fees charged by local units of government;
- Building construction permits, not including specialty work such as heating, ventilation, air conditioning, or electrical;
- Cost of referencing and replacing endangered survey monuments; and
- Environmental permits, including erosion control permits.

00170.04 Patents, Copyrights, and Trademarks - Prior to use of designs, devices, materials, or processes protected by patent, copyright, or trademark, the Contractor shall obtain from the Entity entitled to enforce the patent, copyright, or trademark all necessary evidence of Contractor's legal right to use such design, device, material, or process.

The Contractor shall indemnify, defend and hold harmless the Agency and all third parties and political subdivisions having a possessory or ownership interest or regulatory authority over the Project or Project Site from claims of patent, copyright or trademark infringement, and from costs, expenses and damages the Contractor or Agency may be obligated to pay as a result of such infringement during or after completing the Work.

00170.05 Assignment of Antitrust Rights - The Contractor irrevocably assigns to the Agency any claim for relief or cause of action the Contractor acquires during the term of the Contract, or which may accrue thereafter, by reason of any violation of:

- Title 15 (Commerce and Trade), United States Code;
- ORS 646.725; or
- ORS 646.730.

In connection with this assignment, it is an express obligation of the Contractor to take no action that would in any way impair or diminish the value of the rights assigned to the Agency according to the provisions of this Subsection. Further, it is the express obligation of the Contractor to take all action necessary to preserve the rights assigned. It is an express obligation of the Contractor to advise the Agency's legal counsel:

- In advance, of its intention to commence any action involving such claims for relief or causes of action;
- Immediately upon becoming aware of the fact that an action involving such claims for relief or causes of action has been commenced by some other person or persons;
- Of the date on which it notified the obligor(s) of any such claims for relief or causes of action of the fact of the Contractor's assignment to the Agency according to the provisions of this Subsection; and
- Immediately upon the discovery of any such antitrust claim for relief or cause of action.

In the event any payment is made to the Contractor under any such claims for relief, the Contractor shall promptly pay the full sum over to the Agency. In the event the Contractor fails to make such payment, the Agency may deduct the amount from monies due or to become due the Contractor under the Contract.

00170.07 Record Requirements - For purposes of this Subsection, the term "Contractor" includes the Contractor, all Subcontractors, Material Suppliers, and providers of rented operated Equipment (except non-DBE truck drivers), at all tiers, for all subcontracts with first-tier Subcontractors, all subcontracts between the first-tier Subcontractors and their Subcontractors and any other lower-tier subcontracts, and "Related Entities" as that term is defined in OAR 734-010-0400. The Material Suppliers included in this definition are those for Aggregates, asphalt cement concrete, portland cement concrete and the supply and fabrication of structural steel items, and Material Suppliers that provide quotes.

(a) Records Required - The Contractor shall maintain all records, whether created before or after execution of the Contract, or during Contract performance, or after Contract completion, to clearly document:

- The Contractor's performance of the Contract or a subcontract;
- The Contractor's ability to continue performance of the Contract or a subcontract; and
- All claims arising from or relating to performance under the Contract or a subcontract.

These records shall include all records, including fiscal records, regardless of when created for the Contractor's business. The records for the Contractor's business include, without limitation:

- Bidding estimates and records, worksheets, tabulations or similar documents.
- Job cost detail reports, including monthly totals.
- Payroll records (including, without limitation, the ledger or register, and tax forms) and all documents that establish the periods, individuals involved, the hours for the individuals, and the rates for the individuals.
- Records that identify the Equipment used by the Contractor and Subcontractors in the performance of the Contract or subcontracts, including, without limitation, Equipment lists, rental contracts and any records used in setting rental rates.
- Invoices from vendors, rental agencies, and Subcontractors.
- Material quotes, invoices, purchase orders and requisitions.
- Contracts with Subcontractors and contracts with Material Suppliers, Suppliers and providers of rented Equipment.
- Contracts or documents of other arrangements with any Related Entity as defined in OAR 734-010-0400.
- General ledger.
- Trial Balance.
- Financial statements (including, without limitation, the balance sheet, income statement, statement of cash flows, and financial statement notes).

- Income tax returns.
- All worksheets used to prepare bids or claims, or to establish the cost components for the Pay Items, including, without limitation, the labor, benefits and insurance, Materials, Equipment, and Subcontractors.

The following are examples, but not an exhaustive list, of records that would be included, if generated by the Contractor. If the Contractor generates such records, or equivalent records, they are included among the records subject to 00170.07.

- Daily time sheets and supervisors' daily reports.
- Collective bargaining agreements.
- Earnings records.
- Journal entries and supporting schedules.
- Insurance, welfare, and benefits records.
- Material cost distribution worksheet.
- Subcontractors' and lower-tier Subcontractors' payment certificates.
- Payroll and vendor's cancelled checks.
- Cash disbursements journal.
- All documents related to each and every claim together with all documents that support the amount of damages as to each claim.
- Additional financial statements (including, without limitation, the balance sheet, income statement, statement of cash flows, and financial notes) preceding the execution of the Contract and following final payment of the Contract.
- Depreciation records on all business Equipment maintained by the business involved, its accountant, or other Entity. (If a source other than depreciation records is used to develop cost for the Contractor's internal purposes in establishing the actual cost of owning and operating Equipment, all such other source documents.)

The Contractor shall maintain all fiscal records in material compliance with generally accepted accounting principles, or other accounting principles that are accepted accounting principles and practices for the subject industry and adequate for the nature of the Contractor's business, and in such a manner that providing a complete copy is neither unreasonably time-consuming nor unreasonably burdensome for the Contractor or the Agency. Failure to maintain the records in this manner shall not be an excuse for not providing the records.

The Contractor shall include in its subcontracts, purchase orders, and all other written agreements, a provision requiring all Subcontractors, Material Suppliers and providers of rented operated Equipment (except non-DBE truck drivers), at all tiers, to comply with 00170.07. The Contractor shall also require all Subcontractors, Material Suppliers, and providers of rented operated Equipment (except non-DBE truck drivers), at all tiers, and Related Entities to include in their contracts, purchase orders, and all other written agreements, a provision requiring all lower-tier Subcontractors, Material Suppliers and providers of rented operated Equipment (except non-DBE truck drivers) to comply with 00170.07. The Material Suppliers to which this applies are those for Aggregates, asphalt cement concrete, portland cement concrete and the supply and fabrication of structural steel items and Material Suppliers that provide Material quotes and Related Entities as defined in OAR 734-010-0400.

(b) Access to Records - The Contractor shall provide the Engineer access to or a copy of all Contractor records upon request. A Project Manager's authority to request or access records is subject to OAR 734-010-0400(9). During the record retention period the Engineer, employees of the Agency, representatives of the Agency, or representatives of regulatory bodies or units of government may:

- Inspect, examine and copy or be provided a copy of all Contractor records;
- Audit the records, a Contract or the performance of a Contract;
- Inspect, examine and audit the records when, in the Agency's sole discretion, the records may be helpful in the resolution of any claim, litigation, administrative proceeding or controversy arising out of or related to a Contract.

Reasons for access to audit, inspect, examine and copy records include without limitation, general auditing, reviewing claims, checking for collusive bidding, reviewing or checking payment of required wages, performance and contract compliance, workplace safety compliance, evaluating Related Entities, environmental compliance, and qualifications for performance of the Contract, including the ability to perform and the integrity of the Contractor.

Where such records are stored in a computer or in other digital media, the Engineer may request, and the Contractor shall provide, a copy of the data files and such other information or access to software to allow the Engineer review of the records.

Nothing in 00170.07 is intended to operate as a waiver of the confidentiality of any communications privileged under the Oregon Evidence Code. Nothing in 00170.07 limits the records or documents that can be obtained by legal process.

(c) Record Retention Period - The Contractor shall maintain the records and keep the records accessible and available at reasonable times and places for at least 3 years from the date of final payment under the Contract, or until the conclusion of all audits, litigation, administrative proceedings, disputes and claims arising out of or related to the Contract, whichever date is later.

(d) Public Records Requests - If records provided under this section contain any information that may be considered exempt from disclosure as a trade secret under either ORS 192.345(2) or ORS 646.461(4), or under other grounds specified in Oregon Public Records Law, ORS 192.311 through ORS 192.478, the Contractor shall clearly designate on or with the records the portions which the Contractor claims are exempt from disclosure, along with a justification and citation to the authority relied upon. Entire records or documents should not be designated as a trade secret or otherwise exempt from disclosure. Only specific information within a record or document should be so designated.

To the extent allowed by the Oregon Public Records Law or other applicable law related to the disclosure of public records, the Agency will not disclose records or portions of records the Contractor has designated as trade secrets to a third party, who is not a representative of the Agency, to the extent the records are exempt from disclosure as trade secrets under the Oregon Public Records Law or other applicable law, except to the extent the Agency is ordered to disclose in accordance with the Oregon Public Records Law or by a court of competent jurisdiction. Application of the Oregon Public Records Law or other applicable law shall determine whether any record, document or information is actually exempt from disclosure.

In addition, in response to a public records request, the Agency will not produce or disclose records so identified as exempt by the Contractor to any person other than representatives of the Agency, and others with authorized access under 00170.07(b), without providing the Contractor a copy of the public records request, unless:

- The Contractor consents to such disclosure; or
- The Agency is prohibited by applicable law or court order from providing a copy of the public records request to the Contractor.

00170.10 Required Payments by Contractors - The Contractor shall comply with ORS 279C.505 and ORS 279C.515 during the term of the Contract.

(a) Prompt Payment by Contractor for Labor and Materials - As required by ORS 279C.505, the Contractor shall:

- Make payment promptly, as due, to all Entities supplying labor or Materials under the Contract;
- Pay all contributions or amounts due the Industrial Accident Fund, whether from the Contractor or a Subcontractor, incurred in the performance of the Contract;
- Not permit any lien or claim to be filed against the State or any political subdivision thereof, on account of any labor or Material furnished in performance of the Contract; and
- Pay to the Department of Revenue all sums withheld from employees according to ORS 316.167.

(b) Prompt Payment by Contractor to First-Tier Subcontractor(s) - According to ORS 279C.580(3)(a), after the Contractor has determined and certified to the Agency that one or more of its Subcontractors has satisfactorily performed subcontracted Work, the Contractor may request payment from the Agency for the Work, and shall pay the Subcontractor(s) within 10 Calendar Days out of such amounts as the Agency has paid to the Contractor for the subcontracted Work.

(c) Interest on Unpaid Amount - If the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract within 30 Days after the Contractor's receipt of payment, the Contractor or first-tier Subcontractor shall owe the Entity the amount due plus interest charges that begin at the end of the 10 Day period within which payment is due under ORS 279C.580(3) and that end upon final payment, unless payment is subject to a good-faith dispute as defined in ORS 279C.580(5)(b). As required by ORS 279C.515(2), the rate of interest on the amount due shall be 9 percent per annum. The amount of interest shall not be waived.

(d) Agency's Payment of the Contractor's Prompt Payment Obligations - If the Contractor fails, neglects or refuses to make prompt payment of any invoice or other demand for payment for labor or services furnished to the Contractor or a Subcontractor by any Entity in connection with the Contract as such payment becomes due, the Agency may pay the Entity furnishing the labor or services and charge the amount of the payment against monies due or to become due the Contractor under the Contract. (The Agency has no obligation to pay these Entities, and the Agency will not normally do so, but will refer them to the Contractor and the Contractor's Surety.)

The payment of a claim by the Agency in the manner authorized in this Subsection shall not relieve the Contractor or the Contractor's Surety from obligations with respect to any such claims.

(e) Right to Complain to the Construction Contractors Board - If the Contractor or a Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract, the Entity may file a complaint with the Construction Contractors Board, unless payment is subject to a good-faith dispute as defined in ORS 279C.580(5)(b).

(f) Notice of Claim Against Bond - An Entity (which by definition includes a natural person) claiming not to have been paid in full for labor or Materials supplied for the prosecution of the Work may have a right of action on the Contractor's Payment Bond as provided in ORS 279C.600 and ORS 279C.605.

The Commissioner of the Bureau of Labor and Industries (BOLI) may have a right of action on the Contractor's and Subcontractors' public works bonds and Payment Bonds for workers who have not been paid in full, as provided in ORS 279C.600 and ORS 279C.605.

(g) Paid Summary Report - The Contractor shall submit a "Paid Summary Report", form 734-2882, to the Engineer certifying payments made to all of the following:

- All Subcontractors
- Committed DBE Suppliers
- Non-committed DBE Suppliers and service providers with estimated total payments for the Project over $10,000.

For this purpose, a committed DBE firm is one that was identified by the Contractor to meet an assigned DBE goal including DBE firms substituting for DBE firms committed as a condition of Contract Award.

Submit the completed and signed Paid Summary Report to the Engineer within 20 Calendar Days of receipt of payment from the Agency for each month in which payments were made to each Subcontractor, each committed DBE Supplier, and each non-committed DBE Supplier or service provider with estimated total payments for the Project over $10,000. At the completion of the Project, submit form 734-2882 recapping the total amounts paid to each Subcontractor, each committed DBE Supplier, and each non committed DBE Supplier or service provider with estimated total payments for the Project over $10,000.

The Contractor shall require each Subcontractor at every tier to comply with the requirement to submit form 734-2882 within 20 Calendar Days of receipt of payment from its controlling contractor and provide a recap of the total amounts paid at the completion of the Project or completion of their Work.

Forms shall be submitted to an email address provided to the Contractor at the preconstruction conference.

00170.20 Public Works Bond - Before starting Work, the Contractor and Subcontractors shall each file with the Construction Contractors Board, and maintain in full force and effect, a separate public works bond, in the amount of $30,000 unless otherwise exempt, as required by ORS 279C.830(2) and ORS 279C.836. The Contractor shall verify Subcontractors have filed a public works bond before the Subcontractor begins Work.

00170.32 Protection of Navigable Waters - The Contractor shall comply with all applicable Laws, including, without limitation, the Federal River and Harbor Act of March 3, 1899 and its amendments.

The Contractor shall not interfere with waterway navigation or impair navigable depths or clearances, except as U.S. Coast Guard or Corps of Engineer permits allow.

00170.60 Safety, Health, and Sanitation Provisions - The Contractor shall comply with all Laws concerning safety, health, and sanitation standards. The Contractor shall not require workers to perform Work under conditions that are hazardous, dangerous, or unsanitary.

Workers exposed to traffic shall wear upper body garments or safety vests that are highly visible and meet the requirements of 00221.20.

Workers exposed to falling or flying objects or electrical shock shall wear hard hats.

Upon their presentation of proper credentials, the Contractor shall allow inspectors of the U.S. Occupational Safety and Health Administration (OSHA) and the Oregon Occupational Safety and Health Division (OR-OSHA) to inspect the Work and Project Site without delay and without an inspection warrant.

According to ORS 468A.715 and ORS 468A.720, the Contractor or a Subcontractor who performs Project Work involving asbestos abatement shall possess a valid DEQ asbestos abatement license.

00170.61 Industrial Accident Protection:

(a) Workers' Compensation - The Contractor shall provide workers' compensation coverage for on-the-job injuries as required by 00170.70(e).

(b) Longshoremen's and Harbor Workers' Compensation - If Work to be performed is over or adjacent to navigable waters, the Longshoremen's and Harbor Workers' Compensation Act, (Chapter 18, Title 33 of the USC) may apply, and the Contractor shall be responsible for complying with its provisions (which may include the provision of additional workers' compensation benefits to employees).

00170.62 Labor Nondiscrimination - The Contractor shall comply with all Laws concerning equal employment opportunity, including, without limitation, those prohibiting discrimination because of race, religion, color, sex, disability, or national origin.

It is a material term of this Contract that the Contractor certifies by entering into this Contract that the Contractor has a written policy and practice that meets the requirements described in ORS 279A.112 for preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class and that the Contractor shall maintain the policy and practice in force during the entire term of this Contract.

00170.63 Payment for Medical Care - According to ORS 279C.530, the Contractor shall promptly, as due, make payment to any person, copartnership, association or corporation furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of the Contractor, of all sums that the Contractor agrees to pay for the services and all moneys and sums that the Contractor has collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services.

00170.65 Minimum Wage and Overtime Rates for Public Works Projects:

(a) General - The Contractor is responsible for investigating local labor conditions. The Agency does not imply that labor can be obtained at the minimum hourly wage rates specified in State or federal wage rate publications, and no increase in the Contract Amount will be made if wage rates paid are more than those listed.

As required by ORS 279C.520, the Contractor shall comply with ORS 652.220 and shall not unlawfully discriminate against any of the Contractor's employees in the payment of wages or other compensation for work of comparable character on the basis of an employee's membership in a protected class. "Protected class" means a group of persons distinguished by race, color, religion, sex, sexual orientation, national origin, marital status, veteran status, disability, or age. The Contractor's compliance with this provision constitutes a material element of the Contract and failure to comply constitutes a material breach that entitles the Agency to exercise any remedies available under the Contract, including, but not limited to, termination for default.

As required by ORS 279C.520, the Contractor shall not prohibit any of the Contractor's employees from discussing the employee's rate of wage, salary, benefits or other compensation with another employee or another person and shall not retaliate against an employee who discusses the employee's rate of wage, salary, benefits or other compensation with another employee or another person.

(b) State Prevailing Wage Requirements - The Contractor shall comply with the prevailing wage provisions of ORS 279C.800 through ORS 279C.870.

(1) Minimum Wage Rates - The Bureau of Labor and Industries (BOLI) determines and publishes the existing State prevailing wage rates in the publication *Prevailing Wage Rates for Public Works Contracts*. The Contractor shall pay workers not less than the specified minimum hourly wage rate according to ORS 279C.838 and ORS 279C.840, and shall include this requirement in all subcontracts.

See the Project Wage Rates page included with the Special Provisions for additional information about which wage rates apply to the Project and how to access the applicable wage rates.

The applicable BOLI wage rates will be included in the Contract.

(2) Payroll and Certified Statements - As required in ORS 279C.845, the Contractor and every Subcontractor shall submit written certified statements to the Engineer on the form prescribed by the Commissioner of BOLI in OAR 839-025-0010 certifying compliance with wage payment requirements and accurately setting out the Contractor's or Subcontractor's weekly payroll records for each worker employed on the Project.

The Contractor and Subcontractors shall preserve the certified statements for a period of 6 years from the date of completion of the Contract.

(3) Additional Retainage:

a. Agency - As required in ORS 279C.845(7) the Agency will retain 25% of any amount earned by the Contractor on the Project until the Contractor has filed the certified statements required in ORS 279C.845 and in FHWA Form 1273, if applicable. The Agency will pay to the Contractor the amount retained within 14 Days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.

b. Contractor - As required in ORS 279C.845(8) the Contractor shall retain 25% of any amount earned by a first-tier Subcontractor on the Project until the first-tier Subcontractor has filed with the Agency the certified statements required in ORS 279C.845 and in FHWA Form 1273, if applicable. Before paying any amount retained, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 Days after the first-tier Subcontractor files the required certified statement, the Contractor shall pay the first-tier Subcontractor any amount retained.

(4) Owner/Operator Data – For a project funded by the FHWA, the Contractor shall furnish data to the Engineer for each owner/operator providing trucking services. Furnish the data before the time the services are performed and include without limitation for each owner/operator:

- Driver's name;
- Present driver license upon request;
- Vehicle identification number;
- Present vehicle registration upon request;
- Motor vehicle license plate number;

- Motor Carrier account number;
- Present ODOT Motor Carrier 1A Permit upon request; and
- Name of owner/operator from the side of the truck.

(c) State Overtime Requirements - As a condition of the Contract, the Contractor shall comply with the pertinent provisions of ORS 279C.520 and ORS 279C.540.

(1) Maximum Hours of Labor and Overtime Pay - According to ORS 279C.540, no person shall be employed to perform Work under this Contract for more than 10 hours in any 1 Day, or 40 hours in any 1 week, except in cases of necessity, emergency, or where public policy absolutely requires it. In such instances, the Contractor shall pay the employee at least time and a half pay:

- For all overtime in excess of 8 hours a day or 40 hours in any 1 week when the work week is 5 consecutive days, Monday through Friday; or
- For all overtime in excess of 10 hours a day or 40 hours in any 1 week when the work week is 4 consecutive days, Monday through Friday; and
- For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

For additional information on requirements for overtime and establishing a work schedule see OAR 839-025-0050 and OAR 839-025-0034.

(2) Notice of Hours of Labor - The Contractor shall give written notice to employees of the number of hours per day and days per week the employees may be required to work. Provide the notice either at the time of hire or before commencement of work on this Contract, or by posting a notice in a location frequented by employees.

(3) Exception - The maximum hours of labor and overtime requirements under ORS 279C.540 will not apply to the Contractor's Work under this Contract if the Contractor is a party to a collective bargaining agreement in effect with any labor organization. For a collective bargaining agreement to be in effect it shall be enforceable within the geographic area of the Project, and its terms shall extend to workers who are working on the Project (see OAR 839-025-0054).

(d) State Time Limitation on Claim for Overtime - According to ORS 279C.545, any worker employed by the Contractor is foreclosed from the right to collect any overtime provided in ORS 279C.540 unless a claim for payment is filed with the Contractor within 90 Days from the completion of the Contract, provided the Contractor posted and maintained a circular as specified in this provision. Accordingly, the Contractor shall:

- Cause a circular, clearly printed in boldfaced 12-point type and containing a copy of ORS 279C.545, to be posted in a prominent place alongside the door of the timekeeper's office or in a similar place that is readily available and freely visible to any or all workers employed to perform Work; and
- Maintain such circular continuously posted from the inception to the completion of the Contract on which workers are or have been employed.

(e) Additional Requirements When Federal Funds are Involved - When federal funds are involved, the following requirements shall apply in addition to the requirements of 00170.65(a) through 00170.65(d). The Contractor shall include these provisions in all subcontracts as well as ensure that all Subcontractors include these provisions in their lower-tier subcontracts.

(1) FHWA Requirements - For Federal-aid projects, the Contractor shall comply with the provisions of FHWA Form 1273, *Required Contract Provisions Federal-aid Construction Contracts*.

(2) Minimum Wage Rates - The Contractor shall pay each worker in each trade or occupation employed to perform any work under the Contract not less than the existing State (BOLI) prevailing wage rate or the applicable federal prevailing wage rate required under the Davis-Bacon Act (40 U.S.C. 3141 et seq.), whichever is higher. The Contractor shall include this provision in all subcontracts.

See the Project Wage Rates page included with the Special Provisions for additional information about which wage rates apply to the Project and how to access the applicable wage rates.

The applicable Davis-Bacon and BOLI wage rates will be included in the Contract.

(3) Payroll and Certified Statements - In addition to providing the payroll information and certified statements required under ORS 279C.845 (see 00170.65(b)(2)), the Contractor and every Subcontractor shall submit written certified statements that also meet the requirements in Section IV of FHWA Form 1273, except the Contractor and every Subcontractor shall preserve the certified statements for a period of 6 years from the date of completion of the Contract.

(4) Overtime - With regard to overtime pay, the Contractor shall comply with the overtime provision affording the greatest compensation required under FHWA Form 1273 and ORS 279C.540.

00170.70 Insurance:

(a) Insurance Coverages -

Contractor - The Contractor shall obtain the insurance specified below prior to the execution of the Contract. The Contractor shall maintain the insurance in full force at the Contractor's expense throughout the duration of the Contract and all warranty periods that apply.

Subcontracting - If the Contractor specifies prior to the execution of the Contract that a Subcontractor will satisfy an insurance requirement, that is permitted to be satisfied by a Subcontractor, the Contractor shall obtain Agency approval of Subcontractor and Subcontractor's insurance coverage(s), as required by 00180.21, prior to commencement of Subcontracted work. After the Contractor receives Agency approval of the Subcontractor, the Contractor may contractually obligate the Subcontractor to obtain and maintain, at the Subcontractor's expense or at the Contractor's expense, the insurance permitted.

The Contractor shall require that all Subcontractors carry insurance coverage that the Contractor deems appropriate based on the risks of the subcontracted work. The Contractor shall obtain proof of the required insurance coverages, as applicable, from any Subcontractor providing Services related to the Contract.

Neither the insurance provided by Subcontractor(s) nor any agreements Contractor or Subcontractor(s) may enter into shall place any limitation on the liability or indemnification obligations of the Contractor under applicable law or the Contract.

Insurance Provisions - The Contractor and Subcontractor(s), if any, shall obtain insurance from insurance companies or entities that are authorized to transact the business of insurance and issue coverage in the State and that are acceptable to the Agency. Insurance coverage shall be primary and noncontributory with any other insurance and self-insurance, with the exception of Workers' Compensation. The Contractor, or appropriate Subcontractor, but not the Agency, shall pay for all deductibles, self-insurance retentions and self-insurance, if any.

- **Commercial General Liability** – The Contractor shall provide Commercial General Liability Insurance written on an occurrence basis and covering the Contractor's liability for bodily injury and property damage. This insurance shall include personal and advertising injury liability, products and completed operations coverage, and contractual liability coverage. Coverage may be written in combination with Commercial Automobile Liability Insurance with separate limits for Commercial General Liability and Commercial Automobile Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Special Provisions. The annual aggregate limit shall not be less than the dollar amount specified in the Special Provisions. The policy shall be endorsed to state that the annual aggregate limit of liability shall apply separately to the Contract.

  When Work to be performed includes operations or activity within 50 feet of any railroad property, bridge, trestle, track, roadbed, tunnel, underpass or crossing, the Contractor shall provide the Contractual Liability – Railroads CG 24 17 endorsement, or equivalent, on the Commercial General Liability policy.

- **Commercial Automobile Liability** – The Contractor shall provide Commercial Automobile Liability Insurance covering all owned, non-owned, and hired vehicles for bodily injury and property damage. This coverage may be written in combination with the Commercial General Liability Insurance with separate limits for Commercial Automobile Liability and Commercial General Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Special Provisions. If this coverage is written in combination with the Commercial General Liability, the policy shall be endorsed to state that the Commercial General Liability annual aggregate limit shall apply separately to the Contract.

• **Commercial Automobile Liability (pedestrian transport vehicle for pedestrian circulation)** - The Contractor or Subcontractor, whichever is performing the vehicle transportation for pedestrian circulation, shall provide Commercial Automobile Liability Insurance covering all owned, non-owned, and hired vehicles for bodily injury and property damage. This coverage may be written in combination with the Commercial General Liability Insurance with separate limits for Commercial Automobile Liability and Commercial General Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Special Provisions.

- **Pollution Liability** - If indicated by Special Provision, the Contractor or Subcontractor, whichever is performing the pollution related Work, shall provide Pollution Liability Insurance written on an occurrence or claims made basis and covering the Contractor's or Subcontractor's liability, for bodily injury, property damage, and environmental damage resulting from sudden, accidental, and gradual pollution, and related clean-up costs. If the coverage is obtained by the Contractor, the coverage may be written in combination with the Commercial General Liability Insurance with separate limits for Pollution Liability and Commercial General Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Special Provisions. The annual aggregate limit shall not be less than the dollar amount specified in the Special Provisions. The policy shall be endorsed to state that the annual aggregate limit of liability shall apply separately to the Contract.

- **Asbestos Liability** - If indicated by Special Provision, the Contractor, or Subcontractor, whichever is performing asbestos related Work, shall provide the Pollution Liability coverage with an Asbestos Liability endorsement. If an endorsement cannot be obtained, the Contractor or Subcontractor shall provide separate Asbestos Liability Insurance at the same combined single limit per occurrence and annual aggregate limit as the Pollution Liability Insurance with the policy endorsed to state that the annual aggregate limit of liability shall apply separately to the Contract.

- **Lead Liability** - If indicated by Special Provision, the Contractor or Subcontractor, whichever is performing lead related Work, shall provide the Pollution Liability coverage with a Lead Liability endorsement. If an endorsement cannot be obtained, the Contractor or Subcontractor shall provide separate Lead Liability Insurance at the same combined single limit per occurrence

and annual aggregate limit as the Pollution Liability Insurance with the separate policy endorsed to state that the annual aggregate limit of liability shall apply separately to the Contract.

- **Commercial Automobile Liability with Pollution Coverage** - If indicated by Special Provision, the Contractor or Subcontractor, whichever is performing the pollution related Work, shall provide Commercial Automobile Liability Insurance with Pollution coverage covering the Contractor's or Subcontractor's liability for bodily injury, property damage, natural resource damage, and environmental damage arising out of the use of all owned, non-owned, or hired vehicles while performing Work under the Contract. Combined single limit per occurrence shall not be less than the dollar amount specified in the Contract. If the coverage is obtained by the Contractor, the coverage may be written in combination with the Commercial General Liability Insurance with separate limits for Commercial Automobile Liability with Pollution Coverage and Commercial General Liability. If this coverage is written in combination with the Commercial General Liability, the policy shall be endorsed to state that the Commercial General Liability annual aggregate limit shall apply separately to the Contract.

• **Marine Insurance (watercraft)** - If indicated by Special Provision, the Contractor or Subcontractor, whichever is performing watercraft related Work, entails the use of watercraft, including but not limited to barges, tug boats, work boats, and supply boats, shall provide the following insurance:

- **Marine Liability Insurance** - For the performance of the Work that requires the use of any watercraft, whether owned, non-owned, leased, rented, or chartered by Contractor or any Subcontractors, Marine Liability insurance shall not be less than the dollar amount specified in the Special Provisions per occurrence for bodily injury and property damage. Such insurance shall also include coverage for collision liability, tower's liability, marine contractual liability, wreck/debris removal, and liability for seepage, pollution, containment and cleanup.

- **Hull and Machinery Insurance** - Including collision liability, with sister-ship clause un-amended, with limits of liability at least equal to the full value of all vessels used in connection with performance of the Work required under this Contract and with navigational limitations adequate for the Contractor to perform the specified Work. Where vessels engage in towing operations, said insurance shall include full towers' liability with the sister-ship clause un-amended.

- **Protection and Indemnity Insurance** - To be evidenced through a full entry with a Group P&I Club, including collision liability, towers' liability, marine contractual liability, tankermans' liability, and specialist operations. Alternatively, if a full entry in a Group P&I Club is not available or applicable, Protection and Indemnity Insurance coverage shall be evidenced on the SP-23 form or equivalent, including, by endorsement or otherwise, collision liability, tower's liability, specialist operations, and liability for seepage, pollution, containment and cleanup, with extensions for marine contractual liability, shall not be less than the dollar amount specified in the Special Provisions.

- **Pollution Liability Insurance** - If pollution coverage is provided outside of a P&I Club entry or outside of Protection and Indemnity Insurance coverage evidenced on the SP-23 form or equivalent, the amount shall not be less than the dollar amount specified in the Special Provisions. Pollution liability coverage shall cover bodily injury, property damage, including cleanup costs and defense costs resulting from sudden and gradual pollution conditions of contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water.

With respect to the aforementioned Hull & Machinery Insurance, Protection and Indemnity Insurance and Pollution Insurance, the policy or policies shall be endorsed as follows:

- Other than owner provisions of all policies shall be deleted with respect to the naming of Company as an Additional Assured/Insured;
- Delete any as owner clause and any other language, which limits or purports to limit the coverage afforded to an insured or an additional insured who is not a ship-owner, with coverage to be afforded to all additional insureds in any capacity in which they may be held liable; and
- Operator warrants that COFR's are on file with the U.S. Coast Guard as per Federal requirements.

If Subcontractor(s) are utilized to perform any Work that requires the use of watercraft under the Contract, all such Subcontractor(s) shall maintain insurance including limits, coverages, terms and conditions as required herein unless said Subcontractor(s) are insured by Contractor. Where Contractor provides coverage for a Subcontractor, the Contractor shall issue a Certificate of Insurance, along with related endorsement(s) required to effect coverage, evidencing Subcontractor's "Additional Insured/Assured" status under Contractor's coverage.

An Excess Marine Liability insurance policy may be used to meet the required limits of insurance. Excess coverage must follow form and be as broad as that provided by the underlying primary liability insurance policies.

ORS 15.320 provides that Oregon law applies to the Contract. The parties also agree that Oregon law applies to the Contract, even if ORS 15.320 is determined to be inapplicable or invalid.

(b) Extended Reporting - If any of the required insurance is permitted to be and is on a "claims made" basis, the Contractor or Subcontractor who provided the insurance coverage, shall obtain an extended reporting period on the claims made policy or maintain the claims made policy, for a duration of at least 24 months from the date the applicable work has been completed and accepted by the Agency or the date of Final Acceptance. This extended reporting requirement shall be satisfied with documentation of one of the following:

- Extended Reporting Endorsement;
- Tail Coverage; or
- Maintaining the applicable continuous claims made policy with liability coverage.

The Contractor or Subcontractor shall furnish certification of this extended reporting requirement as a condition to receive Third Notice under 00150.90(b) and 00180.50(g).

(c) Excess/Umbrella Liability - A combination of primary and Excess/Umbrella Insurance may be used to meet the required limits of insurance. Excess/Umbrella coverage must be at least as broad as that provided by the underlying primary insurance policies. In addition, the limits of the underlying primary insurance must be sufficient to prevent any gap between such minimum limits and the attachment point of the coverage provided by the Excess/Umbrella Liability policy**.**

(d) Additional Insured - The liability insurance coverages of 00170.70(a) shall include the Agency, the Agency's governing body, board, or Commission and its members, and their respective officers, agents, and employees as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. When federal transportation funding is involved, the liability insurance coverages of 00170.70(a) shall also include an Additional Insured Endorsement endorsing the "State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents, and employees" as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

Additional Insured Endorsements on the Commercial General Liability shall be written on ISO Form CG 20 10 07 04, or equivalent, with respect to liability arising out of ongoing operations and ISO Form CG 20 37 07 04, or equivalent, with respect to liability arising out of completed operations. Additional Insured Endorsements shall be submitted with the Certificate(s) of Insurance and must be acceptable to the Agency.

(e) Workers' Compensation - All employers, including the Contractor and Subcontractor(s), if any, that employ subject workers, as defined in ORS 656.027, shall comply with ORS 656.017 and shall provide Workers' Compensation Insurance coverage, unless such employers meet the requirement for an exemption under ORS 656.126(2). The coverage shall include Employer's Liability Insurance with limits not less than $500,000 each accident.

The Contractor shall certify in the Contract that the Contractor is registered by the Oregon Workers' Compensation Division either as a carrier-insured employer, a self-insured employer, an exempt employer, or is an independent contractor who will perform the Work without the assistance of others.

The Contractor shall require and verify that its insurance carrier files a guaranty contract with the Oregon Workers' Compensation Division before performing any Work.

All employers, including the Contractor and Subcontractor(s), if any, exempt under ORS 656.126(2) and subject to any other state's Workers' Compensation law, shall provide Workers' Compensation Insurance coverage as required by applicable Workers' Compensation Laws. The coverage shall also include Employer's Liability Insurance with limits not less than $500,000 each accident.

If the Contractor's and Subcontractor's, if any, operations include use of watercraft on navigable waters and employ persons in applicable positions, a Maritime Coverage Endorsement must be added to the Workers' Compensation policy, unless coverage for captain and crew is provided in a Protection and Indemnity policy.

If the Contractor and Subcontractor, if any, conducts its operations in proximity to navigable waters and employ persons in applicable positions, United States Longshore and Harbor Workers' Compensation Act coverage must be endorsed onto the Workers' Compensation policy.

The Contractor shall require compliance with these requirements in all Subcontractor contracts.

(f) Notice of Cancellation or Change - The Contractor shall provide at least 30 Days' written notice to the Agency before cancellation of, material change to, potential exhaustion of aggregate limits, or non-renewal of the required insurance coverages. If a Subcontractor is providing insurance to meet the contract requirements, the Contractor shall provide at least 30 Days' written notice to the Agency before cancellation of, material change to, potential exhaustion of aggregate limits, or non-renewal of the required insurance coverage(s). Any failure to comply with the reporting provisions of this insurance shall not affect the coverage(s) provided to the State, Agency, County, City, or other applicable political jurisdiction or to the Agency's governing body, board, or Commission and its members, and the Agency's officers, agents, and employees.

(g) Certificate(s) of Insurance - As evidence of the insurance coverages required by the Contract, the Contractor shall furnish Certificate(s) of Insurance to the Agency at the time(s) provided in 00130.50(a). As evidence of insurance coverages required by the Contract but permitted by the Agency under 00170.70(a) to be obtained by an appropriate Subcontractor, the Contractor shall furnish Certificate(s) of Insurance to the Agency for such coverages together with the Contractor's request under 00180.21 for approval of the subcontract with that Subcontractor. The Certificate(s) shall:

- List Clackamas County, and when federal transportation funding is involved, shall also include “State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents and employees” as a Certificate holder and endorse as an Additional Insured;
- Include all required endorsements or copies of the applicable policy language effecting coverage required by the Contract;
- Specify that all liability insurance coverages shall be primary and non-contributory with any other insurance and self-insurance, with exception of Workers’ Compensation;
- Include a list of all policies that fall under the Excess/Umbrella Insurance if Excess or Umbrella Insurance is used to meet the minimum insurance requirement.

(h) Agency Acceptance - All insurance and insurance providers are subject to Agency acceptance. In addition, all of the following are subject to Agency acceptance and, if requested by Agency, the Contractor shall provide complete copies of the following to Agency’s representatives responsible for verification of the insurance coverages required by the Contract: insurance policies, endorsements, self-insurance documents and related insurance documents.

(i) Insurance Requirement Review - The Contractor agrees to periodic review of insurance requirements by Agency under the Contract and to provide updated requirements as mutually agreed upon by the Contractor and Agency.

(j) Builder’s Risk - If specified by Special Provision, the Contractor shall obtain, at its expense, and keep in effect during the term of the Contract, Builder’s Risk Insurance on an all risks of direct physical loss basis, including, without limitation, earthquake and flood damage, for an amount equal to at least the value specified in the Special Provisions. The policy shall not contain a coinsurance clause or any collapse exclusions. Any deductible shall not exceed $50,000 for each loss, except that the earthquake and flood deductible shall not exceed 5% of each loss or $50,000, whichever is greater. The policy shall include the Agency and building or structure owner as loss payees. When federal transportation funding is involved, the policy shall also include the State of Oregon as a loss payee.

(k) Builder's Risk Installation Floater - If specified by Special Provision, the Contractor shall obtain, at its expense, and keep in effect during the term of the Contract, Builder’s Risk Installation Floater Insurance covering the Contractor's Materials and Equipment to be used for completion of the Work performed under the Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contractor’s Equipment, Materials, or fixtures to be installed, in-transit, or stored off-site during the performance of the Contract. This insurance shall include as loss payees the Agency, the building or structure owner, the Contractor and Subcontractors as their interests may appear. When federal transportation funding is involved, the policy shall also include the State of Oregon as a loss payee.

00170.71 Independent Contractor Status - The service or services to be rendered and the Work to be completed under this Contract are those of an independent contractor as defined in ORS 670.600. The Contractor is not an officer, employee, or agent of the Agency or the State as those terms are used in ORS 30.265.

00170.72 Indemnity/Hold Harmless - To the fullest extent permitted by law, and except to the extent otherwise void under ORS 30.140, the Contractor shall indemnify, defend (with counsel approved by the Agency) and hold harmless the Agency, Agency's Authorized Representative, Architect/Engineer, Architect/Engineer's consultants, and their respective officers, directors, agents, employees, partners, members, stockholders and affiliated companies (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses (including reasonable attorney fees), demands and actions of any nature whatsoever that arise out of, result from or are related to the following:

- Any damage, injury, loss, expense, inconvenience or delay described in this Subsection.
- Any accident or occurrence that happens or is alleged to have happened in or about the Project Site or any place where the Work is being performed, or in the vicinity of either, at any time prior to the time the Work is fully completed in all respects.
- Any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents that is to be observed or performed by the Contractor, or any breach of any agreement, duty, obligation, responsibility, covenant, provision, requirement, representation or warranty of the Contractor contained in the Contract Documents or in any subcontract.
- The negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.
- Any failure to comply with all applicable Laws by the Contractor or any Subcontractor, or anyone employed by any one of them, or anyone for whose acts they may be liable.
- Any lien filed upon the Project or bond claim in connection with the Work.

Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Subsection.

In claims against any person or Entity indemnified under this Subsection by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Subsection shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

Notwithstanding the Contractor's foregoing defense obligations, neither the Contractor nor any attorney engaged by the Contractor shall defend any claim in the name of the Agency, nor purport to act as legal representative of the Agency, without the prior written consent of the Agency's legal counsel. The Agency may, at any time at its election, assume its own defense and settlement in the event that it determines that the Contractor is prohibited from defending the Agency, or that the Contractor is not adequately defending the Agency's interests, or that an important governmental principle is at issue or that it is in the best interests of the Agency to do so. The Agency reserves all rights to pursue any claims it may have against the Contractor.

When federal transportation funding is involved, the following additional requirements apply:

- The State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation and their respective officers and members and employees (for purposes of this Subsection 00170.72 collectively "State") are additional Indemnitees.

- Neither Contractor nor Subcontractors nor any attorney engaged by the Contractor or Subcontractors shall defend any claim in the name of the State or purport to act as legal representative of the State or any of its agencies, without the prior written consent of the State's legal counsel, the Oregon Attorney General. State may, at any time at its election, assume its own defense and settlement in the event that it determines that the Contractor or Subcontractors are prohibited from defending the State, or that the Contractor or Subcontractors are not adequately defending the State's interests, or that an important governmental principle is at issue or that it is in the best interests of the State to do so. The State reserves all rights to pursue any claims it may have against the Contractor or Subcontractors.

- Contractor shall include a provision in each subcontract requiring Subcontractors to indemnify, defend (with counsel approved by the State) and hold harmless the State in accordance with this Subsection 00170.72.

00170.74 Employee Drug Testing Program - As required by ORS 279C.505(2), the Contractor shall have in place, and maintain during the period of the Contract, an employee drug-testing program. The Agency retains the right to audit and/or monitor the program. On request by the Engineer, the Contractor shall furnish a copy of the employee drug-testing program.

00170.78 Conflict of Interest - The Contractor shall not give or offer any gift, loan, or other thing of value to any member of the Agency's governing body or employee of the Agency in connection with the award or performance of any Contract.

The Contractor shall not rent, lease, or purchase Materials, supplies, or Equipment, with or through any Agency employee or member of the Agency's governing body.

No ex-employee of the Agency who has worked for the Agency on any phase of the Project within the prior 2 years may be employed by the Contractor to perform Work on the Project.

The Contractor shall also be and remain in compliance with the Agency's Conflict of Interest Guidelines. (See 00120.40(g) and 00180.21(b).)

00170.79 Third Party Beneficiary - There are no third-party beneficiaries of the Contract, unless federal transportation funding is involved then the State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation and their respective officers and members and employees, are third-party beneficiaries of the Contract.

00170.80 Responsibility for Damage to Work:

(a) Responsibility for Damage in General - The Contractor shall perform Work, and furnish Materials and Equipment for incorporation into the Work, at the Contractor's own risk, until the entire Project has been completed and accepted by the Agency. The Contractor shall repair all damages to Work performed, Materials supplied, and Equipment incorporated into the Work, except as otherwise provided in this Section.

(b) Repair of Damage to Work - Until Final Acceptance, the Contractor shall promptly rebuild, repair, restore, and make good damages to all portions of the permanent or temporary Work, except to the extent the Agency has assumed responsibility according to the provisions of (c) below. The Contractor shall perform all repairs of damage to Work at no additional cost to the Agency, except for repairs necessitated by damage caused by:

- Acts of God or Nature, as defined in Section 00110; or
- Actions of governmental authorities.

(c) Responsibility for Damage to Work Caused by Public Traffic - The Contractor may apply for relief of responsibility for damage to Work caused by Public Traffic by submitting a signed Contractor's Request for Relief of Responsibility, form 734-2768, to the Engineer by mail, personal delivery, courier, scanned and submitted via email, or other agreed-upon method.

The Engineer will process a maximum of two forms per month and return the forms within 7 Calendar Days indicating each item as "approved" or "denied".

The approval of the Engineer is limited, and is made only for the purposes of determining relief of responsibility for damage to completed portions of the Work caused by Public Traffic. The completed portions of the Work are not considered complete, and are not finally accepted for any other purposes under the Contract.

If the Contractor disagrees with the Engineer's findings, the Contractor may request a Step 1 review according to 00199.40(b).

(1) Request for Relief - The Agency will only accept a request for relief from and will only assume responsibility for damages caused by Public Traffic, to the following completed portions of the Work:

- A segment of Roadway, drainage facilities, Slopes, lighting, Traffic Control Devices and access facilities;
- A Bridge or other Structure within a segment of Roadway;
- Traffic signals and appurtenances at an intersection;
- Permanent, passive Traffic Control Devices;
- Complete circuits of a highway lighting system; and
- Portions of a building open to public use.

The Agency will approve a request for the Agency to assume responsibility for damages to the completed portions of the Work caused by Public Traffic only under the following conditions:

- The completed portions of the Work are completed according to Contract Change Orders, the Plans or approved stage construction Plans;
- The traffic control complies with approved Traffic Control Plans; and
- All required Materials conformance and quality compliance documents pertaining to the completed portions of the Work are on file with the Engineer (see Section 00165).

(2) Scope of Relief - When the Agency assumes responsibility for damage to completed portions of the Work caused by Public Traffic, any damages will be repaired by the Contractor on a Changed Work basis, or by Agency forces, or by other means as determined by the Engineer. If completed portions of the Work are damaged by Public Traffic before Final Inspection, and the Agency requires the Contractor to repair the damages, the Engineer will reimburse the Contractor for the Changed Work at 75% of the total amount calculated according to Section 00197.

If completed portions of the Work are damaged by Public Traffic after Final Inspection, and the Agency requires the Contractor to repair the damages, the Engineer will reimburse the Contractor for the Work at 100% of the total amount calculated according to Section 00197.

If any additional Work is performed by the Contractor on completed portions of the Work for which the Agency has assumed responsibility for damages caused by Public Traffic, and the Work is performed outside of the approved stage construction Plans or approved Traffic Control Plans, the Contractor shall become fully responsible and liable, and shall make good all damages caused by Public Traffic at no additional cost to the Agency.

(d) Vandalism and Theft - Vandalism includes damage to or destruction of Work or portions of Work that remain on the Project Site resulting from vandalism, criminal mischief, arson, or other criminal or illegal behavior.

The Contractor shall provide reasonable protection of the Work from vandalism until Third Notification. If reasonable protection has been provided, the Contractor's responsibility for damage resulting from vandalism will be limited to $5,000.00 per occurrence. Requests for reimbursement of amounts in excess of $5,000.00 shall be in writing and directed to the Engineer. Upon receipt, the Engineer will investigate, evaluate the amount of damages and their cause, determine the number of occurrences, and determine whether, and how much, the Contractor will be compensated.

Theft includes the loss of Work or portions of Work that are lost or stolen or otherwise unaccounted for from the Project Site or from Materials or fabrication locations. The Contractor shall remain solely responsible for all losses caused by theft, including, without limitation, theft that occurs in conjunction with vandalism.

00170.82 Responsibility for Damage to Property and Facilities:

(a) In General - As used in this Subsection, the term "Contractor" shall include the Contractor's agents, Subcontractors, and all workers performing Work under the Contract; and the term "damage" shall include without limitation soiling or staining surfaces by tracking or splashing mud, asphalt, and other materials, as well as damage of a more serious nature.

The Contractor shall be solely responsible for damages arising from:

- The Contractor's operations;
- The Contractor's negligence, gross negligence, or intentional wrongful acts; and
- The Contractor's failure to comply with any Contract provision.

The Agency may withhold funds due the Contractor or the Contractor's Surety until all lawsuits, actions, and claims for injuries or damages are resolved, and satisfactory evidence of resolution is furnished to the Agency.

(b) Protection and Restoration of Agency Property and Facilities - The following requirements apply to Highways, Highway Structures and other improvements that are existing, under construction, or completed. The Contractor shall:

- Provide adequate protection to avoid damaging Agency property and facilities;
- Be responsible for damage to Agency property and facilities caused by or resulting from the Contractor's operations; and
- Clean up and restore such damage by repair, rebuilding, replacement, or compensation, as determined by the Engineer.

(c) Protection and Restoration of Non-Agency Property and Facilities - The Contractor shall determine the location of properties and facilities that could be damaged by the Contractor's operations, and shall protect them from damage. The Contractor shall protect monuments and property marks until the Engineer has referenced their location and authorized their removal. The Contractor shall restore property or facilities damaged by its operations to the condition that existed before the damage, at no additional compensation.

The Contractor shall provide temporary facilities when needed, (e.g., to maintain normal service or as directed by the Engineer), until the required repair, rebuilding, or replacement is accomplished.

The Contractor shall protect specific service signs, (e.g., business logos, and tourist-oriented directional signs (TODS)) from damage, whether the signs are to remain in place or be placed on temporary supports. The Contractor shall repair or replace damaged signs at no cost to the Agency. Liquidated damages will be assessed against the Contractor in the amount of $200 per Day for each sign out of service for more than 5 Calendar Days because of the Contractor's operations.

00170.85 Responsibility for Defective Work - The Contractor shall make good any defective Work, Materials or Equipment incorporated into the Work, according to the provisions of Section 00150.

(a) Latent Defects - The Contractor shall remain liable for all latent defects resulting from causes other than fraud or gross mistakes that amount to fraud until the expiration of all applicable statutes of limitation and ultimate repose, the Performance Bond, Warranty Bond, or warranty period, whichever expires last. The Contractor shall remain liable for all latent defects resulting from fraud or gross mistakes that amount to fraud regardless of when those latent defects may be discovered, and regardless of whether such discovery occurs outside any applicable statutes of limitation or ultimate repose or any applicable Performance Bond, Warranty Bond, or warranty period.

(b) Contractor Furnished Warranties:

(1) Contractor Warranty for Specific Items - For those Items with Specifications referencing this 00170.85(b)(1) warranty, the Contractor warrants that the Work for those Items, including Changed Work, Additional Work, Incidental Work, On-Site Work, and Extra Work, and Materials and Equipment incorporated into the Work, shall meet the technical and performance Specifications required under the Contract. The warranty period will be identified in each applicable Specification or elsewhere in the Contract and will begin on the date of Second Notification. The Contractor shall be responsible for making good the Work, and for all repairs of damage to the Work and other improvements, natural and artificial structures, systems, equipment, and vegetation caused by, or resulting in whole or in part from, defects in warranted Materials, Equipment, and workmanship. The Contractor shall be responsible for all costs caused by, or resulting in whole or in part from, defects in warranted Materials, Equipment, or workmanship.

When the Agency makes written notification of failure of an item covered by this warranty, the warranty period will stop for the effected item or the portion of the effected item that failed, as applicable, until the required repairs or replacements are made and accepted. All repaired or replaced items shall meet current Specifications, unless otherwise specified in the Contract, and will be warranted for the remaining warranty period.

This warranty provision shall survive expiration or termination of the Contract.

(2) General Warranty for Local Public Agency Projects - For those Contracts that are developed, advertised, awarded, and administered by Local Public Agencies, and are not on the National Highway System or do not contain federal funding, this 00170.85(b)(2) warranty applies.

The Contractor shall warrant all Work and workmanship, including Changed Work, Additional Work, Incidental Work, On-Site Work, and Extra Work, and Materials and Equipment incorporated in the Work, for 1 year from the date of Second Notification, except that warranties according to 00170.85(b)(1) and manufacturers' warranties and extended warranties according to 00170.85(c) shall not be abridged.

The Contractor shall be responsible for meeting the technical and performance Specifications required, making good the Work, and for all repairs of damage to the Work and other improvements, natural and artificial structures, systems, equipment, and vegetation caused by, or resulting in whole or in part from, occurrences beginning during the warranty period and are the result of defects in Materials, Equipment, and workmanship. The Contractor shall be responsible for all costs associated with completing the repair of the defects and for associated Work including, but not limited to, permitting, mobilization, traffic control, erosion control, surface restoration, site cleanup and remediation caused by, or resulting in whole or in part from, defects in Materials, Equipment, or workmanship, and other Work determined by the Engineer to be necessary to complete the repair of the defects.

Within 10 Calendar Days of the Agency's written notice of defects, the Contractor, or the Contractor's Surety, shall vigorously and continuously correct and repair the defects and all related damage. If the Contractor or the Contractor's Surety fails to correct and repair the defects, the Agency may have the correction and repair done by others. The Contractor or Contractor's Surety shall promptly reimburse the Agency for all expenses incurred to correct and repair the defects.

In the event of an emergency, where delay could result in serious loss or damage, the Agency may make emergency corrections and repairs without written notice. The Contractor or Contractor's Surety shall promptly reimburse the Agency for all expenses incurred to correct and repair the defects.

Corrections, repairs, replacements or changes shall be warranted for an additional 1 year period beginning on the date of the Agency's acceptance of the corrections, repairs, replacements or changes.

Without limiting the general applicability of other survival clauses under the Contract, this warranty provision shall survive expiration or termination of the Contract.

(c) Manufacturer Warranties and Guarantees:

(1) Manufacturer Warranties - For those Specification Sections referencing 00170.85(c)(1), the Contractor shall furnish Warranties from the Manufacturer and signed by a Manufacturer's Representative.

The warranty period will be specified in the applicable Specification Section for which it applies.

The warranty period will begin on the date of Second Notification, unless otherwise specified in the Contract.

When the Agency makes written notification to the Manufacturer of failure of an item covered by this warranty, the warranty period will stop for the effected item or the portion of the effected item that failed, as applicable, until the required repairs or replacements are made and accepted. All repaired or replaced items shall meet current Specifications, unless otherwise specified in the Contract, and will be warranted for the remaining warranty period.

If, in the opinion of the Engineer, temporary repairs are necessary, the temporary repairs will be made by the Agency or an independent contractor at the Manufacturer's expense. The Manufacturer shall replace all temporary repairs at no additional cost to the Agency.

The Manufacturer shall provide all required traffic control during repair or replacement of failed items at no additional cost to the Agency.

Warranty work shall be performed when weather permits.

(2) Trade Practice Guarantees - For those Items installed on the Project that have customary trade practice guarantees, the Contractor shall furnish the guarantees to the Engineer at the completion of the Contract.

00170.89 Protection of Utility, Fire-control, and Railroad Property and Services; Repair; Roadway Restoration:

(a) Protection of Utility, Fire-Control, and Railroad Property and Services; Coordination -
The Contractor shall avoid damaging the properties of Utilities, Railroads, railways, and fire-control authorities during performance of the Work. The Contractor shall cooperate with and facilitate the relocation or repair of all Utilities and Utility services, as required under 00150.50, and of Railroad and fire-control property and railways.

The Contractor shall conduct no activities of any kind around fire hydrants until the local fire-control authority has approved provisions for continued service.

The Contractor shall immediately notify any Utility, Railroad, or fire-control authority whose facilities have been damaged.

If an Entity has a valid permit from the proper authority to construct, reconstruct, or repair Utility, Railroad, or fire-control service in the Roadway, the Contractor shall allow the permit holder to perform the work.

(b) Restoration of Roadway after Repair Work - The Contractor shall restore the Roadway to a condition at least equal to that which existed before the repair work addressed under this Subsection was performed, as directed by the Engineer, at no additional cost to the Agency.

00170.92 Fencing, Protecting Stock, and Safeguarding Excavations - The Contractor shall be responsible for loss, injury, or damage that results from its failure to restrain stock and persons.

(a) At the Contractor's Expense - The Contractor shall restrain stock to lands on which they are confined using temporary fences or other adequate means. The Contractor shall provide adequate temporary fences or other protection around excavations to prevent animals and unauthorized persons from entering.

The Contractor shall repair, at Contractor's expense and to the Engineer's satisfaction, fences damaged by the Contractor's operations and the operations of the Contractor's agents, employees and Subcontractors.

(b) At the Agency's Expense - The Contractor shall construct fences, or move and reconstruct fences, as shown on the Contract Documents or as directed by the Engineer. The Contractor shall tear down and remove fencing within the Right-of-Way when no longer needed, as part of the removal Work described in and paid for according to Section 00310.

00170.93 Trespass - The Contractor shall be responsible for its own, its agents' and employees', and its Subcontractors' trespass or encroachment upon, or damage to, property during performance of the Contract.

00170.94 Use of Explosives - The Contractor shall comply with all Laws pertaining to the use of explosives. The Contractor shall notify anyone having facilities near the Contractor's operations of the Contractor's intended use or storage of explosives. The Contractor shall be responsible for all damage resulting from its own, its agents' and employees', and its Subcontractors' use of explosives. (See 00330.41(e) and Section 00335.)

Section 00180 - Prosecution and Progress

00180.00 Scope - This Section consists of requirements for assignment of the Contract, subcontracting, time for performance, Contract responsibility, suspensions, terminations, and related provisions.

00180.05 Assignment/Delegation of Contract - Unless the Agency gives prior written consent, which will not be unreasonably withheld, the Contractor shall not assign, delegate, sell, or otherwise transfer or dispose of any rights or obligations under the Contract, whether voluntarily or involuntarily, and whether by merger, consolidation, dissolution, operation of law, or any other manner, including, without limitation:

- The power to execute or duty to perform the Contract; or
- Any of its right, title or interest in the Contract.

Any purported or attempted assignment, delegation, sale, transfer or disposition without prior Agency consent shall be voidable.

If written Agency consent is given to assign, delegate, sell, or otherwise transfer or dispose of any rights or obligations under the Contract, such consent shall not relieve the Contractor or its Surety of any part of their duties, obligations, responsibilities, or liabilities under or pursuant to the Contract.

00180.06 Assignment of Funds Due under the Contract - Assignment of funds due or to become due under the Contract to the Contractor will not be permitted unless:

- The assignment request is made on the form provided by the Agency;
- The Contractor secures the written consent of the Contractor's Surety to the assignment; and
- The Engineer gives prior written consent to the assignment, which will not be unreasonably withheld.

00180.10 Responsibility for Contract - The Contractor shall direct and coordinate the operations of its employees, Subcontractors and agents performing Work, and see that the Engineer's orders are carried out promptly. The Contractor's failure to direct, supervise and control its employees, Subcontractors and agents performing Work will result in one or more of the following actions, as the Engineer deems appropriate:

- Suspension of the Work;
- Withholding of Contract payments, as necessary to protect the Agency;
- Ordering removal of individuals from the Project Site; or
- Termination of the Contract.

00180.15 Agency's Right to Do Work at Contractor's Expense - Except as otherwise provided in 00150.75 and 00220.60, if the Contractor neglects to prosecute the Work properly or fails to perform any provision of the Contract, the Agency may, after 2 Calendar Days' written notice, correct the deficiencies at the Contractor's expense. In situations where the Engineer reasonably believes there is danger to life or property, the Agency may immediately and without notice correct the deficiencies at the Contractor's expense.

Action by the Agency under this provision will not prejudice any other remedy it may have.

00180.20 Subcontracting Limitations:

(a) General - The Contractor's own organization shall perform Work amounting to at least 30% of the original Contract Amount. The value of subcontracted Work is the full compensation to be paid to the Subcontractor(s) for all pay items in the subcontract(s).

(b) Own Organization - The term "own organization", as used in Section 00180, includes only employees of the Contractor, Equipment owned or rented by the Contractor, Incidental rental of operated Equipment, truck hauling of materials not included in or requiring a subcontract, and Materials and Equipment to be incorporated into the Work purchased or produced by the Contractor.

(c) Rental of Operated Equipment - The use of Equipment rented with operators, except truck hauling of materials which is addressed in 00180.20(e), will be allowed without a subcontract only when the following requirements are met:

(1) Written Request - The Contractor has submitted to the Engineer a written request describing the work or service to be provided, its estimated cost, and its estimated duration. The Engineer must approve the request before the work or service is provided.

(2) Limitations - The use of Equipment rented with operators is limited to performing minor, Incidental, short-duration work or services under the direct supervision of the Contractor or Subcontractor, with Equipment not customarily owned, rented, leased, or operated by a Contractor, or with Equipment that is temporarily unavailable to the Contractor.

(3) Submittals - The Contractor shall provide the Engineer with a copy of the rental agreement or purchase order covering the work or service to be provided. The Contractor shall make certain that the provider of approved work or services submits payrolls required under Section 00170 and complies with applicable Contract provisions, including, without limitation, 00170.07. The work or service provider will not be considered a Subcontractor under the Contract, but the work or services will be considered to have been performed by the Contractor's own organization for the purposes of determining compliance with 00180.20(a).

(4) Revocation of Approval - The Engineer may revoke approval for the work or services provided through rented, operated Equipment at any time the Engineer determines that the work is outside that authorized under 00180.20(c)(2). Unless the Contractor promptly submits to the Engineer a subcontract agreement for consent under 00180.21, the work or service provider shall be immediately removed from the Project Site.

(d) Disadvantaged Business Enterprise (DBE) - Every agreement to perform Work, including, without limitation, subcontracts, trucking services agreements, purchase orders, and rental agreements, shall indicate whether the Work will be performed by a DBE or non-DBE.

(e) Trucking - This Section does not apply to delivery of Materials by or for or from a Supplier. This Subsection applies to all truck hauling of materials not performed with trucks owned (or rented) and operated by the Contractor. If the services under Rental of Operated Equipment or Trucking are provided by a committed DBE firm, a subcontract is required under 00180.21. For this purpose a committed DBE firm is one that was identified by the Contractor to meet an assigned DBE goal including DBE firms substituting for DBE firms committed as a condition of Contract Award.

(1) Trucking Services Agreement - The Contractor shall submit at the preconstruction conference one or more proposed trucking services agreements for all trucking services for hauling materials. The proposed agreements shall include:

- Statement specifying whether the services will be provided by a DBE;

- Statement specifying whether the services will be provided by an owner/operator;
- Prompt payment clause (10 days) (ORS 279C.580);
- Interest penalty clause (ORS 279C.580);
- Lower-tier clause (ORS 279C.580);
- Statement about the provider's ability to file a complaint with the Construction Contractors Board (ORS 279C.515);
- Statement that workers shall be paid not less than the specified minimum hourly rate of wage (ORS 279C.830) as applicable;
- Provision requiring the provider to have a public works bond filed with the Construction Contractors Board before starting work on the Project, unless exempt under ORS 279C.836(4) or (9), or has elected to not file a bond under ORS 279C.836(7) or (8), or is otherwise not applicable;
- Insurance clauses that include Commercial Automobile Liability and Workers Compensation (ORS 656.017 unless exempt under ORS 656.126);
- Provision requiring the provider to comply with applicable Contract provisions, including, without limitation, Record Requirements in 00170.07; and
- Construction Contractors Board License Number if applicable.

The Agency must review and consent to the proposed trucking services agreements prior to use.

(2) Limitations - The approved trucking services agreements shall be used for all trucking services for hauling materials not provided by trucks owned (or rented) and operated by the Contractor except for trucking services provided by committed DBEs that require a subcontract under 00180.21. The Contractor shall execute a trucking services agreement with every trucking services provider for hauling materials prior to the trucking services provider doing any Work on the Project Site.

(3) Submittals - The Contractor shall provide the Engineer with an executed copy of the trucking services agreement not later than 2 Days after the trucking services provider for hauling materials has started work. The Contractor shall make certain that the provider of approved trucking services submits payrolls required under Section 00170, complies with applicable Contract provisions, including, without limitation, 00170.07, and complies with applicable trucking services agreement provisions. The work or service provider will not be considered a Subcontractor under the Contract, but the work or services will be considered to have been performed by the Contractor's own organization for the purposes of determining compliance with 00180.20(a). If the trucking services are provided by an owner/operator:

- Attach a copy of the data required under 00170.65(b)(4) to the trucking services agreement; and
- Each truck shall have the name of the owner/operator clearly displayed on the side of the truck.

(4) Revocation of Approval - The Engineer may revoke approval for trucking services provided under the trucking services agreement at any time the Engineer determines that the work or service is outside that authorized under 00180.20(e). Upon revocation of approval, the service provider shall be immediately removed from the Project Site.

00180.21 Subcontracting:

(a) General - The Contractor shall not subcontract or perform any portion of the Contract by other than the Contractor's own organization without the Agency's prior written consent. A request for consent to subcontract, at any tier, solely for the furnishing of a labor force will not be considered.

A written request for consent to subcontract any portion of the Contract at any tier shall be submitted to the Engineer, and when required by the Engineer, shall be accompanied by background information showing that the organization proposed to perform the Work is experienced and equipped for such Work. The Agency will review the Contractor's submission to verify compliance with Contract requirements, confirm the percentage of Work subcontracted, and evaluate the proposed Subcontractor's ability to perform the Work. If the Agency approves the Contractor's request to subcontract, the Agency will provide its consent to the Contractor's request as follows:

- If the Subcontractor is not providing any of the insurance coverages as permitted under 00170.70(a), the Agency will respond within 7 Calendar Days after the Engineer's receipt of the request.
- If the Subcontractor is providing any of the insurance coverages as permitted under 00170.70(a), the Agency will respond within 35 Calendar Days after the Engineer's receipt of the request. (28 Calendar Days for the Agency to review and approve the Certificates of Insurance required by 00170.70(g) plus 7 Calendar Days to review and approve the subcontract request.)

The Engineer may revoke consent to subcontract. If the Engineer revokes consent to subcontract, the Subcontractor shall be immediately removed from the Project Site.

(b) Submittal of Requests - The Contractor must submit requests for consent to subcontract any portion of the Contract, at any tier, on the Agency's form, available from the Engineer. The Contractor shall attach a duplicate original subcontract agreement. The Contractor must also submit in writing any amendments or modifications proposed to Agency-approved subcontract agreements, at any tier, before the affected Work begins. The Agency's written consent will be required before such amendments or modifications become effective.

The Contractor and proposed Subcontractors shall review the Agency's Conflict of Interest Guidelines, and if any disclosures are required, they shall complete the Conflict of Interest Disclosure Form(s) and submit them with the request for consent to subcontract. The Conflict of Interest Guidelines and Conflict of Interest Disclosure Form are available on the ODOT Procurement Office website (see 00110.05(e)).

If disclosures are not required under the Agency's Conflict of Interest Guidelines, no disclosures need be submitted.

The Subcontractors shall also otherwise be and remain in compliance with the Agency's Conflict of Interest Guidelines. (See 00170.78.)

(c) Substitution of Disclosed Subcontractors - The Contractor may only substitute a previously undisclosed first-tier Subcontractor according to the provisions of ORS 279C.585. The Contractor shall provide the Engineer with a written notification that identifies the name of the proposed new Subcontractor and the reason for the substitution. Authorized reasons for substitution are limited to the following circumstances (see ORS 279C.585(1) through ORS 279C.585(10)):

- The disclosed Subcontractor fails or refuses to execute a written contract that is reasonably based either upon the Project Plans and Specifications, or the terms of the Subcontractor's written Bid, after having had a reasonable opportunity to do so;

- The disclosed Subcontractor becomes bankrupt or insolvent;
- The disclosed Subcontractor fails or refuses to perform the contract;
- The disclosed Subcontractor fails or refuses to meet the bond requirements of the prime Contractor that had been identified prior to the Bid submittal;
- The Contractor demonstrates to the Agency that the Subcontractor was disclosed as the result of an inadvertent clerical error;
- The disclosed Subcontractor does not hold a license from the Construction Contractors Board and is required to be licensed by the board;
- The Contractor determines that the Work performed by the disclosed Subcontractor is not in substantial compliance with the Plans and Specifications, or that the Subcontractor is substantially delaying or disrupting the progress of the Work;
- The disclosed Subcontractor is ineligible to work on a public improvement according to the applicable statutory provisions;
- The substitution is for "good cause" as defined by State Construction Contractors Board rule; or
- The substitution is reasonably based on the Contract alternates chosen by the Agency.

(d) Terms of Subcontracts - All subcontracts shall provide that Work performed under the subcontract shall be conducted and performed according to, and shall include, the pertinent requirements, provisions, terms, and conditions of the Contract, including but not limited to the requirements of 00170.72. Compliance with 00170.07 is required. All subcontracts, including Contractor's with the first-tier Subcontractors and those of the first-tier Subcontractors with their Subcontractors, and any other lower-tier subcontracts shall contain a clause or condition that if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract, the Entity may file a complaint with the Construction Contractors Board, unless payment is subject to a good-faith dispute as defined in ORS 279C.580. Additionally, according to the provisions of ORS 279C.580, subcontracts shall include:

(1) A payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under the subcontract within 10 Calendar Days out of amounts the Agency pays to the Contractor under the Contract.

(2) A clause that requires the Contractor to provide the first-tier Subcontractor with a standard form that the first-tier Subcontractor may use as an application for payment or as another method by which the Subcontractor may claim a payment due from the Contractor.

(3) A clause that requires the Contractor, except as otherwise provided in this Subsection, to use the same form and regular administrative procedures for processing payments during the entire term of the subcontract. The Contractor may change the form or the regular administrative procedures the Contractor uses for processing payments if the Contractor:

- Notifies the Subcontractor in writing at least 45 Calendar Days before the date on which the Contractor makes the change; and
- Includes with the written notice a copy of the new or changed form or a description of the new or changed procedure.

(4) An interest penalty clause that obligates the Contractor, if the Contractor does not pay the first-tier Subcontractor within 30 Calendar Days after receiving payment from the Agency, to pay the first-tier Subcontractor an interest penalty on amounts due in each payment the Contractor does not make in accordance with the payment clause included in the subcontract under 00180.21(d)(1). The Contractor or first-tier Subcontractor is not obligated to pay an

interest penalty if the only reason that the Contractor or first-tier Subcontractor did not make payment when payment was due is that the Contractor or first-tier Subcontractor did not receive payment from the Agency or the Contractor when payment was due. The interest penalty applies to the period that begins on the day after the required payment date and ends on the date on which the amount due is paid; and shall be computed at the rate specified in 00170.10(c).

(5) A clause that requires the Contractor's first-tier Subcontractor to include a payment clause and an interest penalty clause that conform to the standards of ORS 279C.580 (see 00180.21(d)(1) and 00180.21(d)(4)) in each of the first-tier Subcontractor's subcontracts and to require each of the first-tier Subcontractor's Subcontractors to include such clauses in its subcontracts with each lower-tier Subcontractor or Material Supplier.

These payment clauses shall require the Contractor to return all retainage withheld from the Subcontractor, whether held by the Contractor or the Agency, as specified in 00195.50(d).

As required by ORS 279C.800 through ORS 279C.870, subcontracts shall include:

- A provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work on the Project, unless exempt.
- A provision requiring that the workers shall be paid not less than the specified minimum hourly rate of wage.

As and when applicable, the Contractor shall require in its subcontracts that Subcontractors maintain the certifications required by ORS 279A.107.

(e) Contractor's Responsibilities - As a condition of the Agency's grant of consent to subcontract, whether or not stated in the subcontract agreement itself, the Contractor shall remain solely responsible for administration of the subcontract, including, but not limited to:

- Performance of subcontracted Work;
- Progress of subcontracted Work;
- Payments for accepted subcontracted Work; and
- Disputes and claims for additional compensation regarding subcontracted Work.

The Engineer's consent to subcontract will not create a contract between the Agency and the Subcontractor, will not convey to the Subcontractor any rights against the Agency, and will not relieve the Contractor or the Contractor's Surety of any of their responsibilities under the Contract.

(f) Failure to Comply - Failure to comply with 00180.21 will be cause for the Engineer to take action reasonably necessary to obtain compliance. This action may include, but is not limited to:

- Suspension of the Work;
- Withholding of Contract payments as necessary to protect the Agency; and
- Termination of the Contract.

00180.22 Payments to Subcontractors and Agents of the Contractor - To the extent practicable, the Contractor shall pay in the same units and on the same basis of measurement as listed in the Schedule of Items for subcontracted Work or other Work not done by the Contractor's own organization. The Agency will not be responsible for any overpayment or losses resulting from overpayment by the Contractor to Subcontractors and to its other agents, work providers, service providers, and trucking services providers.

If requested, the Engineer will make estimates of the Work quantities performed by Subcontractors or by others on the Project, and of Materials eligible for advances on Materials in the progress payments. These estimates are approximate only, and will be made in units of measure as listed in the Schedule of Items. The Agency does not guarantee the accuracy of these estimates, and an incorrect estimate will not bind the Agency in final settlement.

If requested in writing by a first-tier Subcontractor, the Contractor shall send to the Subcontractor, within 10 Calendar Days of receiving the request, a copy of that portion of any invoice or request for payment submitted to the Agency, or pay document provided by the Agency to the Contractor, specifically related to any labor, Equipment, or Materials supplied by the first-tier Subcontractor.

00180.30 Materials, Equipment, and Work Force - The Contractor shall furnish suitable and sufficient Materials, Equipment, and personnel to properly prosecute and complete the Work. The Contractor shall use only Equipment of adequate size and condition to meet the requirements of the Work and Specifications, and to produce a satisfactory quality of Work. Upon receipt of the Engineer's written order, the Contractor shall immediately remove, and not use again on the Project without the Engineer's prior written approval, Equipment that, in the Engineer's opinion, fails to meet Specifications or produce a satisfactory product or result.

The work force shall be trained and experienced for the Work to be performed. Upon receipt of the Engineer's written order, the Contractor shall immediately remove from the Project Site, and shall not employ again on the Project without the Engineer's prior written approval, any supervisor, employee, worker, agent or other provider of the Contractor or of any Subcontractor or Supplier who, in the Engineer's opinion, does not perform satisfactory Work or whose conduct interferes with the progress of the Work.

If the Contractor fails to remove Equipment or persons as ordered, or fails to furnish suitable and sufficient Materials, Equipment and personnel for the proper prosecution of the Work, the Engineer may suspend the Work by written notice until such orders are complied with and such deficiencies are corrected, or the Engineer may terminate the Contract under the provisions of 00180.90(a).

00180.31 Required Materials, Equipment, Products, and Methods - The Engineer's decisions under this Section are final. Substitutions after Award will be considered as provided below unless specified as the subject of an exemption per ORS 279C.345. See 00120.16 for possible substitutions before Bid Opening.

(a) General - When the Equipment and methods to be used are not specified in the Contract, any Equipment or methods that accomplish the Work as required by the Contract will be permitted.

When the Contract specifies certain Equipment or methods, the Contractor shall use the Equipment or methods specified unless otherwise authorized by the Engineer in writing.

(b) Substitution of Materials, Products, and Equipment to be Incorporated into the Work - After execution of the Contract, the Engineer may approve substitution of Materials, products, and Equipment to be incorporated into the Work as follows:

(1) Reasons for Substitution - The Engineer will consider substitution only if:

- The proposed Materials, products, or Equipment are equal to or superior to the specified items in construction, efficiency and utility; or
- Due to reasons beyond the control of the Contractor, the specified Materials, products, or Equipment cannot be delivered to the Project in sufficient time to complete the Work in proper sequence.

(2) Submittal of Request - The Contractor shall submit requests for substitution to the Engineer, including manufacturers' brochures and other information needed to verify equality of the proposed item(s).

(c) Substitution of Equipment Specified to Perform Work - The Agency encourages development of new or improved Equipment and innovative use of Equipment. When the Specifications require Equipment of a particular size or type to be used to perform certain portions of the Work, the Contractor may submit a request to the Engineer to use Equipment of a different size or type. The request will not be considered as a cost reduction proposal under 00140.70. The request shall:

- Be in writing and include a full description of the Equipment proposed and its intended use;
- Include the reasons for requesting the substitution; and
- Include evidence, obtained at the Contractor's expense and satisfactory to the Engineer, that the proposed Equipment is capable of functioning as well as or better than the specified Equipment.

The Engineer will consider the Contractor's request and will provide a written response to the Contractor, either permitting or denying use of the proposed Equipment.

Permission may be granted on a trial basis to test the quality of Work actually produced, subject to the following:

- There will be no cost to the Agency, either in Contract Amount or in Contract Time;
- The permission may be withdrawn by the Engineer at any time if, in the Engineer's opinion, the Equipment is not performing in all respects equivalent to the Equipment specified in the Contract;
- If permission is withdrawn, the Contractor shall perform the remaining Work with the originally-specified Equipment; and
- The Contractor shall remove and replace non-specification work resulting from the use of the Contractor's proposed Equipment, or otherwise correct it as the Engineer directs, at no additional compensation.

(d) Substitution of Methods - The Agency encourages development of new, improved, and innovative construction methods. When the Plans or Specifications require a certain construction method for a portion of the Work, the Contractor may submit a request for a change by following the provisions of 00140.70, "Cost Reduction Proposals".

00180.32 Alternative Materials, Equipment, and Methods - Whenever the Contract authorizes certain alternative Materials, Equipment, or methods of construction for the Contractor's use to perform portions of the Work, and leaves the selection to the Contractor, the Agency does not guarantee that all listed alternative Materials, Equipment, or methods of construction can be used successfully throughout all or any part of the Work.

The Contractor shall employ only those alternatives that can be used to satisfactorily perform the Work. No additional compensation will be paid for corrective work necessitated by the Contractor's use of an inappropriate alternative.

00180.40 Limitation of Operations:

(a) In General - The Contractor shall comply with all Contract provisions and shall:

- Conduct the Work at all times so as to cause the least interference with traffic, and

- Not begin Work that may allow damage to Work already started.

(b) On-Site Work - The Contractor shall not begin On-Site Work until the Contractor has:

- Received Notice to Proceed;
- Filed with the Construction Contractors Board the public works bond as required in 00170.20;
- An approved Project Work schedule;
- An approved Traffic Control Plan;
- An approved Pollution Control Plan;
- An approved Erosion and Sediment Control Plan;
- Met with the Engineer at the required preconstruction conference; and
- Assembled all Materials, Equipment, and labor on the Project Site, or has reasonably assured that they will arrive on the Project Site, so the Work can proceed according to the Project Work schedule.

00180.41 Project Work Schedules - The Contractor shall submit a Project Work schedule meeting the requirements of this Subsection to the Engineer. The Project Work schedule is intended to identify the sequencing of activities and time required for prosecution of the Work. The schedule is used to plan, coordinate, and control the progress of construction. Therefore, the Project Work schedule shall provide for orderly, timely, and efficient prosecution of the Work, and shall contain sufficient detail to enable both the Contractor and the Engineer to plan, coordinate, analyze, document, and control their respective Contract responsibilities. Sufficient detail shall also include all required double shifts, overtime work, or combination of both necessary to complete Contract Work within the Contract Time.

Contractor's activity related to developing, furnishing, monitoring, and updating these required schedules is Incidental.

The Contractor shall submit a supplemental "look ahead" Project Work schedule each week to the Engineer. The "look ahead" Project Work schedule is supplemental to the Type A, B, or C schedule specified below. The supplemental "look ahead" Project Work schedule shall:

- Identify the sequencing of activities and time required for prosecution of the Work.
- Provide for orderly, timely, and efficient prosecution of the Work.
- Contain sufficient detail to enable both the Contractor and the Engineer to plan, coordinate, analyze, document, and control their respective Contract responsibilities.

The supplemental "look ahead" Project Work schedule shall be written in common terminology and show the planned Work activities broken down into logical, separate activities by area, stage, and size and include the following information:

- The resources the Contractor, Subcontractors, or services will use.
- The locations of each activity that will be done including the limits of the Work by mile posts, stations, or other indicators.
- The time frames of each activity by Calendar Days, shifts, and hours.
- All anticipated Shoulder, lane, and road closures.

At a minimum, the Contractor shall prepare a bar chart that:

- Shows at least 3 weeks of activity including the week the bar chart is issued.

- Uses a largest time scale unit of 1 Calendar Day. Smaller time scale units may be used if needed.
- Is appropriate to the activities.
- Identifies each Calendar Day by month and day.

Include the Contract name, Contract number, Contractor's name, and date of issue on each page of the bar chart.

The Contractor shall submit the supplemental "look ahead" Project Work schedule starting at First Notification and continuing each week until Second Notification has been issued and all punch list items and final trimming and clean-up has been completed. The Contractor shall meet with the Engineer each week to review the supplemental "look ahead" Project Work schedule. If the Engineer or the Contractor determines that the current supplemental "look ahead" Project Work schedule requires changes or additions, either notations can be made on the current schedule or the Engineer may require the submittal of a revised supplemental "look ahead" Project Work schedule. Review of the current and subsequent supplemental "look ahead" Project Work schedules does not relieve the Contractor of responsibility for timely and efficient execution of the Contract.

One of the following Type "A", "B", or "C" schedules will be required under the Contract. The type of schedule will be identified in the Special Provisions.

(a) Type "A" Schedule - When a Type "A" schedule is required, the Contractor shall do the following:

(1) Schedule - At least 7 Calendar Days prior to the preconstruction conference, the Contractor shall provide to the Engineer four copies of a Project Work schedule, including a time-scaled bar chart and narrative, showing:

- Expected beginning and completion dates of each activity, including all staging; and
- Elements of the Traffic Control Plan as required under 00221.06.

The schedule shall show detailed Work activities as follows:

- Construction activities;
- The time needed for completion of the Utility relocation work;
- Submittal and approval of Materials samples and shop drawings;
- Fabrication, installation, and testing of special Materials and Equipment; and
- Duration of Work, including completion times of all stages and their sub phases.

For each activity, the Project Work schedule shall list the following information:

- A description in common terminology;
- The quantity of Work, where appropriate, in common units of measure;
- The activity duration in Calendar Days; and
- Scheduled start, completion, and time frame shown graphically using a time-scaled bar chart.

The schedule shall show the Work broken down into logical, separate activities by area, stage, or size. The duration of each activity shall be verifiable by manpower and Equipment allocation, in common units of measure, or by delivery dates.

The bar chart shall be prepared as follows:

- The length of bar shall represent the number of workdays scheduled.
- The time scale shall be appropriate for the duration of the Contract.
- The time scale shall be in Calendar Days.
- The smallest unit shown shall be 1 Calendar Day.
- The first day and midpoint of each month shall be identified by date.
- Distinct symbols shall be used to denote multiple shift, holiday, and weekend Work.

Each page of the bar chart shall include a title block showing the Contract name and number, Contractor's name, date of original schedule, and all update dates; and a legend containing the symbols used, their definitions, and the time scale, shown graphically. To ensure readability the bar chart shall be drawn on a reasonable size of paper up to a maximum of 36 inch by 36 inch, using multiple sheets when needed.

Within 7 Calendar Days after the preconstruction conference, the Engineer and the Contractor shall meet to review the Project Work schedule as submitted. The Engineer will review the schedule for compliance with all Contract Time limitations and other restraints. Review of this and subsequent schedules by the Engineer shall not relieve the Contractor of responsibility for timely and efficient execution of the Contract. Within 10 Calendar Days of this meeting, the Contractor shall resubmit to the Engineer four copies of the Project Work schedule, including required revisions.

(2) Review by the Engineer - The Project Work schedule may need revision as the Work progresses. Therefore, the Contractor shall periodically review the Project Work schedule and progress of the Work with the Engineer. If the Engineer or the Contractor determines that the Project Work schedule no longer represents the Contractor's own plans or expected time for the Work, a meeting shall be held between the Engineer and the Contractor. At this meeting, the Contractor and the Engineer shall review Project events and any changes for their effect on the Project Work schedule.

The Contractor shall compile an updated Project Work schedule incorporating any changes to the Project completion time(s). The bar chart shall reflect the updated information. The Contractor shall submit four copies of the updated Project Work schedule to the Engineer within 7 Calendar Days after the meeting. The report shall include without limitation the following:

- Sufficient narrative to describe the past progress, anticipated activities, and stage Work;
- A description of any current and expected changes or delaying factors and their effect on the construction schedule; and
- Proposed corrective actions.

(b) Type "B" Schedule - When a Type "B" Schedule is required, the Contractor shall do the following:

(1) Initial Schedule - At least 7 Calendar Days prior to the preconstruction conference, the Contractor shall provide to the Engineer four copies of a time-scaled bar chart Project Work schedule showing:

- Expected beginning and completion date of each activity, including all staging; and
- Elements of the Traffic Control Plan as required under 00221.06.

The initial schedule shall show all Work intended for the first 60 Days of the Contract to the level of detail described in (2) below, and shall show the priority and interdependence (sequencing and network logic) of all major segments of the remainder of the Work.

(2) Detailed Schedule - In addition to the above requirements, and within 30 Calendar Days after the Notice to Proceed, the Contractor shall provide the Engineer one digital copy and four paper copies of a detailed time-scaled bar chart Project Work schedule indicating the critical course of the Work. The digital copy shall be compatible with the Microsoft Project 2016 or newer, or another scheduling program approved by the Engineer.

Detailed work schedule activities shall include the following:

- Construction activities;
- The time needed for completion of the Utility relocation work;
- Submittal and approval of Material samples and shop drawings;
- Procurement of critical Materials;
- Fabrication, installation, and testing of special Material and Equipment; and
- Duration of Work, including completion times of all stages and their sub phases.

For each activity, the Project Work schedule shall list the following information:

- A description in common terminology;
- The quantity of Work, where appropriate, in common units of measure;
- The activity duration in normal workdays; and
- Scheduled start, completion, and time frame shown graphically using a time-scaled bar chart.

The schedule shall show the Work broken down into logical, separate activities by area, stage, or size. The duration of each activity shall be verifiable by manpower and Equipment allocation, in common units of measure, or by delivery dates.

The bar chart shall be prepared as follows:

- The length of bar shall represent the number of normal workdays scheduled.
- The time scale shall be appropriate for the duration of the Contract.
- The time scale shall be in normal workdays (every day except Saturday, Sunday, and legal holidays).
- The smallest unit shown shall be 1 Calendar Day.
- The first day and midpoint of each month shall be identified by date.
- Distinct symbols shall be used to denote multiple shift, holiday, and weekend Work.

The bar chart drawing(s) shall include a title block showing the Contract name and number, Contractor's name, date of original schedule, and all update dates; and a legend containing the symbols used, their definitions, and the time scale, shown graphically. To ensure readability the bar chart shall be drawn on a reasonable size of paper up to a maximum of 36 inch x 36 inch, using multiple sheets when needed.

Within 10 Calendar Days after submission of the Project schedule the Engineer and the Contractor shall meet to review the Project schedule as submitted. Within 10 Days of the review

meeting, the Contractor shall resubmit to the Engineer one digital and four paper copies of the Project schedule, including required revisions.

The accepted Project schedule shall represent all Work, as well as the planned sequence and time for the Work. Review of this and subsequent schedules by the Engineer shall not relieve the Contractor of responsibility for timely and efficient execution of the Contract.

(3) Review and Reporting - The Project Work schedule may require revision as the Work progresses. Therefore, the Contractor shall monitor and when necessary revise the Project Work schedule as follows:

a. Review with the Engineer - The Contractor shall perform ongoing review of the Project Work schedule and progress of the Work with the Engineer. If the Engineer or the Contractor determines that the Project Work schedule no longer represents the Contractor's own plans or expected time for the Work, a meeting shall be held between the Engineer and the Contractor. At this meeting, the Contractor and the Engineer shall review Project events and any changes for their effect on the Project Work schedule. After any necessary action has been agreed upon, the Contractor shall make required changes to the Project Work schedule.

The Contractor shall collect information on all activities worked on or scheduled to be worked on during the previous report period, including shop drawings, Material procurement, and Contract Change Orders that have been issued. Information shall include commencement and completion dates on activities started or completed, or if still in progress, the remaining time duration.

The Contractor shall develop detailed sub-networks to incorporate changes, Additional Work, and Extra Work into the Project Work schedule. Detailed sub-networks shall include all necessary activities and logic connectors to describe the Work and all restrictions on it. The restraints shall include those activities from the Project Work schedule that initiated the sub-network as well as those restrained by it.

The Contractor shall evaluate this information and compare it with the Contractor's Project schedule. If necessary, the Contractor shall make an updated bar chart schedule to incorporate the effect changes may have on the Project completion time(s). For any activity that has started, the Contractor shall add a symbol to show the actual date the activity started and the number of normal workdays remaining until completion. For activities that are finished, a symbol shall be added to show the actual date. The Contractor shall submit one digital and four paper copies of the updated bar chart to the Engineer within 7 Days after the progress meeting, along with a progress report as required by "b." below.

b. Progress Report - The Contractor shall submit a progress report to the Engineer each month. The report shall include the following:

- Sufficient narrative to describe the past progress, anticipated activities, and stage Work;
- A description of any current and expected changes or delaying factors and their effect on the construction schedule; and
- Proposed corrective actions.

(c) Type "C" Schedule - When a Type "C" Schedule is required, the Contractor shall do the following:

(1) Initial Schedule - At least 7 Calendar Days prior to the preconstruction conference, the Contractor shall provide to the Engineer one digital copy and four paper copies of a time-scaled bar chart Project Work schedule. The digital copy shall be compatible with Microsoft Project

2016 or newer, or another scheduling program approved by the Engineer. The initial schedule shall show:

- The expected beginning and completion date of each activity, including all stages and phases;
- The time needed for completion of the Utility relocation work; and
- The elements of the Traffic Control Plan as required under 00221.06.

A logic diagram and a time-scaled bar chart will be acceptable in lieu of a time-scaled logic diagram.

The initial schedule shall show all Work intended for the first 60 Days of the Contract to the level of detail described in (2) below, and shall show the priority and interdependence (sequencing and network logic) of all major segments of the remainder of the Work.

(2) Detailed Project Work Schedule - In addition to the above requirements, and within 30 Calendar Days after First Notification, the Contractor shall provide the Engineer one digital copy and four paper copies of a detailed time-scaled critical path method (CPM) network Project Work schedule and computer analysis printout, both clearly indicating the critical path. The digital copy shall be compatible with Microsoft Project version 2016 or newer, or another scheduling program approved by the Engineer. The first submitted detailed time-scaled critical path method (CPM) network Project Work schedule shall also contain a listing of the quantity of Work for each activity, when appropriate, in common units of measure.

Detailed work schedule activities shall include the following:

- Construction activities;
- Any limitations of operation specified in 00180.40;
- The time needed for completion of the Utility relocation work;
- Implementation of TCP for each stage and phase;
- Submittal and approval of Material samples, mix designs, and shop drawings;
- Agency timeframes to process and return Contractor submitted plans, Working Drawings, Equipment lists and other submittals;
- Procurement of critical Materials;
- Fabrication, installation, and testing of special Material and Equipment;
- Duration of Work, including completion times of all stages and their sub-phases; and
- Specified cure times for all concrete elements.

The activities shall be separately identifiable by coding or use of sub-networks or both. The duration of each activity shall be verifiable and consistent with the description in the Project narrative required in (3) below.

Detailed sub-networks shall include all necessary activities and logic connectors to describe the Work and all restrictions on it. In the restraints, include those activities from any Project Work schedule that initiated the sub-network as well as those restrained by it.

The time scale used on the Contractor's detailed time-scaled critical path method (CPM) network Project Work schedule shall be appropriate for the duration of the activities and the Project duration. The time scale shall be in normal workdays, defined as every day except Saturday, Sunday and legal holidays, with calendar dates identified no less than the first and midpoint of each calendar month. The smallest unit shown shall be 1 Day. The network shall show the

length of the activity or part scaled to accurately represent the number of normal workdays scheduled. Distinct symbols or graphics shall be used to show multiple shift, holiday, or weekend work.

The schedule network drawing(s) shall include a title block showing the Contract name and number, Contractor's name, date of original schedule, and all update dates; and a legend containing the symbols used, their definitions, and the time scale, shown graphically. To ensure readability the drawings shall be on a reasonable size of paper up to a maximum of 36 inch x 36 inch, using multiple sheets when needed.

The Contractor shall include a tabulation of each activity in the computer mathematical analysis of the network diagram. The following information represents the minimum required for each activity:

- Event (node) number(s) for each activity;
- Maintain event (node) numbers throughout the Project;
- Activity description;
- Original duration of activities (in normal workdays);
- Estimated remaining duration of activities (in normal workdays);
- Earliest start date and actual start date (by calendar date);
- Earliest finish date and actual finish date (by calendar date);
- Latest start date (by calendar date);
- Latest finish date (by calendar date); and
- Slack or float time (in workdays).

Computer print-outs shall consist of at least a node sort and an "early start/total-float" sort.

Within 14 Calendar Days after submission of the detailed time-scaled critical path method (CPM) network Project Work schedule, the Engineer and the Contractor shall meet to review the detailed time-scaled critical path method (CPM) network Project Work schedule as submitted. Within 7 Calendar Days of the meeting, the Contractor shall resubmit to the Engineer one digital and four paper copies of the detailed time-scaled critical path method (CPM) network Project Work schedule, including required revisions.

This first accepted detailed time-scaled critical path method (CPM) network Project Work schedule, also called the accepted Project Work schedule, shall represent all Work, as well as the planned sequence and time for the Work. Review and acceptance of any Project Work schedules and Project narratives by the Engineer shall not relieve the Contractor of responsibility for timely and efficient execution of the Contract.

(3) Project Narrative - In addition to the above requirements, and within 30 Calendar Days after First Notification, the Contractor shall provide to the Engineer a final written Project narrative that discusses the planning, coordinating, scheduling and resourcing of the Work. The Project narrative shall include the following written description:

- Plans for staging the Project.
- All critical activities.
- All near critical activities defined as those with less than 30 Days of float.
- All Subcontractor activities that are critical, near critical, and those that are greater than two weeks in duration.

- Labor resourcing, by stage and phase, to include the number of crews, average crew size and planned night/weekend shifts including that of Subcontractors.
- Equipment allocation, by stage and phase to include mobilization, demobilization and planned activities including that of Subcontractors.
- Notifications required under the Contract during each stage and phase which may include but is not limited to road closures, lanes closures, night work, cold plane Pavement removal, and pile driving.
- Provide discussion on addressing reasonably predictable weather conditions and their impact on all weather sensitive activities. Also, provide discussion on other weather limitations that may affect the Project schedule.
- Submittal and approval of material samples, mix designs, and shop drawings.
- Procurement of critical materials.
- Plans for dealing with "unique" construction items.
- Coordination of utilities and any immediate concerns for impacts/delays.
- Constructability issues.
- Cost Reduction Proposals and/or immediate requests for changes to the Specifications.
- Concerns/issues that need to be addressed within the first 90 Days following First Notification.

The accepted Project narrative shall represent all critical and near critical Work, as well as the planned sequence and time for the Work.

(4) Review and Reporting - The Project Work schedule may require revision as the Work progresses. Therefore, the Contractor shall monitor and when necessary revise the Project Work schedule as follows:

a. Review with the Engineer - The Contractor shall perform ongoing review of the accepted Project Work schedule and progress of the Work with the Engineer. If the Engineer or the Contractor determines that the accepted Project Work schedule no longer represents the Contractor's own plans or expected time for the Work, a meeting shall be held between the Engineer and the Contractor. At this meeting, the Contractor and the Engineer shall review Project events and any changes for their effect on the accepted Project Work schedule. After any necessary action has been agreed upon, the Contractor shall make required changes to the accepted Project Work schedule and associated Project narrative. Upon acceptance by the Engineer, this will become the new accepted Project Work schedule and associated Project narrative.

The Contractor shall collect information on all activities worked on or scheduled to be worked on during the previous report period, including shop drawings, Material procurement, and Contract Change Orders that have been issued. Information shall include actual start and completion dates on activities started or completed, or if still in progress, the remaining time duration.

The Contractor shall develop detailed sub-networks to incorporate changes, Additional Work, and Extra Work into the Project Work schedule. Detailed sub-networks shall include all necessary activities and logic connectors to describe the Work and all restrictions on it. The restraints shall include those activities from the Project Work schedule that initiated the sub-network as well as those restrained by it. The procedure for acceptance of the revised or updated Project Work schedule as the new accepted Project Work schedule will be as provided above.

The Contractor shall evaluate this information each month and compare it with the accepted Project Work schedule. The Contractor shall make an updated bar chart schedule to incorporate the effect changes may have on the Project completion time(s). For any activity that has started, the Contractor shall add a symbol to show the actual date the activity started and the number of normal workdays remaining until completion. For activities that are finished, a symbol shall be added to show the actual date. The Contractor shall submit, digitally and in paper, copies of the updated bar chart to the Engineer within 7 Days after the progress meeting, along with a progress report as required by "b." below.

b. Progress Report - Each month the Contractor shall submit a progress report and an update of the Project Work schedule to the Engineer. The report and updated schedule shall be submitted both digitally and in paper copy and shall include the following:

- A sufficient description, in narrative form, to describe the past progress, anticipated activities, and stage Work;
- A description of any current and expected changes or delaying factors and their effect on the construction schedule;
- Proposed corrective actions;
- Proposals to keep the Project on schedule in the event of a delay; and
- Any changes to the logic as compared to the accepted Project Work schedule.

(d) Substitution of Schedules - When a Type "A" schedule is required, a Type "B" or Type "C" schedule may be substituted for the Type "A" schedule.

When a Type "B" schedule is required, a Type "C" schedule may be substituted for the Type "B" schedule.

(e) Specified Contract Time Not Superseded by Schedule Revisions - The completion dates in any Project Work schedule and any revised or updated Project Work schedules shall be within the Contract Time(s) specified for the Project, or within adjusted Contract Times approved according to 00180.80(c). Acceptance of any Project Work schedule or any revised or updated Project Work schedules shall not constitute approval of any completion dates that exceed such Contract Time(s). If the Contractor believes that additional Contract Time is due, the Contractor shall submit, with a revised Project Work schedule, a request for adjustment of Contract Time according to 00180.80(c). A request for an adjustment of Contract Time will be evaluated using the most recently accepted Project Work schedule.

(f) Float Time - Float time shown on the Project Work schedule, including any time between a Contractor's scheduled completion date and the specified Contract Time(s), does not exist for the exclusive use of either party to the Contract and belongs to the Project.

(g) Schedules Do Not Constitute Notice - Submittal of a Project Work schedule, with supporting Project narrative, does not constitute or substitute for any notice the Contractor is required under the terms of the Contract to give the Agency.

(h) Failure to Provide Schedule - The Project Work schedule is essential to the Agency. The Contractor's failure to provide the schedule, schedule information, progress reports, Project narratives, or schedule updates when required will be cause to suspend the Work, or to withhold Contract payments as necessary to protect the Agency, until the Contractor provides the required information to the Engineer.

00180.42 Preconstruction Conference - Unless otherwise approved in writing by the Engineer, before any Work is performed and within 30 Calendar Days of the Notice to Proceed, the Contractor shall meet with the Engineer for a preconstruction conference at a time mutually agreed upon.

00180.43 Commencement and Performance of Work - From the time of commencement of the Work to the time of Final Acceptance the Contractor shall:

- Provide adequate Materials, Equipment, labor, and supervision to perform and complete the Work within the Contract Time or the adjusted Contract Time;
- Perform the Work as vigorously and as continuously as conditions permit, and according to a Project Work schedule that ensures completion within the Contract Time or the adjusted Contract Time;
- Not voluntarily suspend or slow down operations without prior written approval from the Engineer, and if approved submit an updated Project Work schedule according to 00180.41 that ensures completion within the Contract Time or the adjusted Contract Time; and
- Not resume suspended Work without the Engineer's written authorization.
- Conduct the Work at all times in a manner and sequence that will ensure minimal interference with traffic. The Contractor shall not begin Work that will interfere with Work already started. If it is in the County's best interest to do so, the County may require the Contractor to finish a portion or unit of the project on which Work is in progress or to finish a construction operation before Work is started on an additional portion or unit of the project.

00180.50 Contract Time to Complete Work:

(a) General - The time allowed to complete the Work or Pay Item is stipulated in the Solicitation Documents, and will be known as the "Contract Time". (See 00110.20.)

(b) Kinds of Contract Time - The Contract Time will be expressed in one or more of the following ways:

(1) Fixed Date Calculation - The calendar date on which the Work or Pay Item shall be completed; or

(2) Calendar Day Calculation - The number of Calendar Days from a specified beginning point in which the Work or Pay Item shall be completed.

(c) Beginning of Contract Time - When the Contract Time is stated in Calendar Days, counting of Contract Calendar Days will begin on the Day the Contractor begins On-Site Work as defined in 00110.20.

(d) Recording Contract Time - All Contract Time will be recorded and charged to the nearest one-half Day.

On Contracts with Calendar Day counts, the Engineer will furnish the Contractor a weekly statement of Contract Time charges. The statement will show the number of Calendar Days counted for the preceding week and the number of Calendar Days remaining prior to the established completion date for the specified Work in 00180.50(h).

For Contracts with fixed completion dates for Pay Items, the Engineer will furnish the Contractor a weekly statement of Contract Time charges only after expiration of the Contract Time. The statement will show the number of Calendar Days of liquidated damages that have been assessed, if any.

These statements will include any exclusions from, or adjustments to, Contract Time.

(e) Exclusions from Contract Time - Regardless of the way Contract Time is expressed in the Contract, certain Calendar Days will not be charged against Contract Time. These exclusions will

be allowed when the Contractor is prevented from performing Work due to one of the following reasons, resulting in delay:

- Acts of God or Nature;
- Court orders enjoining prosecution of the Work;
- Strikes, labor disputes or freight embargoes that, despite the Contractor's reasonable efforts to avoid them, cause a shutdown of the entire Project or one or more major operations. "Strike" and "labor dispute" may include union action against the Contractor, a Subcontractor, a materials Supplier, or the Agency; or
- Suspension of the Work by written order of the Engineer for reasons other than the Contractor's failure or neglect.

(f) Time Calculation Protest - In the event the Contractor disputes the accuracy of the statement of Contract Time charges, it shall immediately contact the Engineer and attempt to resolve the dispute. If the dispute cannot be resolved informally, the Contractor shall submit a formal written protest to the Engineer within 7 Calendar Days of the date the Engineer mailed or delivered the statement. Failure to submit a formal written protest within the 7 Calendar Day period constitutes the Contractor's approval of the time charges, or adjusted time charges, itemized in the statement.

(g) End of Contract Time - When the Engineer determines that the On-Site Work has been completed, except for the items listed below, the Engineer will issue a Second Notification.

The Second Notification will list:

- The date the time charges stopped;
- Final trimming and cleanup tasks (see 00140.90);
- Equipment to be removed from the Project Site;
- Minor corrective work not involving additional payment to be completed; and
- Submittals, including, without limitation, all required certifications, bills, forms, warranties, certificate of insurance coverage (00170.70(b)), and other documents, required to be provided to the Engineer before Third Notification will issue.

The Contractor shall complete all tasks listed in the Second Notification in an expeditious manner within the time frame proposed by the Contractor and accepted by the Engineer. Unless otherwise agreed by the Agency, failure of the Contractor to complete all tasks listed in the Second Notification within the time frame accepted, will result in the Agency rescinding the Second Notification. Counting of time charges will resume upon expiration of the accepted time frame.

00180.60 Notice of Delay - The Contractor shall notify the Engineer of any delay that will likely prevent completion of the Work or a Pay Item by the date specified in the Project Work schedule. The notice shall be in writing and shall be submitted within 7 Calendar Days of when the Contractor knew or should have known of the delay. The notice shall include, to the extent available, the following:

- The reasons or causes for the delay;
- The estimated duration of the delay and the estimated resulting cumulative delay in Contract completion;
- Except for 00180.50(e) and 00180.65 delays, whether or not the Contractor expects to request an adjustment of Contract Time due to the delay;
- Whether or not the Contractor expects to accelerate due to the delay; and

- Whether or not the Contractor expects to request additional compensation due to the delay. Except for 00180.50(e) and 00180.65 delays, failure to include this information will constitute waiver of the Contractor's right to later make such a request.

00180.65 Right-of-Way and Access Delays - Right-of-Way and access delays will be taken into consideration in adjusting Contract Time, and in approving additional compensation if the performance of the Work is delayed because of the Agency's failure to make available to the Contractor:

- Necessary Rights-of-Way;
- Agency-owned or Agency-controlled Materials sources that are offered in the Contract for the Contractor's use; or
- Access to, or rights of occupancy of, buildings and other properties the Contractor is required to enter or to disturb according to Contract requirements.

If the ending date of an anticipated delay is stated in the Special Provisions, only the delay occurring after that date will be considered for adjusting Contract Time or providing additional compensation.

00180.70 Suspension of Work:

(a) General - The Engineer has authority to suspend the Work, or part of the Work, for any of the following causes:

- Failure of the Contractor to correct unsafe conditions;
- Failure of the Contractor to carry out any provision of the Contract;
- Failure of the Contractor to carry out orders issued by the Engineer, the Agency, or any regulatory authority;
- Existence of conditions unsuitable to proper or safe performance of the Work; or
- Any reason considered by the Agency to be in the public interest.

When Work has been suspended for any reason, the Contractor shall not resume Work without the Engineer's written authorization.

(b) Contractor's Responsibilities during and after Suspension - During periods of suspension of the Work, the Contractor shall continue to be responsible for protecting and repairing the Work according to 00170.80, and for ensuring that a single designated representative responsible for the Project remains available according to 00150.40.

When Work is resumed after suspension, unless otherwise specified in the Contract, the Contractor shall perform the following at no additional compensation:

- Replace or repair any Work, Materials, and Equipment to be incorporated into the Work that was lost or damaged because of the temporary use of the Project Site by the public; and
- Remove Materials, Equipment, and temporary construction necessitated by temporary maintenance during the suspension, as directed by the Engineer.

(c) Compensation and Allowances for Suspension - Compensation and allowance of additional Contract Time due to suspension of any portion of the Work will be authorized only for Agency-initiated suspensions for reasons other than the Contractor's failure or neglect. (See 00180.50(e), 00180.65, and 00195.40.)

00180.80 Adjustment of Contract Time:

(a) General - Contract Time established for the Work will be subject to adjustment, either by increase or decrease, for causes beyond the control of the Contractor, according to the terms of this Subsection. After adjustment, the Contract Time will become, and be designated as, the "Adjusted Contract Time". Except as provided in 00180.65 and 00195.40, an adjustment of Contract Time shall be the Contractor's only remedy for any delay arising from causes beyond the control of the Contractor.

(b) Contractor's Request Not Required - The Engineer may increase or decrease the Contract Time or the Adjusted Contract Time if Change Orders or Extra Work orders issued actually increase or decrease the amount of time required to perform the Work. The Engineer may also increase Contract Time in the event of Right-of-Way and Access delays (see 00180.65), and those delays due to causes beyond the Contractor's control specified in 00180.50(e). The Engineer will promptly inform the Contractor of adjustments made to Contract Time according to this Subsection, and will include the reasons for adjustment.

If the Agency anticipates delay during performance of the Contract, and specifies its expected duration in the Special Provisions, the Engineer will only consider additional delay beyond the stipulated duration in determining whether to adjust Contract Time.

(c) Contractor's Request Required - In the event the Contractor believes that additional Contract Time is due, the Contractor shall submit to the Engineer a timely request for adjustment of Contract Time. The Engineer will not consider untimely requests. The Agency regards as timely only those requests for adjustment of Contract Time that:

- Accompany a proposed revised Project Work schedule submitted according to 00180.41, for comparison with the last revision of the Project Work schedule; or
- Are not otherwise deemed waived and are submitted within 45 Days after the date of Second Notification, if Second Notification has been issued.

The Engineer will not grant an adjustment of Contract Time for events that occurred prior to the date of the last revision of the Project Work schedule. The Engineer will not authorize, nor the Agency pay, acceleration costs incurred by the Contractor prior to its submittal of a request for adjustment of Contract Time to which the acceleration costs relate.

The Contractor's request for adjustment of Contract Time shall be submitted to the Engineer on a form provided by, or in a format acceptable to, the Engineer, and shall include a copy of the written notice required under 00180.60. The request shall include without limitation:

- Consent of the Contractor's Surety if the request totals more than 30 Calendar Days of additional Contract Time;
- Sufficient detail for the Engineer to evaluate the asserted justification for the amount of additional Contract Time requested;
- The cause of each delay for which additional Contract Time is requested, together with supporting analysis and data;
- Reference to the Contract provision allowing Contract Time adjustment for each cause of delay;
- The actual or expected duration of delay resulting from each cause of delay, expressed in Calendar Days; and
- A schedule analysis based on the current approved Project Work schedule for each cause of delay, indicating which activities are involved and their impact on Contract completion.

(d) Basis for Adjustment of Contract Time - In the adjustment of Contract Time, the Engineer will consider causes that include, but are not limited to:

- Failure of the Agency to submit the Contract and bond forms to the Contractor for execution within the time stated in 00130.50, or to submit the Notice to Proceed within the time stated in 00130.90;
- Errors, changes, or omissions in the Supplemental Drawings, quantities, or Specifications;
- Performance of Extra Work;
- Failure of the Agency or Entities acting for the Agency to act promptly in carrying out Contract duties and obligations;
- Acts or omissions of the Agency or Entities acting for the Agency that result in unreasonable delay referenced in 00195.40;
- Causes cited in 00180.50(e); and
- Right-of-way and access delays referenced in 00180.65.

The Engineer will not consider requests for adjustment of Contract Time based on any of the following:

- Contentions that insufficient Contract Time was originally specified in the Contract;
- Delays that do not affect the specified or Adjusted Contract Time;
- Delays that affect the Contractor's planned early completion, but that do not affect the specified or adjusted Contract Time;
- Shortage or inadequacy of Materials, Equipment or labor;
- Late delivery of Materials and Equipment to be incorporated into the Work, except under those conditions referenced in 00180.50(e);
- Different area of Material source in 00160.40(a);
- Substitution of Equipment in 00180.31(c);
-
- Reasonably predictable weather conditions: For Fixed Date Contracts, normally expected inclement weather conditions are considered in the Engineer's selection of the completion date, and time extensions will only be considered for reasons shown in 00180.50(e) and for weather conditions which in the opinion of the Engineer have an extraordinarily low statistical probability. Low statistical probability will be determined using historical weather data from a government website for the previous 10 years in which weather that occurs within 7 years of the 10-year period is considered reasonable and predictable; or
- Other matters within the Contractor's control or Contract responsibility.

(e) Consideration and Response by Agency - The Engineer will only consider a Contractor's request for Contract Time adjustment submitted according to the requirements of 00180.80(c). The Engineer may elect not to consider claimed delays that do not affect the specified or adjusted Contract Time required to complete the Work.

The Engineer may adjust Contract Time for causes not specifically identified by the Contractor in its request.

The Engineer will review a properly submitted request for Contract Time adjustment, and within a reasonable time will advise the Contractor of the Engineer's findings. If the Contractor disagrees with the Engineer's findings, the Contractor may request review according to the procedure specified in 00199.40.

00180.85 Failure to Complete on Time; Liquidated Damages:

(a) Time is of the Essence - Time is of the essence in the Contractor's performance of the Contract. It is essential and in the public interest that the Contractor prosecute the Work vigorously to Contract completion and within Contract Time or adjusted Contract Time.

The Agency does not waive any rights under the Contract by permitting the Contractor to continue to perform the Contract, or any part of it, after the Contract Time or adjusted Contract Time has expired.

(b) Liquidated Damages - Delays in the Contractor's performance of the Work will cause the Agency to sustain damages; increase risk to, inconvenience, and interfere with the traveling public and commerce; and increase costs to taxpayers. Because the Agency finds it is unduly burdensome and difficult to demonstrate the exact dollar value of such damages, the Contractor agrees to pay to the Agency, not as a penalty but as liquidated damages, the amount(s) determined as specified below for each Calendar Day the Work remains incomplete after the expiration of the Contract Time or adjusted Contract Time applicable to that Work.

Payment by the Contractor of liquidated damages does not release the Contractor from its obligation to fully and timely perform the Contract according to its terms. Nor does acceptance of liquidated damages by the Agency constitute a waiver of the Agency's right to collect any additional damages it may sustain by reason of the Contractor's failure to fully perform the Contract according to its terms.

If the Contract is terminated according to 00180.90(a), and if the Work has not been completed by other means on or before the expiration of Contract Time or adjusted Contract Time, liquidated damages will be assessed against the Contractor for the duration of time reasonably required to complete the Work.

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be shown in the Special Provisions.

00180.88 Workplace Harassment Prevention Plan – Submit a workplace harassment prevention plan for review ten (10) days before the preconstruction conference. The plan shall ensure all workers are guaranteed a safe and respectful work environment regardless of their identity or status. The plan applies to, but is not limited to, a worker's race, gender, creed, or any protected characteristic under state or federal law. At a minimum, the plan shall include:

- A Statement that the Contractor shall provide a safe and respectful workplace on the jobsite for all workers, subcontractors, suppliers, and other persons performing work.
- A description of how the plan will be implemented and monitored during the project duration.
- A list of the in-person trainings that will be conducted for workers of all ranks working on the project to support, promote, and grow a positive jobsite culture.
- A list of meaningful policies including procedures for aggrieved workers in need of recourse.
- How incidents involving bullying or harassment will be investigated and resolved in a prompt, thorough, and impartial manner.

Contractor shall post on the jobsite and make available copies of policies about hate, intimidation, or harassment including how to report incidents and how to receive support. Materials will be provided in all languages necessary to be inclusive of the workforce.

00180.90 Termination of Contract and Substituted Performance:

(a) Termination for Default - Termination of the Contract for default may result if the Contractor:

- Fails to comply with the requirements for records;
- Violates any material provision of the Contract;
- Disregards applicable laws and regulations or the Engineer's instructions;
- Refuses or fails to supply enough Materials, Equipment or skilled workers for prosecution of the Work in compliance with the Contract;
- Fails to make prompt payment to Subcontractors;
- Makes an unauthorized general assignment for the benefit of the Contractor's creditors;
- Has a receiver appointed because of the Contractor's insolvency;
- Is adjudged bankrupt and the court consents to the Contract termination; or
- Otherwise fails or refuses to faithfully perform the Contract according to its terms and conditions.

If the Contract is terminated by the Agency, upon demand the Contractor and the Contractor's Surety shall provide the Engineer with immediate and peaceful possession of the Project Site, and of all Materials and Equipment to be incorporated into the Work, whether located on and off the Project Site, for which the Contractor received progress payments under 00195.50.

If the Contract is terminated for default, neither the Contractor nor its Surety shall be:

- Relieved of liability for damages or losses suffered by the Agency because of the Contractor's breach of Contract; or
- Entitled to receive any further progress payments until the Work is completed. However, progress payments for completed Work that remain due and owing at the time of Contract termination may be made according to the terms of 00195.50, except that the Engineer will be entitled to withhold sufficient funds to cover costs incurred by the Agency as a result of the termination. Final payment to the Contractor will be made according to the provisions of Section 00195.

If a termination under this provision is determined by a court of competent jurisdiction to be unjustified, the termination shall be deemed a termination for public convenience.

(b) Substituted Performance - According to the Agency's procedures, and upon the Engineer's recommendation that sufficient cause exists, the Agency, without prejudice to any of its other rights or remedies and after giving the Contractor and the Contractor's Surety at least 10 Calendar Days' written notice, may:

- Terminate the Contract;
- Substitute the Contractor with another Entity to complete the Contract;
- Take possession of the Project Site;
- Take possession of Materials on the Project Site;
- Take possession of Materials not on the Project Site, for which the Contractor received progress payments under 00195.50;
- Take possession of Equipment on the Project Site that is to be incorporated into the Work;
- Take possession of Equipment not on the Project Site that is to be incorporated into the Work, and for which the Contractor received progress payments under 00195.50; and

- Finish the Work by whatever method the Agency deems expedient.

If, within the 10 Calendar Day notice period provided above, the Contractor and/or its Surety corrects the basis for declaration of default to the satisfaction of the Engineer, or if the Contractor's Surety submits a proposal for correction that is acceptable to the Engineer, the Contract will not be terminated.

(c) Termination for Public Convenience - The Engineer may terminate the Contract for convenience in whole or in part whenever the Engineer determines that termination of the Contract is in the best interest of the public.

The Engineer will provide the Contractor and the Contractor's Surety 7 Calendar Days' written notice of termination for public convenience. After such notice, the Contractor and the Contractor's Surety shall provide the Engineer with immediate and peaceful possession of the Project Site, and of Materials and Equipment to be incorporated into the Work, whether located on and off the Project Site, for which the Contractor received progress payments under 00195.50.

If the Contract is terminated for public convenience, neither the Contractor nor its Surety shall be relieved of liability for damages or losses suffered by the Agency as a result of defective, unacceptable or unauthorized Work completed or performed.

Compensation for Work terminated by the Engineer under this provision will be determined according to the provisions of 00195.70(b).

Section 00190 - Measurement of Pay Quantities

Description

00190.00 Scope - The Engineer will measure pay quantities for accepted Work according to the United States standard measure unless otherwise provided in the Contract. Unless otherwise specified in the Contract, the Engineer will round off all quantity computations using the following convention:

- The final significant digit will not be changed when the succeeding digit is less than 5.
- The final significant digit will be increased by one when the succeeding digit is 5 or greater.

The measurement provisions contained in the Specifications for each Pay Item will supplement or modify the above convention by:

- Imposing measurement limitations
- Describing measurement or computation procedures
- Giving conversion factors or adjustment conditions
- Providing for determination of reasonably accurate and representative Pay Item quantities

Measurements required or allowed to be made by the Contractor will be subject to the Engineer's verification. The Engineer's decision about measurement is final.

00190.10 Measurement Guidelines - Measurement of quantities will be made on the following bases, unless otherwise specified in the Contract:

(a) Unit Basis - Unit will be each, unless otherwise specified in the Contract and will be determined by actual count of units in place.

(b) Length Basis - Length will be feet or mile, unless otherwise specified in the Contract and will be determined by measuring the length at least to the nearest 0.1 foot or at least to the nearest 0.1 mile, as applicable, unless otherwise specified in the Contract. Measurements will be limited to the dimensions shown or specified, or as directed by the Engineer.

(c) Area Basis - Area will be square foot, square yard, or acre, unless otherwise specified in the Contract and will be determined by measuring the width and the length (or height) at least to the nearest 0.1 foot and computed at least to the nearest 0.1 square foot, nearest 0.1 square yard, or nearest 0.1 acre, as applicable, unless otherwise specified in the Contract.

(d) Weight Basis - Weight will be pound or Ton, unless otherwise specified in the Contract and will be determined as follows:

(1) Pound - Pound weight will be determined by the net weight identified on the manufacturer's packaged labels, subject to periodic check weighing. Weight by pound will be measured at least to the nearest 1.0 pound unless otherwise specified in the Contract.

Provide a certificate with each shipment together with a certified copy of the weight of each delivery. If the check weight is less than the manufacturer weight by more than 0.4%, the discrepancy will be resolved by the Engineer.

(2) Ton - Ton weight will be determined on Contractor-provided scales as required under 00190.20 unless otherwise allowed by the Specifications. Weight by Ton will be measured at least to the nearest 0.01 Ton unless otherwise specified in the Contract.

If bituminous materials, portland cement, lime, and similar bulk Materials are shipped by truck or rail, the Supplier's shipping invoice with net scale weights, or volumes converted to weights, may be used for Pay Item quantity determination in place of weights determined on the Contractor-provided vehicle scales.

Shipping invoice weights of the Supplier's truck or transport shall be subject to periodic check weighing on the Contractor's vehicle scales, or other scales designated, according to 00190.20. If the check weight is less than the Supplier weight by more than 0.4%, the discrepancy will be resolved by the Engineer.

No payment will be made:

- For quantities in excess of the Supplier weight
- When Materials have been lost, wasted, or otherwise not incorporated into the Work
- For additional hauling costs resulting from the check weighing

(e) Volume Basis - Volume will be cubic yard truck measure or in-place measure, gallons, foot board measure (FBM), or thousand foot board measure (MFBM), unless otherwise specified in the Contract and will be measured at least to the nearest 0.1 cubic yard, nearest 1.0 gallon, nearest 0.1 FBM, or nearest 0.1 MFBM, as applicable, unless otherwise specified in the Contract.

Truck measure will be the measured and calculated maximum "water level" capacity of the vehicle. Quantities will be determined at the point of delivery, with no allowance for settlement of Material during transit. When required to facilitate measurement, the vehicle load shall be leveled at the point of delivery. Payment will not be made for Material in excess of the maximum "water level" capacity. Deductions will be made for loads below the maximum "water level" capacity.

When bituminous materials are measured by volume, the volume will be measured at 60 °F or will be corrected to the volume at 60 °F using the correction factors found in the MFTP (ODOT TM 321).

(f) Time Basis - Time will be hour, Day, or year, unless otherwise specified in the Contract, and will be measured to at least the nearest 0.5 hour, nearest 1.0 Day, or nearest 1.0 year, as applicable, unless otherwise specified in the Contract.

(g) Standard Manufactured Items - If standard manufactured items, such as fence, wire, plates, rolled shapes, pipe, conduit and other similar items are specified in the Contract by properties such as gauge, unit weight, or section dimensions, the manufacturing tolerances established by the industry involved will be accepted unless more stringent tolerances are cited in the Contract.

(h) Lump Sum Basis - Lump sum, when used, means the Work described shall be completed and accepted without measurement unless changes are ordered in writing by the Engineer. If estimated quantities of the Work to be performed are listed in the Special Provisions, they provide only a basis for adjusting payment amounts. Estimated quantities are approximate only, and are made from a reasonable interpretation of the Contract Documents. Computations based on the details and dimensions shown on the Contract Documents are not guaranteed to equal estimated quantities.

If the Agency issues no Change Order, the Agency will make no pay adjustment for quantities based on the Contractor's computations that overrun or underrun the estimated quantities.

If the Agency issues Change Orders for changes in the Work, the Engineer will measure such changes according to the standards set by 00195.20 to determine adjustment of payment.

00190.20 Contractor to Provide Vehicle Weigh Scales:

(a) General - If the Specifications require measurement by weighing on vehicle weigh scales, the Contractor shall provide vehicle weigh scales and shall transport Materials to the scales. Subject to the Engineer's approval, weights may be determined by plant or hopper scales according to 00190.30.

Contractor-provided scales shall be furnished, installed and maintained by the Contractor or its Supplier, or, subject to the Engineer's approval, may be commercial scales located in the vicinity of the Project.

Unless otherwise provided in the Contract, Pay Items to be measured by weight shall include all Contractor costs for providing, maintaining, inspecting, and testing scales; for furnishing appropriate weigh tickets; for self-printing scales; for electronic weigh memo system(s); and for transporting Materials to the scales or to check weighing.

(b) Requirements - The scales shall conform to ORS Chapter 618, or the laws of the state in which they are located, and NIST *Handbook 44*, and shall be:

- Licensed by the Oregon Department of Agriculture, or by the analogous regulatory body for scales located outside the State;
- Technically suitable for weighing the Materials;
- Properly installed and maintained; and
- Accurate to the required tolerances.

The weight of any Materials weighed by anyone other than the Engineer will be subject to check weighing as the Engineer directs.

(c) Approaches - Vehicle scale approaches shall be:

- At each end of the scale platform;
- Straight and in line with the platform; and
- Long enough to accommodate combination vehicles longer than the scale platform so that they are level and allow release of brakes before weighing.

(d) Inspections - Contractor shall have all scales certified, that is inspected and their accuracy tested, by the Oregon Department of Agriculture, an analogous regulatory body for scales located outside the State, or a scale service company, as follows:

- Before use if installed at a new site;
- 60 Calendar Days after initial inspection;
- As otherwise required by the Oregon Department of Agriculture, or an analogous regulatory body for scales located outside the State; and
- When the Engineer directs additional inspections.

No Materials weighed on scales without current certifications according to this Subsection will be accepted. The Contractor shall provide a copy of all required certifications to the Engineer.

Testing by a scale service company within the State of Oregon shall comply with ORS Chapter 618.

If additional inspections directed by the Engineer confirm that the scale accuracy is within the required tolerances, the Agency will pay the cost for inspecting and testing the scales. If the scale

accuracy is not within these tolerances, the Contractor shall pay the cost for inspecting and testing the scales.

(e) Inspection Results - If an inspection indicates the scales have been under-weighing (indicating less than the true weight), the Agency will make no additional payment to the Contractor for Materials previously weighed.

If an inspection indicates the scales have been over-weighing (indicating more than the true weight), the weights will be reduced for Materials received after the time the Engineer determines the overweighing began or, if that is not possible, after the last acceptable certification of the scales. The reduction will be the amount of error in excess of the 0.2% maintenance tolerance allowed in the Contract.

(f) Contractor-Provided Weigh Technician - The Contractor shall provide a technician to operate Contractor-provided vehicle weigh scales. The Agency may observe procedures and require check weighing according to the following:

(1) Scale with Automatic Printer - If the scales have an automatic weigh memo printer or an approved electronic weigh memo system that does not require manual entry of gross weight information, the Agency may periodically have a representative at the scales to observe the weighing procedures. In addition, the Engineer may periodically check the weight for a load of Materials by directing the haul vehicle to reweigh on a different scale that has been inspected and certified according to 00190.20(b) and 00190.20(d).

If a different scale is not available within a 30-mile round trip from the regular haul route, the Agency will allow check weighing on an approved alternate basis. Check weights within 0.4% of the Contractor-provided weight are acceptable.

The Engineer will resolve discrepancies found by check weighing. Agency employee costs will be paid by the Agency. The Contractor shall pay all other costs resulting from the check weighings, including, without limitation, the use of other scales.

When 2,000 Tons or less of all types of Materials are received from a scale, check weighing will be at the discretion of the Engineer.

The Contractor shall make at least one check weighing on projects where more than 2,000 Tons of all types of Materials are received from a scale. If more than 50 Tons per Day of all types of Materials are received from a scale, the Contractor shall make random check weighings at least once every ten Days on which more than 50 Tons is received or at each interval that 10,000 Tons has been weighed, whichever occurs first, or as directed by the Engineer. The check weighing frequency does not apply to total quantities less than 2,000 Tons of all types of Materials from a scale. The Contractor shall provide the Engineer with the results of the check weighing.

(2) Scale Without Automatic Printer - If the scales require manual entry of gross weight information, the Agency may periodically have a representative weigh witness at the scales to observe the weighing procedures. The Contractor shall inform the Engineer of their intent to use a scale without an automatic printer at least 3 working days before weighing begins or before the Contractor changes to a scale that does not have an automatic printer. The Contractor shall pay costs for the weigh witness. The hourly cost of the weigh witness will be as stated in the Special Provisions. In addition, the Engineer may periodically check the weight for a load of Materials by directing the haul vehicle to reweigh on a different scale that has been inspected and certified according to 00190.20(b) and 00190.20(d).

If a different scale is not available within a 30-mile round trip from the regular haul route, the Agency will allow check weighing on an approved alternate basis. Check weights within 0.4% of the Contractor-provided weight are acceptable.

The Engineer will resolve discrepancies found by check weighing. Agency employee costs for check weighings will be paid by the Agency. The Contractor shall pay all other costs resulting from the check weighings, including, without limitation, the use of other scales.

If more than 50 Tons per Day of all types of Materials are received from a scale, the Contractor shall make random check weighings at least every tenth Day on which more than 50 Tons is received or at each interval that 10,000 Tons has been weighed, whichever occurs first, or as directed by the Engineer. The Contractor shall make at least one check weighing on all projects where Materials are received from a scale without an automatic printer. The Contractor shall provide the Engineer with the results of the check weighing.

(3) Duties of Weigh Technician - The Contractor's weigh technician shall:

- Determine twice a Day, or as otherwise directed by the Engineer, the empty haul weights (tare weights) of hauling vehicles, unless vehicles are tared before each load;
- Furnish daily a listing of the tare weights if 10 or more loads are hauled during that Day;
- Furnish a note listing the net weight for each consecutive ten loads with the following load;
- Furnish a daily listing of the net weights and total weight for each type of Material hauled during that Day; and
- Furnish a legible, serially numbered weigh memo for each load of Materials to the Agency's Materials receiver at the point of delivery, or as directed by the Engineer. The memo shall identify the Project, the Materials, the date, net weight (gross and tare as appropriate), and identification of the vehicle and weigh technician. If approved by the Engineer an electronic weigh memo system may be used. Requests to use an electronic weigh memo system shall be submitted to the Engineer according to 00150.37, providing sufficient detail for the Engineer to perform an evaluation. If approved, the Contractor shall provide training, technical support, reports, and weigh memo information to the Engineer at no additional cost to the Agency. The electronic weigh memo system shall be:
  - Capable of recording and securely retaining the same required “weigh memo” information identified above. For retention see 00170.07(c).
  - Fully integrated with the provided weigh scale system.
  - Designed in such a way that the data electronically read from scales cannot be altered by the Contractor, Subcontractor, Supplier, Engineer, or other system users.
  - Designed to allow the Engineer remote access to all the weigh memo data in real-time and allow the Engineer to add comments to the individual weigh memo regarding waste, temperature, stations, yield or other information. The system shall identify the system user or individual that adds comments to the electronic weigh memo or otherwise accesses the system. The Contractor shall provide the Engineer a means to access the data if the Engineer cannot use an Agency provided hand held device for access.
  - Capable of providing all the weigh memo information, including any added comments, in an electronic data file the Engineer can easily access without proprietary software.

(g) Agency-Provided Weigh Technician - If the Contractor provides vehicle weigh scales without a weigh technician meeting the requirements of this Subsection, the Agency will provide a weigh technician at the Contractor's expense. The hourly cost for the weigh technician will be as stated in the Special Provisions. The Contractor shall provide a weighhouse for the weigh technician as specified in the Special Provisions. The Agency's weigh technician will:

- Determine tare weights;
- Prepare weigh memos for each load;
- Compile the weigh records; and
- Not participate in the production of Materials or the loading of haul vehicles.

00190.30 Plant Scales - The Contractor, with the Engineer's written approval, may weigh plant-mixed Materials on scales that have either:

- An automatic weight batching and mixing control printer system; or
- A weigh hopper printer system.

If approved by the Engineer, an electronic weigh memo system may be used in place of a printer system. See 00190.20(f)(3).

Any additional costs resulting from the use of these scales shall be borne by the Contractor. Check weighing will be done according to 00190.20(f).

Except for 00190.20(c) regarding approaches, the Contractor's use of plant scales shall comply with all provisions of 00190.20.

The Engineer's approval for the Contractor's use of plant scales to determine pay weights will be rescinded if check weighing or scale inspections indicate the scales do not consistently determine weights within the tolerances allowed by state law.

Section 00195 - Payment

Description

00195.00 Scope and Limit:

(a) General - The Agency will pay only for measured Pay Item quantities incorporated into the Work or performed according to the terms of the Contract. The Contractor understands and agrees that Pay Item quantities listed in the Schedule of Items do not govern payment.

Payment constitutes full compensation to the Contractor for furnishing all Materials, Equipment, labor, and Incidentals necessary to complete the Work; and for risk, loss, damage, and expense arising from the nature or prosecution of the Work or from the action of the elements, subject to the provisions of 00170.80. The Contractor shall include the costs of bonds and insurance for the Project in the unit price for each Pay Item of Work to be performed.

(b) Essential or Incidental Materials or Work - When the Specifications state that the unit price for a Pay Item is compensation for certain Materials or Work essential or Incidental to the Pay Item, the same Materials or Work will not be measured or paid under any other Pay Item.

Provisions and Requirements

00195.10 Payment For Changes in Materials Costs - On certain projects, as identified in the Special Provisions, an escalation/de-escalation clause with respect to certain materials will be in effect during the life of the Contract.

00195.12 Steel Material Price Escalation/De-Escalation Clause - Subsections 00195.12, 00195.12(a), 00195.12(b), 00195.12(c), and 00195.12(d) contain the price escalation/de-escalation clause relating to steel materials (as defined in 00195.12(d)) that is included in this Contract. This exclusive steel material price escalation/de-escalation clause, and the steel escalation/de-escalation program described in 00195.12 through 00195.12(d), are in effect for the life of this Contract regardless of the number of steel material Pay Items, if any, that are included, and whether or not the Contractor elects to participate in the steel escalation/de-escalation program according to 00195.12(d).

(a) Steel Material Price Escalation/De-Escalation Participation - The Contractor may select individual Pay Items to include in the steel escalation/de-escalation program from those Pay Items listed for this Project under 00195.12(d) by following the directions provided in 00195.12(d). The Contractor is not obligated to select any Pay Items. Before or within seven Calendar Days after the date of the preconstruction conference, the Contractor shall submit in writing to the Project Manager the Pay Items selected by the Contractor to be included in the steel escalation/de-escalation program, in the manner required under 00195.12(d). If the Contractor elects to not participate in the steel escalation/de-escalation program for the Project, no response from the Contractor is required. If the Contractor fails to inform the Project Manager of Pay Items to include in the steel escalation/de-escalation program in the manner and within the time limits stated in 00195.12(d) (or the Contractor otherwise elects not to participate in the program), the Contractor thereby elects not to participate in the program and forfeits all present and future rights to participate in the program for this Project.

The Agency reserves all of its rights under the Contract, including, but not limited to, its rights for suspension of the Work under 00180.70 and its rights for termination of the Contract under 00180.90, and this steel material price escalation/de-escalation provision will not limit those rights. Adjustment for fluctuations in the cost of steel material will apply only to the Pay Items

individually selected by the Contractor from the Pay Items listed under 00195.12(d), and will be made using the respective steel cost basis (CB) listed.

(b) Monthly Steel Materials Value (MV) and Base Steel Materials Value (BV) - The Monthly Steel Materials Value (MV) will be established by ODOT from the IDWPUSISTEEL1 Bureau of Labor Statistics (BLS), Producer Price Indexes (PPI) using non-seasonally adjusted indexes only. Preliminary numbers may be referenced on the IDWPUSISTEEL1 BLS PPI for 6 months or more before IDWPUSISTEEL1 BLS PPI determines they are final numbers.

The Base Steel Materials Value (BV) for this Project will be the MV published on the ODOT Estimating website (see 00110.05(e)) for the month of the Bid Opening for this Project. ODOT will only publish values on the ODOT Estimating website for use after the IDWPUSISTEEL1 BLS PPI establishes the numbers as final numbers. The final values of MV and BV will be available at the ODOT Estimating website.

ODOT has no control of when the IDWPUSISTEEL1 BLS PPI establishes final values. The Agency steel material price escalation/de-escalation adjustments made under 00195.12 through 00195.12(d) may not be reflected on payments made to the Contractor for up to 2 months after the IDWPUSISTEEL1 BLS PPI applicable values become final. This timing for steel material price escalation/de-escalation adjustments is an agreed term of this Contract and shall not constitute late payment under ORS 279C.570, nor shall the Agency be responsible to pay interest on any such steel material price adjustments.

If the ODOT-selected index ceases to be available for any reason, ODOT in its discretion will select and begin using a substitute price source or index to establish the MV each month. The MV will only apply to Pay Items selected by the Contractor and provided in writing to the Project Manager from the Pay Item list contained under, and in the manner and within the time limits required by, 00195.12(d). The Agency does not guarantee that steel material will be available at any stated or implied materials price.

(c) Monthly Steel Materials Price Adjustment - If the Contractor has properly informed the Project Manager of Pay Items to include in the steel escalation/de-escalation program as required by 00195.12(a) and 00195.12(d), a price adjustment evaluation will be made for the Pay Items individually selected. No adjustments will be made using the BV or MV until such time as they are listed as final values by the IDWPUSISTEEL1 BLS PPI. The price adjustment as calculated in this provision for a given Pay Item will use the MV for the month the Work associated with that Pay Item is performed and added to the monthly progress estimate. A price adjustment for that Pay Item will only be made if the MV for the month the Work associated with the Pay Item is performed and added to the monthly progress estimate differs by more than 10% from the BV. A price adjustment will be made, as and when required by 00195.12 through 00195.12(d), only for the Pay Items, if any, that were selected by the Contractor in the manner and within the time limits required under 00195.12(a) and 00195.12(d).

The Monthly Steel Materials Price Adjustment will be determined as follows:

- If the MV is within 10% $\pm$ of the BV, there will be no adjustment.
- If the MV is more than 110% of the BV, then:
  PA = (((MV-BV) ÷ BV) - 0.10) x (CB x PIP)
- If the MV is less than 90% of the BV, then:
  PA = (((MV-BV) ÷ BV) + 0.10) x (CB x PIP)

Where:

PA = Price Adjustment, dollars
MV = Monthly Steel Materials Value from BLS PPI for the month determined above (after becomes final)

BV = Base Steel Materials Value from month of the Bid Opening (after becomes final)
PIP = Amount paid for the Pay Item for the month for which the adjustment is made
CB = Cost Basis for the applicable steel material, in percent (see 00195.12(d))

(d) Steel Materials Pay Item Selection - The Agency has a process using estimated quantities to determine which Pay Items containing steel material qualify for the steel escalation/de-escalation program by meeting a minimum threshold, and are therefore included in the eligible Pay Items listed in the Special Provisions.

For purposes of 00195.12 through 00195.12(d), "steel material" means structural and reinforcing steel, steel studs, sheet piling, guardrail, ductile iron pipe and other steel products used for the construction, reconstruction or major renovation of a road or Highway.

The Contractor may elect to participate in the steel escalation/de-escalation program for this Project by marking the list in the Special Provisions, checking each box next to each Pay Item the Contractor wants included in the program and submitting this information in writing, signed and dated by the Contractor, to the Project Manager before or within 7 Calendar Days after the date of the preconstruction conference. The steel material price escalation/de-escalation clause for price adjustments for fluctuations in the cost of steel material will apply only to the Pay Items selected by the Contractor, from the Pay Item list included in the Special Provisions, and provided in writing to the Project Manager in the manner and within the time limits stated above.

If the Contractor fails to inform the Project Manager of Pay Items to include in the steel escalation/de-escalation program in the manner and within the time limits stated above (or the Contractor otherwise elects not to participate in the program), the Contractor thereby elects not to participate in the program and forfeits all present and future rights to participate in the program for this Contract and this Project.

00195.20 Changes to Plans or Character of Work:

(a) Insignificant Changed Work - If the changes made under 00140.30 do not significantly change the character or unit cost of the Work to be performed under the Contract, the Agency will pay for such Work at the Pay Item price.

If the Work involved in the change is measured on a lump sum basis and its character is not significantly changed, payment for the Changed Work will be determined:

- As described in the applicable Section of the Specifications;
- If not described there, on a theoretical unit price determined by dividing the Contractor's lump sum price by the estimated quantity of the Pay Item listed in the Special Provisions; or
- If neither of the above apply, the Engineer will make an equitable adjustment.

(b) Significant Changed Work - If the changes made under 00140.30 significantly alter the character, unit cost, or lump sum cost of the Work, the Agency will adjust the Contract. Adjustments will exclude any loss of anticipated profits. The parties shall agree upon the basis for payment and the amount of adjustment prior to the Contractor commencing the Changed Work. If the basis and amount cannot be agreed upon, the Engineer will make an equitable adjustment, which may increase or decrease the Contract Amount and Contract Time.

Any such adjustments may be less than, but will not be more than the amount justified by the Engineer on the basis of the established procedures set out in Section 00197 for determining rates. This does not limit the application of Section 00199.

The term "Significant Changed Work" shall apply only to that circumstance in which the character of the Work, as changed, differs materially in kind, nature, or unit cost from that involved or included in the originally proposed construction.

00195.30 Differing Site Conditions - Upon written notification, as required in 00140.40, the Engineer will investigate the identified conditions. If the Engineer determines that the conditions materially differ and cause an increase or decrease in the cost or time required to perform any Work under the Contract, an adjustment in the Contract Amount or Contract Time, excluding loss of anticipated profits, will be made, and the Contract modified accordingly, in writing. The Engineer will notify the Contractor as to whether or not an adjustment of the Contract is warranted.

No Contract adjustment which benefits the Contractor will be allowed unless the Contractor has provided the required written notice. Any such adjustments will be made according to 00195.20.

00195.40 Unreasonable Delay by the Agency - If the Contractor believes that performance of all or any portion of the Work is suspended, delayed, or interrupted for an unreasonable period of time in excess of that originally anticipated or customary in the construction industry, due to acts or omissions of the Agency, or persons acting for the Agency, and that additional compensation, Contract Time, or both, are due the Contractor because of the suspension, delay or interruption, the Contractor shall immediately file a written notice of delay according to 00180.60. The Contractor shall then promptly submit a properly supported request for any additional compensation, Contract Time, or both, according to the applicable provisions in 00180.60 through 00180.80 and Section 00199.

The Engineer will promptly evaluate a properly submitted request for additional compensation. If the Engineer determines that the delay was unreasonable, and that the cost required for the Contractor to perform the Contract has increased as a result of the unreasonable suspension, delay or interruption, the Engineer will make an equitable adjustment, excluding profit, and modify the Contract in writing accordingly. The Engineer will notify the Contractor of the determination and whether an adjustment to the Contract is warranted.

Under this provision, no Contract adjustment will be allowed:

- Unless the Contractor has provided the written notice required by 00180.60;
- For costs incurred more than 10 Calendar Days before the Engineer receives the Contractor's properly submitted written request;
- For any portion of a delay that the Engineer deems to be a reasonable delay, or for which an adjustment is provided for or excluded under other terms of the Contract; or
- To the extent that performance would nevertheless have been suspended, delayed or interrupted by causes other than those described in this Subsection.

00195.50 Progress Payments and Retained Amounts:

(a) Progress Payments - The Agency's payment of progress payments, or determination of satisfactory completion of Pay Items or Work or release of retainage under 00195.50(d), shall not be construed as Final Acceptance or approval of any part of the Work, and shall not relieve the Contractor of responsibility for defective Materials or workmanship or for latent defects and warranty obligations.

The estimates upon which progress payments are based are not represented to be accurate estimates. All estimated quantities are subject to correction in the final estimate. If the Contractor uses these estimates as a basis for making payments to Subcontractors and Suppliers, the Contractor assumes all risk and bears any losses that result.

If the estimated amount due the Contractor for any given month is less than $1,000, the Agency will make no payment for that month unless requested by the Contractor.

(1) Progress Estimates - At the same time each month, the Engineer will make an estimate of the amount and value of Pay Item Work completed. The amount of Work completed will be the sum of the estimated number of units completed for unit price Pay Items plus the estimated percentage completed of lump sum Pay Items.

The estimated value of the Work completed will then be determined by using the Contract unit price for unit price Pay Items, and by using one of the following methods to determine the value of the lump sum Pay Items:

- The "theoretical unit price", when the Special Provisions contain an estimated number of units;
- A Contractor-submitted, Engineer-approved Schedule of Values, when there is no theoretical unit price available; or
- Engineer's determination, when there is neither an available theoretical unit price, nor an approved, Contractor-submitted Schedule of Values.

The amounts to be allowed for lump sum Pay Items in progress payments will not exceed the reasonable value of the Work performed, as determined by the Engineer.

Incidentals such as formwork, falsework, shoring, and cribbing shall be included in the unit prices for the various Pay Items requiring their use, unless specified as a separate Pay Item. No payment will be made for Pay Items that include Incidentals until units or portions of such Pay Item Work are in place and completed. The costs of Incidentals will be paid in proportion to the percentage of Pay Item Work completed.

(2) Value of Materials on Hand - The Engineer will also make an estimate of the amount and value of acceptable Materials on hand, (i.e., already delivered and stored) according to 00195.60(a), to be incorporated into the Work.

(3) Value of Work Accomplished - The sum of the values in (1) and (2) above will be collectively referred to in this Subsection as the "value of Work accomplished", subject to (4) below.

(4) Limitations on Value of Work Accomplished - In determining the "value of Work accomplished", the Engineer's estimate will be based on the unit prices for the various Pay Items. Any amounts not included in progress payments due to substantial mathematical unbalancing of Pay Item prices will be included in the final payment issued according to 00195.90(b).

(5) Reductions to Progress Payments - With each progress payment, the Contractor will receive a Contract payment voucher and summary setting forth the value of Work accomplished reduced by the following:

- Amounts previously paid;
- Amounts deductible or owed to the Agency for any cause specified in the Contract;
- Additional amounts retained to protect the Agency's interests according to Subsection (e) below.

(b) Retainage - The Agency reserves the right in its sole discretion to not withhold retainage from progress payments or to begin withholding retainage at any time. If the Agency withholds retainage from progress payments, the amount to be retained from progress payments will be 5.0% of the value of Work accomplished, and will be retained in one of the forms specified in Subsection (c)

below. If the Agency determines that satisfactory progress is not being made on the Work, the Agency may withhold up to 5% of the value of Work accomplished from subsequent progress payments. No retainage will be withheld from Work performed as Force Account Work, escalation/de-escalation, bonuses, or other items decided by the Agency.

As provided in 00170.65(b)(3) in addition to any retainage, a withholding of 25% of amounts earned will be withheld and released according to ORS 279C.845 when the Contractor fails to file the certified statements required in ORS 279C.845, FHWA Form 1273, and 00170.65.

(c) Forms of Retainage - If the Agency withholds retainage, forms of acceptable retainage are specified below in Subsections (1) through (3). Unless the Contractor requests and the Agency accepts a form of retainage under Subsections (2) or (3), the Agency will use the "Cash, Alternate A" in this Subsection. If the Agency incurs additional costs as a result of the Contractor's election to use a form of retainage other than Cash, Alternate A, the Agency may recover such costs from the Contractor by a reduction of the final payment.

(1) Cash, Alternate A - Retainage will be deducted from progress payments and held by the Agency until final payment is made according to 00195.90, unless otherwise specified in the Contract.

Except as otherwise provided, and if elected by contractor, the Agency will deposit the cash retainage withheld in an interest-bearing account, in a bank or other financial institution for the benefit of the Agency, in accordance with ORS 279C.560(5i don'). Interest earned on the account shall accrue to the Contractor. Amounts retained and interest earned will be included in the final payment made according to 00195.90, unless otherwise specified in the Contract.

Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

(2) Cash, Alternate B (Retainage Surety Bond) - The Contractor may submit a Surety bond in lieu of all or a portion of the retainage required under the Contract. The Agency will accept this Surety bond unless the Agency first finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560(1)(c).

The Surety bond must be in substantially the form specified in ORS 701.435 (4) (Oregon House Bill 4006, 2024), and executed by a Surety bonding company that is authorized to transact Surety business in the State of Oregon and may not be a Surety obligation of an individual. The Surety bond and any proceeds of the Surety bond must be made subject to all claims and liens and in the same manner and priority specified for retainage under ORS 279C.550 to 279C.570 and ORS 279C.600 to 279C.625. Agency will reduce the cash retainage held by an amount equal to the value of the Surety bond and pay the amount of the reduction to Contractor according to ORS 279C.570. Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

When the Agency accepts a Surety bond in lieu of retainage from the Contractor, the Contractor shall accept Surety bonds from Subcontractors or Suppliers from which the Contractor has withheld retainage. At any time before final payment a Subcontractor may submit a Surety bond to the Contractor and request that the Contractor submit a Surety bond as described above for the portion of the Contractor's retainage that pertains to the Subcontractor. The Surety bond the Subcontractor provides to the Contractor must meet the Agency requirements specified in the paragraph above. When a Contractor at a Subcontractor's request obtains and submits a Surety bond under this subsection, the Contractor may withhold from payments to the Subcontractor an amount equivalent to the portion of the Contractor's Surety bond premium for which the Subcontractor is responsible in accordance with ORS 279C.560 (Oregon House Bill 4006, 2024).

Within 30 Days after a Subcontractor's request the Contractor shall provide a Surety bond as described above, and the Agency will accept the Surety bond unless:

- the Agency finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560;
- a Surety bond is not commercially available;
- the Subcontractor refuses to pay to the Contractor the Subcontractor's portion of the Surety bond premium; or
- the Subcontractor refuses to provide the Contractor with a Surety bond that meets the requirements of ORS 279C.560(1)(b).

Notwithstanding 00195.50(d), within 30 Days of receiving a Surety bond from Contractor at a Subcontractor's or Supplier's request, Agency will release to the Contractor the amount held as retainage that is equivalent to the amount the Contractor submitted as a Surety bond. Contractor shall, within 30 Days after receiving a Surety bond from a Subcontractor or Supplier, release to the Subcontractor or Supplier the amount the Contractor holds as retainage that is equivalent to the amount of the Surety bond submitted, in accordance with ORS 279C.560(8).

(3) Bonds, Securities, and Other Instruments - Contractor may deposit bonds, securities or other instruments with the Agency or in a bank or other financial institution, to be held by Agency instead of cash retainage for the benefit of the Agency, which the Agency will accept unless the Agency first finds in writing good cause for rejection based on unique project circumstances, in accordance with ORS 279C.560(1)(c).

If the Contractor deposits bonds, securities or other instruments, and Agency does not reject the bonds, securities or other instruments as permitted by ORS 279C.560(1)(c), the Agency will reduce the cash retainage by an amount equal to the value of the bonds, securities and other instruments. Interest or earnings on the bonds, securities and other instruments accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be of a character approved by the Director of the Oregon Department of Administrative Services, including, but not limited to:

- Bills, certificates, notes or bonds of the United States;
- Other obligations of the United States or agencies of the United States;
- Obligations of a corporation wholly owned by the federal government;
- Indebtedness of the Federal National Mortgage Association;
- General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon;
- Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

(d) Reduction of Retainage - As the Work progresses, the amounts to be retained under (b) of this Subsection are subject to reduction in the Engineer's sole discretion. Retainage reductions will be considered only as follows:

- When the Work is 97.5% or more completed, the Engineer may, without application by the Contractor, reduce the retained amount to 100% of the value of the Work remaining.
- For a project funded by the FHWA, when a subcontractor has satisfactorily completed all of its Work, it may request release of retainage for that Work from the Contractor. The Contractor shall request reduction of retainage in the amount withheld for the subcontractor's Work after certifying to the Agency that the subcontractor's Work is complete and that all contractual

requirements pertaining to the subcontractor's Work have been satisfied. Within 60 Calendar Days of the end of the month in which the Agency receives the Contractor's certification regarding the subcontractor's Work, the Agency will either notify the Contractor of any deficiencies which require completion before release of retainage, or verify that the subcontractor's Work complies with the Contract and release all retainage for that Work with the next scheduled progress payment. Within 10 Calendar Days of receipt of retainage, the Contractor shall pay to the subcontractor all such retainage released except for latent defects or warranty.

The Agency will only release retainage for satisfactorily completed portions of the Work represented by Pay Items in the Schedule of Items, or by Pay Items added by Change Order. Work not represented by a Pay Item, but which constitutes part of an uncompleted Pay Item, will not be regarded as satisfactorily completed Work for the purposes of this Subsection.

If retainage has been reduced or eliminated, the Agency reserves the right to protect its interests by retaining amounts from further progress payments at the rates provided in 00195.50(b).

A determination of satisfactory completion of Pay Items or Work or release of retainage shall not be construed as acceptance or approval of the Work and shall not relieve the Contractor of responsibility for defective Materials or workmanship or for latent defects and warranty obligations.

The Contractor shall comply with all applicable legal requirements for withholding and releasing retainage and for prompt payments, including but not limited to those in ORS Chapters 279C and 701, and 49 CFR 26.29.

(e) Withholding Payments - The Engineer may withhold such amounts from progress payments or final payment as may reasonably protect the Agency's interests until the Contractor has:

- Complied with all orders and directives issued by the Engineer under or pursuant to the Contract;
- Corrected or cured its failure to comply with the Contract; and
- Satisfied all legal actions filed against the Agency, the Agency's governing body and its members, and Agency employees that the Contractor is obliged to defend. (See 00170.72.).

Notwithstanding ORS 279C.555 or ORS 279C.570 or 00195.50(d), if a Contractor is required to file statements on the prevailing rate of wages, but fails to do so, the Agency will withhold 25% of any amount earned as required in 00170.65.

(f) Prompt Payment Policy - Payments shall be made promptly according to ORS 279C.560, ORS 279C.570, ORS 279C.580 and other applicable legal requirements.

00195.60 Advance Allowance for Materials on Hand:

(a) General - If the total value of Materials on hand is at least $1,000, or the total value of a single class of Materials on hand is at least $500, the Engineer may authorize an advance allowance for the Materials in the progress payments. The Agency will not make advance allowances on the Materials unless the following three conditions are satisfied:

(1) Request for Advance Allowance - If Materials on hand meet the requirement of (2) below, an advance allowance will be made if:

- A written request for advance allowance for Materials on hand has been received by the Engineer at least 5 Calendar Days before the pay period cutoff date; and
- The request is accompanied by written consent of the Contractor's Surety, if required by the Agency.

(2) Stored or Stockpiled Conditions - The Materials shall have been delivered and/or acceptably stored or stockpiled according to the Specifications and as follows:

- At the Project Site;
- On Agency-owned property;
- On property in the State of Oregon on which the property owner has authorized storage in writing. The written authorization must allow the Agency to enter upon the property and remove Materials for at least 6 months after completion of the Project. The Contractor shall furnish a copy of the written permission to the Agency; or
- On property outside the State of Oregon on which the property owner has authorized storage in writing, provided that such storage location is allowed by the Special Provisions or authorized in writing by the Engineer. The permit must allow the Agency to enter upon the property and remove Materials for at least 6 months after completion of the Project. The Contractor shall furnish a copy of the written permission to the Agency.

To be eligible for advance allowance, the Materials shall:

- Meet Specification requirements;
- Have the required Materials conformance and quality compliance documents on file with the Engineer (see Section 00165);
- Be in a form ready for incorporation into the permanent Work; and
- Be clearly marked and identified as being specifically fabricated, or produced, and reserved for use on the Project.

(3) Responsibility for Protection - The Contractor has full control and responsibility for the protection of Materials on hand from the elements and against damage, loss, theft, or other impairment until the entire Project has been completed and accepted by the Agency.

If Materials are damaged, lost, stolen, or otherwise impaired while stored, the monetary value advanced for them, if any, will be deducted from the next progress payment.

If these conditions in 00195.60(a)(1) through 00195.60(a)(3) have been satisfied, the amount of advance allowance, less the retainage described in 00195.50, will be determined by one of the following methods as elected by the Engineer:

- Net cost to the Contractor of the Materials, f.o.b. the Project Site or other approved site; or
- Price (or portion of it attributable to the Materials), less the cost of incorporating the Materials into the Project, as estimated by the Engineer.

(b) Proof of Payment - The Contractor shall provide the Engineer with proof of payment to the Suppliers for purchased Materials within 30 Calendar Days of the date of the progress payment that includes the advance allowance.

If proof of payment is not provided, sums advanced will be deducted from future progress payments, and the Engineer will not approve further prepayment advance allowance requests.

(c) Terminated Contract - If the Contract is terminated, the Contractor shall provide the Agency immediate possession of all Materials for which advance allowances have been received, as provided above. If, for any reason, immediate possession of the Materials cannot be provided, the Contractor shall immediately refund to the Agency the total amount advanced for the Materials. The Agency may deduct any amount not so refunded from final payment.

00195.70 Payment under Terminated Contract - Payment for Work performed under a Contract that is terminated according to the provisions of 00180.90 will be determined under (a) or (b) of this Subsection.

(a) Termination for Default - Upon termination of the Contract for the Contractor's default, the Agency will make no further payment until the Project has been completed. The Agency will make progress payments to the party to whom the Contract is assigned, but may withhold an amount sufficient to cover anticipated Agency costs, as determined by the Engineer, to complete the Project.

Upon completion of the Project, the Engineer will determine the total amount that the defaulting Contractor would have been entitled to receive for the Work, under the terms of the Contract, had the Contractor completed the Work (the "cost of the completed Work").

If the cost of the completed Work, less the sum of all amounts previously paid to the Contractor, exceeds the expense incurred by the Agency in completing the Work, including, without limitation, expense for additional managerial and administrative services, the Agency will pay the excess to the Contractor, subject to the consent of the Contractor's Surety.

If the expense incurred by the Agency in completing the Work exceeds the Contract Amount, the Contractor or the Contractor's Surety shall pay to the Agency the amount of the excess expense.

The Engineer will determine the expense incurred by the Agency and the total amount of Agency damage resulting from the Contractor's default. That determination will be final as provided in 00150.00.

If a termination for default is determined by a court of competent jurisdiction to be unjustified, it shall be deemed a termination for public convenience, and payment to the Contractor will be made as provided in Subsection (b) below.

(b) Termination for Public Convenience:

(1) General - Full or partial termination of the Contract shall not relieve the Contractor of responsibility for completed or performed Work, or relieve the Contractor's Surety of the obligation for any just claims arising from the completed or performed Work.

(2) Mobilization - If mobilization is not a separate Pay Item, and payment is not otherwise provided for under the Contract, the Agency may pay the Contractor for mobilization expenses, including moving Equipment to and from the Project Site. If allowed, payment of mobilization expenses will be based on cost documentation submitted by the Contractor to the Engineer.

(3) All Other Work - The Agency will pay the Contractor at the unit price for the number of Pay Item units of completed, accepted Work. For units of Pay Items partially completed, payment will be as mutually agreed, or, if not agreed, as the Engineer determines to be fair and equitable. No claim for loss of anticipated profits will be allowed. The Agency will purchase Materials left on hand according to 00195.80.

00195.80 Allowance for Materials Left on Hand:

(a) Purchase of Unused Materials - If Materials are delivered to the Project Site, or otherwise acceptably stored at the order of the Engineer, but not incorporated into the Work due to complete or partial elimination of Pay Items, changes in Plans, or termination of the Contract for public convenience according to 00180.90, and it is not commercially feasible for the Contractor to return

them for credit or otherwise dispose of them on the open market; the Agency will purchase them according to the formula and conditions specified in Subsection (b) below.

(b) Purchase Formula and Conditions:

(1) Formula - The Agency will apply the following formula in determining the Contractor's allowance for Materials left on hand:

Contractor's Actual Cost, plus 5% Overhead Allowance, minus Advance Allowances under 00195.60, but no markup or profit.

(2) Conditions - The Agency will not purchase the Contractor's Materials left on hand unless the Contractor satisfies the following conditions:

- Requests the Agency's purchase of unused Materials;
- Shows acquisition of the Materials according to 00160.10;
- Shows that the Materials were acquired prior to the Agency change or termination;
- Shows that the Materials meet Specifications; and
- Provides receipts, bills and other records of actual cost of Materials delivered to the designated delivery points.

00195.90 Final Payment:

(a) Final Estimate - As soon as practicable after Final Inspection of the Project, as provided in 00150.90, the Engineer will prepare a final estimate of the quantities of the Pay Items completed. With this estimate of quantities as a base, the total amount due the Contractor will be determined according to the terms of the Contract, including, without limitation, any amounts due for Extra Work performed.

(b) Final Payment - The amount of final payment will be the difference between the total amount due the Contractor and the sum of all payments previously made. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

After computation of the final amount due, and after Final Acceptance of the Project, final payment will be mailed to the Contractor's last known address as shown in the records of the Agency.

Beginning 30 Calendar Days after the date of Third Notification, interest will begin to accrue at the rate established by ORS 279C.570 on any money due and payable to the Contractor as final payment, determined as described above. No interest will be paid on money withheld due to outstanding amounts owed by the Contractor under the provisions of 00170.10.

(c) No Waiver of Right to Make Adjustment - The fact that the Agency has made any measurement, estimate, determination or certification either before or after completion of the Project, Final Acceptance, Agency assumption of possession of the Project Site, determination of satisfactory completion of Pay Items or Work or release of retainage under 00195.50(d) or payment for any part of the Work, shall not prevent either party from:

- Showing the true amount and character of the Work;
- Showing that any measurement, estimate, determination or certification is incorrect;
- Recovering from the other party damages that may have been suffered because the other party failed to comply with the Contract.

00195.95 Error in Final Quantities and Amounts:

(a) Request for Correction of Compensation - If the Contractor believes the quantities and amounts detailed in the final Contract payment voucher, prepared by the Engineer according to 00195.90, to be incorrect, the Contractor shall submit an itemized statement to the Engineer detailing all proposed corrections.

This statement must be submitted to the Engineer within 90 Calendar Days from the date the voucher was mailed to the Contractor, according to 00195.90(b). Any request for compensation not submitted and supported by an itemized statement within the 90 Calendar Day period will not be paid by the Agency. This does not limit the application of Section 00199.

(b) Acceptance or Rejection of Request:

(1) Consideration of Request - The Engineer will consider and investigate the Contractor's request for correction of compensation submitted according to 00195.95(a), and will promptly advise the Contractor of acceptance or rejection of the request in full or in part.

(2) Acceptance of Request - If the Engineer accepts the Contractor's request(s) in full or in part, the Engineer will prepare a post-final Contract payment voucher, including all accepted corrections, and will forward it to the Contractor.

(3) Rejection of Request - If the Engineer rejects the request(s) in full, the Engineer will issue a written notice of rejection and mail it to the Contractor.

(4) Contractor Objection to Revised Voucher or Notice of Rejection - If the Contractor disagrees with the revised voucher or notice of rejection, the Contractor may request review according to the procedure specified in 00199.40. If the Contractor fails to submit a request for 00199.40 review within 30 Calendar Days after the Engineer mails a post-final Contract payment voucher or notice of rejection, the Contractor waives all rights to a claim based on errors in quantities and amounts.

If the Engineer rejects the Contractor's request on the basis that the issue was not one that qualified for treatment under this Section, no review according to 00199.40 will be allowed.

Section 00196 - Payment for Extra Work

Description

00196.00 General - Only work not included in the Contract as awarded but deemed by the Engineer to be necessary to complete the Project (see 00140.60) will be paid as Extra Work. Regardless of alterations and changes, any item of Work provided for in the Contract will not constitute Extra Work. Payment for alterations and changes to Work will be made according to 00195.20.

Compensation for Extra Work will be paid only for Work authorized in writing by the Engineer and performed as specified. Work performed before issuance of the Engineer's written authorization shall be at the Contractor's risk. Extra Work will be paid as determined by the Engineer, according to 00196.10 and 00196.20.

Provisions and Requirements

00196.10 Negotiated Price - If the Engineer can reasonably determine a price estimate for Extra Work, the Engineer may then give written authorization to the Contractor to begin the Extra Work. As soon as practicable, but within 10 Calendar Days after that authorization, the Contractor shall respond in writing to the Engineer's Extra Work price estimate by submitting to the Engineer an Extra Work price quote. The price quote shall detail the following items related to the Extra Work:

- Types and amounts of Materials
- Hours of Equipment use and hours of labor
- Travel
- Overhead and profit
- Other costs associated with the proposed Extra Work

Pending approval of the price quote, the Engineer will maintain force account records of the Extra Work. As soon as practicable, but within 10 Calendar Days of receipt of a properly supported price quote, the Engineer will review the price quote and advise the Contractor if it is accepted or rejected. The Engineer will not accept a price quote that cannot be justified on a Force Account basis. If the Contractor's price is accepted, the Engineer will issue a Change Order, and the Extra Work will be paid at the accepted price.

00196.20 Force Account - If the Engineer and the Contractor cannot agree on a price for the Extra Work, the Engineer may issue an Extra Work order requiring the Extra Work to be paid as Force Account Work. Force Account Work records and payment will be made according to Section 00197.

Section 00197 - Payment for Force Account Work

Force Account Work

00197.00 Scope - The Materials, Equipment and labor rates and procedures established in this Section apply to Extra Work ordered by the Engineer to be performed as Force Account Work. With the exceptions identified in 00197.01(b), these rates and procedures also apply to other Work when according to other Sections this Section 00197 applies, including, without limitation, the following:

- 00140.70 - Cost Reduction Proposals
- 00195.20 - Changes to Plans or Character of Work
- 00195.30 - Differing Site Conditions
- 00199.30(b) - Claims Requirements

00197.01 General:

(a) Extra Work on a Force Account Basis - Before ordering Force Account Work, the Engineer will discuss the proposed work with the Contractor, and will seek the Contractor's comments and advice concerning the formulation of Force Account Work specifications. The Engineer is not bound by the Contractor's comments and advice, and has final authority to:

- Determine and direct the Materials, Equipment and labor to be used on the approved Force Account Work; and
- Determine the time of the Contractor's performance of the ordered Force Account Work.

If the Engineer orders the performance of Extra Work as Force Account Work, the Engineer will record, on a daily basis, the Materials, Equipment, labor, and Special Services used for the Force Account Work during that Day. The Engineer and the Contractor shall sign the record daily to indicate agreement on the Materials, Equipment, labor, and Special Services used for the Force Account Work performed on that Day.

The following shall be reflected on the daily record:

- Materials used in the Force Account Work as directed by the Engineer, except those furnished and paid under rental rates for use of Equipment;
- Equipment that the Engineer considers necessary to perform the Force Account Work. Equipment hours will be recorded to the nearest quarter hour;
- Labor costs, including that of Equipment operators and supervisors in direct charge of the specific operations while engaged in the Force Account Work;
- Special Services; and
- The Engineer's and Contractor's signatures confirming its accuracy.

(b) Other Work - When according to other Sections this Section 00197 applies, the following exceptions apply to the Work under those other Sections, except for Extra Work ordered by the Engineer to be performed as Force Account Work.

- 00197.01(a) does not apply.
- Cost Efficiency - The Agency will not be responsible for additional costs that are a direct or indirect result of the Contractor's inefficient means and methods or that reasonably could have been avoided if the Materials, Equipment, labor or services had been obtained at a more commercially reasonable cost.

- Standby Time - Equipment that is necessary for the Work but is not being operated to progress the Work will be considered to be on standby and will be limited to the standby rates and hour limitations in 00197.20(e). Equipment costs will be limited to a combination of operating time and standby time of not more than 8 hours in a 24 hour period or 40 hours in a 1 week period. The Equipment must be onsite and available for use to be eligible for standby time.

  For a period of 7 or fewer Calendar Days: If a continuous period of standby time for a piece of Equipment does not exceed 7 Calendar Days, the accumulated standby cost for that continuous period of standby time shall be limited to the standby rates and hour limitations in 00197.20(e).

  For a period of more than 7 Calendar Days: Unless the Engineer has otherwise agreed in advance in writing, if a continuous period of standby time for a piece of Equipment exceeds 7 Calendar Days, the accumulated standby cost shall be limited to:

  - For the first 7 Calendar Days, the standby rates and hour limitations in 00197.20(e), and
  - For the portion of the continuous period of standby time after the first 7 Calendar Days, the lesser of:
    - The standby rates and hour limitations in 00197.20(e); or
    - The cost for moving that piece of Equipment to and from the Project Site according to 00197.20(d).

00197.10 Materials:

(a) General - The Contractor will be paid for Materials actually used in the Force Account Work as directed by the Engineer, except for those furnished and paid for under rental rates included with the use of Equipment. Payments will be at actual cost, including transportation costs to the specified location, from the Supplier to the purchaser, whether the purchaser is the Contractor, a Subcontractor, or other forces. All costs are subject to the provisions of this Subsection.

(b) Trade Discount - If a commercial trade discount is offered or available to the purchaser, it shall be credited to the Agency, even though the discount may not have actually been taken. The Agency will not take any discounts for prompt or early payment, whether or not offered or taken.

(c) Not Directly Purchased From Supplier - If Materials cannot be obtained by direct purchase from and direct billing by the Supplier, the cost shall be considered to be the price billed to the purchaser less commercial trade discounts, as determined by the Engineer, but not more than the purchaser paid for the Materials. No markup other than actual handling costs will be permitted.

(d) Purchaser-Owned Source - If Materials are obtained from a supply or source wholly or partly owned by the purchaser, the cost shall not exceed the price paid by the purchaser for similar Materials furnished from that source on Pay Items, or the current wholesale price for the Materials delivered to the Project Site, whichever is lower.

00197.20 Equipment:

(a) General - Equipment approved by the Engineer to perform the Force Account Work will be eligible for payment at the established rates only during the hours it is operated or on standby if so ordered by the Engineer. Equipment hours will be recorded on the daily record to the nearest quarter hour.

Except as modified by these provisions, Equipment use approved by the Engineer will be paid at the rental rates given in the most current edition of the EquipmentWatch Cost Recovery (Blue Book)

published by EquipmentWatch, a division of Penton Business Media, Inc., and available from EquipmentWatch (phone 1-800-669-3282) (see 00110.05(e) for website).

(b) Equipment Description - On the billing form for Equipment costs, the Contractor shall submit to the Engineer sufficient information for each piece of Equipment and its attachments to enable the Engineer to determine the proper rental rate from the Blue Book.

(c) Rental Rates (without Operator):

(1) Rental Rate Formula - Rental rates for Equipment will be paid on an hourly basis for Equipment and for attachments according to the following formula:

$$\text{Hourly Rate} = \frac{\text{Monthly Base Rate} \times \text{Rate Adjustment Factor}}{176 \text{ hours/month}} + \text{Hourly Operating Rate}$$

Some attachments are considered "standard Equipment" and are already included in the monthly base rate for the Equipment. That information can be obtained from EquipmentWatch.

(2) Monthly Base Rate - The monthly base rate used above for the machinery and for attachments represents the major costs of Equipment ownership, such as depreciation, interest, taxes, insurance, storage, and major repairs.

(3) Rate Adjustment Factor - The rate adjustment factor used above will be determined by applying only the Model Year Adjustment to the Blue Book Rates. The Regional and User Defined Ownership/Operating Adjustments shall not apply.

(4) Hourly Operating Rate - The hourly operating rate used above for the machinery and for attachments represents the major costs of Equipment operations, such as fuel and oil, lubrications, field repairs, tires or ground engaging components, and expendable parts.

(5) Limitations - If multiple attachments are included with the rental Equipment, and are not considered "standard Equipment", only the attachment having the higher rental rate will be eligible for payment, provided the attachment has been approved by the Engineer as necessary to the Force Account Work.

Rental will not be allowed for small tools that have a daily rental rate of less than $5, or for unlisted Equipment that has a fair market value of $400 or less.

The above rates apply to approved Equipment in good working condition. Equipment not in good working condition, or larger than required to efficiently perform the work, may be rejected by the Engineer or accepted and paid for at reduced rates.

(d) Moving Equipment - If it is necessary to transport Equipment located beyond the Project Site exclusively for Force Account Work, the actual cost to transport the Equipment to, and return it from, its On-Site Work location will be allowed as an additional item of expense. However, the return cost will not exceed the original delivery cost. These costs will not be allowed for Equipment that is brought to the Project Site for Force Account Work if the Equipment is also used on Pay Item or related Work.

If transportation of such Equipment is by common carrier, payment will be made in the amount paid for the freight. No markups will be allowed on common carrier transportation costs. If the Equipment is hauled with the Contractor's own forces, transportation costs will include the rental rate of the hauling unit and the hauling unit operator's wage. If Equipment is transferred under its

own power, the rental rate allowed for transportation time will be 75% of the appropriate hourly rate for the Equipment, without attachments, plus the Equipment operator's wage.

(e) Standby Time - If ordered by the Engineer, standby time will be paid at 40% of the hourly rental rate calculated according to this Subsection, excluding the hourly operating rate. Rates for standby time that are calculated at less than $1 per hour will not be paid. Payment will be limited to not more than 8 hours in a 24-hour period or 40 hours in a 1 week period.

(f) Blue Book Omissions - If a rental rate has not been established in the Blue Book, the Contractor may:

- If approved by the Engineer, use the rate of the most similar model found in the Blue Book, considering such characteristics as manufacturer, capacity, horsepower, age and fuel type;
- Request EquipmentWatch to furnish a written response for a rental rate on the Equipment, which shall be presented to the Engineer for approval; or
- Request that the Engineer establish a rental rate.

(g) Outside Rental Equipment - If Contractor-owned or Subcontractor-owned Equipment is not available, and Equipment is rented from outside sources, payment will be based on the actual paid invoice.

If the invoice specifies that rental rate does not include fuel, lubricants, field repairs, and servicing, an amount equal to the Blue Book hourly operating cost may be added for those items that were excluded.

The Agency may reduce the payment when the invoice amount plus allowance is higher than the amount authorized under (c) through (f) of this Subsection.

The provisions of 00180.20(c) apply to owner-operated Equipment.

00197.30 Labor - The Contractor will be paid for all labor engaged directly on Force Account Work, including Equipment operators and supervisors in direct charge of the specific force account operations, as follows:

(a) Wages - The actual wages paid to laborers and supervisors, if those wages are paid at rates not more than those for comparable labor currently employed on the Project, or at the recognized, current, prevailing rates in the locality of the Project.

(b) Required Contributions - The actual cost of industrial accident insurance, unemployment compensation contributions, payroll transit district taxes, and social security for old age assistance contributions incurred or required under statutory law and these Specifications. The actual cost of industrial accident insurance is the National Council on Compensation Insurance (NCCI) rate for the assigned risk pool for the appropriate work class multiplied by the experience modification factor for the Contractor.

(c) Required Benefits - The actual amount paid to, or on behalf of, workers as per diem and travel allowances, health and welfare benefits, pension fund benefits, or other benefits when such other benefits are required by a collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the Project.

00197.40 Invoices for Special Services - Invoices for Special Services that reflect current market pricing may be accepted without complete itemization of Materials, Equipment, and labor costs, if the itemization is impractical or not customary. The invoice for Special Services shall show credit for commercial trade discounts offered or available.

No percentage markup will be allowed other than that specified in 00197.80.

00197.80 Percentage Allowances - To the Contractor's actual costs incurred, as limited in this Section 00197, amounts equal to a percentage markup of such costs will be allowed and paid to the Contractor as follows:

Subsection	Percent
00197.10 Materials	17
00197.20 Equipment	17
00197.30 Labor	22
00197.40 Special Services	17

When a Subcontractor performs ordered Force Account Work, the Contractor will be allowed a supplemental markup of 8% on each Force Account Work order.

These allowances made to the Contractor will constitute complete compensation for overhead, general and administrative expense, profit, and all other Force Account Work costs that were incurred by the Contractor, or by other forces that the Contractor furnished. No other reimbursement, compensation, or payment will be made.

00197.90 Billings - Billings for Force Account Work by the Contractor shall be submitted for the Engineer's approval on forms provided by the Agency or approved by the Engineer. Billings for Materials (other than Incidental items out of the inventory of the Contractor or Subcontractors), rental Equipment from sources other than the Contractor or Subcontractors, and Special Services, shall be accompanied by copies of invoices for the goods and services. The invoices shall be fully itemized showing dates, quantities, unit prices, and complete descriptions of goods and services provided. Invoices for amounts of $10 or less per invoice are not required, unless requested by the Engineer.

Costs included on the billings shall comply with 00197.01(a) and 00197.10 through 00197.40.

When a billing for Force Account Work has been paid at the Project level, no further corrections will be made because of further review if those corrections amount to less than $10.

Section 00199 - Disagreements, Protests, and Claims

Description

00199.00 General - This Section details the process through which the parties agree to resolve any disagreement concerning additional compensation or concerning a combination of additional compensation and Contract Time. (See 00180.80 for disagreements and claims concerning additional Contract Time only, and 00195.95 for disagreements and claims concerning correction of final compensation.) The Agency will not consider direct disagreements, protests, or claims from Subcontractors, Suppliers, or any other Entity not a party to the Contract.

Provisions and Requirements

00199.10 Procedure for Resolving Disagreements - When disagreements occur concerning additional compensation or a combination of additional compensation and Contract Time, the Contractor shall first pursue resolution through the Engineer of all issues in the dispute, including, without limitation, the items to be included in the written notice in 00199.20. If the discussion fails to provide satisfactory resolution of the disagreement, the Contractor shall follow the protest procedures outlined in 00199.20. If the Engineer denies all or part of the Contractor's protest, and the Contractor desires to further pursue the issues, the Contractor shall submit a claim for processing according to 00199.30.

00199.20 Protest Procedure - If the Contractor disagrees with anything required in a Change Order or other written or oral order from the Engineer, including any direction, instruction, interpretation, or determination, or if the Contractor asserts a disagreement or dispute on any other basis, except 0195.95, that, in the Contractor's opinion, entitles or would entitle the Contractor to additional compensation or a combination of compensation and Contract Time, the Contractor shall do all of the following in order to pursue a protest and preserve its claim:

(a) Oral Notice - Give oral notice of protest to the Engineer and outline the areas of disagreement before starting or continuing the protested Work.

(b) Written Notice - File a proper written notice of protest on form 734-2887 with the Engineer within 7 Calendar Days after receiving the protested order. In the notice the Contractor shall:

- Describe the acts or omissions of the Agency or its agents that allegedly caused or may cause damage to the Contractor, citing specific facts, persons, dates and Work involved;
- Describe the nature of the damages;
- Cite the specific Contract provision(s) that support the protest;
- Include the estimated dollar cost, if any, of the protested Work, and furnish a list of estimated Materials, Equipment and labor for which the Contractor might request additional compensation; and
- If additional compensation is estimated to be due, include the estimated amount of additional time required, if any.

Failure to comply with these notice requirements renders the notice improper.

(c) Records - Keep complete records of all costs and time incurred throughout the protested Work, and allow the Engineer access to those and other supporting records. Provide daily records of protested Work, on a weekly basis, on a schedule to be set by agreement with the Engineer.

(d) Comparison of Records - Provide the Engineer adequate facilities for keeping cost and time records of the protested Work. The Contractor and the Engineer will compare records and either bring them into agreement at the end of each Day, or record and attempt to explain any differences.

(e) Work to Proceed - In spite of any protest, proceed promptly with the Work ordered by the Engineer.

(f) Evaluation of Protest - The Engineer will promptly evaluate all protests, after the Contractor has fully complied with the requirements described in 00199.20(b). If the protest is denied, the Engineer will notify the Contractor in writing of the reasons for full or partial denial. If a protest is found to be valid, the Engineer will, within a reasonable time, make an equitable adjustment of the Contract. Adjustment of time will be evaluated according to 00180.80.

The Engineer has no responsibility for evaluating and may reject a protest that does not comply with 00199.20(b). If the protest is rejected, the Engineer will notify the Contractor in writing of the reasons for rejection.

(g) Protest Evaluation by Third Party Neutral - If the Engineer agrees that the Contractor has fully complied with the requirements described in 00199.20(b), and if the Engineer fully or partially denies, in writing, the Contractor's protest according to 00199.20(f), the Contractor may request that a mutually selected Third Party Neutral review the protest. Procedures for selecting, using, and paying for the cost of the Third Party Neutral will be specified by Change Order.

If the Contractor does not accept the Engineer's evaluation of the protest, or either the Contractor or Engineer disagrees with the resolution recommended by the Third Party Neutral, the Contractor may pursue a claim as described in 00199.30.

00199.30 Claims Procedure:

(a) General - If the Contractor believes that additional compensation is due, or a combination of additional compensation and Contract Time, and has pursued and exhausted all the procedures provided in 00199.10 and 00199.20 to resolve a disagreement and protest, the Contractor may file a claim.

The Agency's Contract is with the Contractor. There is no contractual relationship between the Agency and any Subcontractors, Suppliers or any Entity other than the Contractor. It is the Contractor's responsibility to fully evaluate any claim before presenting it to the Agency. In addition, when a claim includes Work done or costs incurred by any Subcontractors, Suppliers, or any Entity other than the Contractor, the Contractor remains solely responsible for presenting the claim to the Agency.

Claims that include Work done or costs incurred by any Subcontractors, Suppliers, or any Entity other than the Contractor will not be considered by the Agency unless the Contractor has:

- Completed and provided its own written evaluation of the claim;
- Verified by its own independent review and evaluation of the amount of compensation sought; and
- Certified the claim according to 00199.30(b) (Part 10).

(b) Claims Requirements - At any time during the progress of the Work, but not later than 45 Calendar Days following the date of the Second Notification, the Contractor shall submit to the Engineer in writing, claims for additional compensation or a combination of additional compensation and Contract Time additional to that specified in the Contract. For a claim not submitted within the

45-Day limit, that has not met the requirements of 00199.20, or is not filed as provided in 00199.30, the Contractor waives any claim for additional compensation or for additional compensation and Contract Time, and the Agency may reject the claim.

Written claims to the Engineer or the Agency by the Contractor shall be delivered to the Agency address shown in the Special Provisions, unless a different address is agreed to by the Engineer, and shall be delivered:

- By U.S. Postal Service first class mail or priority mail (which at the sender's option may include certified or registered mail return receipt requested); or
- By overnight delivery service of a private industry courier.

Claims will be considered as having been received by the Agency:

- At the time of actual receipt or 7 Calendar Days after the postmarked date when deposited for delivery by first class or priority mail, whichever is earlier; or
- At the time of actual receipt or 3 Calendar Days after deposit with a private industry courier for overnight delivery service, whichever is earlier.

The Agency reserves the right at any time and at any step in the claim decision or review process to request additional information, records or documentation related to the claim or the Contract either directly or through agents working toward resolution of the disputed or claimed events and issues.

Claims shall be made in writing, and shall include all information, records and documentation necessary for the Agency to properly and completely evaluate the claim.

To be considered, claims for additional compensation, or for additional compensation and Contract Time, shall be completed according to 00199.30 and shall be submitted with the required information and in the format below and labeled as required below for each claimed issue:

(Part 1) Summary (label page 1.1 through page 1.X) - In the summary, include a detailed, factual statement of the claim for additional compensation and Contract Time, if any, with necessary dates and locations of Work involved in the claim and the dates of when the event arose. Also include detailed facts supporting the Contractor's position relative to the Engineer's decision (see 00199.20(f));

(Part 2) Proof of notice (label page 2.1 through page 2.X) - Submit a copy of form 734-2887, with all attachments, that was given to the Agency. Include the date when that written notice and the date when oral notice was given:

(Part 3) Copies of the Contract Specifications that support the Contractor's claim (label page 3.1 through page 3.X);

(Part 4) Theory of entitlement supporting the claim (label page 4.1 through page 4.X) - Include a narrative of how or why the specific Contract Specifications support the claim and a statement of the reasons why such Specifications support the claim;

(Part 5) Itemized list of claimed amounts (label page 5.1 through page 5.X) - Claimed damages that resulted from the event with a narrative of the theories and records and documents used to arrive at the value of the damages;

(Part 6) Additional Contract Time requests (label page 6.1 through page 6.X) - If the claim is for a combination of additional compensation and Contract Time, submit a copy of the schedule that

was in effect when the event occurred and a detailed narrative which explains how the event impacted Contract Time. In addition, if an Agency-caused delay is claimed:

- Include the specific days and dates under claim;
- Provide detailed facts about the specific acts or omissions of the Agency that allegedly caused the delay, and the specific reasons why the resulting delay was unreasonable; and
- Provide a schedule evaluation that accurately describes the impacts of the claimed delay.

Also see 00180.80 for additional requirements regarding claims for Contract Time and causes that are eligible and ineligible for consideration;

(Part 7) Copies of actual expense records (label page 7.1 through page 7.X) - Include documents that contain the detailed records and which support and total to the exact amount of additional compensation sought. Include the information and calculations necessary to support that amount. That amount may be calculated on the basis of Section 00197, if applicable, or may be calculated using direct and indirect costs presented in the following categories:

- Direct Materials;
- Direct Equipment. The rate claimed for each piece of Equipment shall not exceed the actual cost. In the absence of actual Equipment costs, the Equipment rates shall not exceed 75 percent of those calculated under the provisions of 00197.20. For each piece of Equipment, the Contractor shall include a detailed description of the Equipment and attachments, specific days and dates of use or standby, and specific hours of use or standby;
- Direct labor;
- Job overhead;
- General and administrative overhead; and
- Other categories as specified by the Contractor or the Agency;

(Part 8) Supporting records and documents (label page 8.1 through page 8.X) - Include copies of, or excerpts from the following:

- Any documents that support the claim, such as manuals standard to the industry and used by the Contractor; and
- Any daily reports or diaries related to the event, photographs or media that help explain the issue or event (optional), or all other information the Contractor chooses to provide (optional);

(Part 9) Certification (label page 9.1 through 9.X) - A certified statement, signed by a person authorized to execute Change Orders, by the Contractor, Subcontractor, Supplier, or Entity, originating the claim, as to the validity of facts and costs with the following certification:

Under penalty of law for perjury or falsification, the undersigned, (Name), (Title), (Company) certifies that this claim for additional compensation for Work on the Contract is a true statement of the actual costs incurred (in the amount of $_____, exclusive of interest) and is fully documented and supported under the Contract between the parties.

Signature: _____

Date: _____, 20___

Subscribed and sworn before me this ____ day of _____, 20___

_____

Notary Public

My commission expires _____.

(Part 10) Contractor evaluation of a lower-tier claim (label page 10.1 through 10.X) - If the claim includes Work done or costs incurred by any Subcontractors, Suppliers, or any Entity other than the Contractor, the following are required:

- Data required by the other Subsections of 00199.30(b);
- Copies of the Contractor's, Subcontractor's, Supplier's and Entity's, at all tiers above the level of which the claim originates, separate evaluation of entitlement;
- Copies of the Contractor's, Subcontractor's, Supplier's and Entity's, at all tiers above the level of which the claim originates, independent verification and evaluation of the amount of damages sought; and
- A person authorized to execute Change Orders on behalf of the Contractor, Subcontractor, Supplier and Entity, at all tiers above the level of which the claim originates, must sign a statement with the following certification:

  Under penalty of law for perjury or falsification, the undersigned, (Name) (Title), (Company) certifies that this claim originating from the Subcontractor, Supplier or Entity (Company) for additional compensation for Work on the Contract is a reasonable statement, independently verified, of the costs incurred (in the amount of $_____, exclusive of interest) and is fully documented and supported under the Contract between the parties.

  Signature: _____

  Date: _____, 20___

  Subscribed and sworn before me this ____ day of _____, 20__

  _____

  Notary Public

  My commission expires _____.

If the Engineer determines that additional information, records or documentation is needed to allow proper evaluation of the claim submittal, the Engineer will request the information, records or documentation. The Contractor shall submit to the Engineer within 14 Calendar Days, or as otherwise agreed by the parties, the required additional information, records and documentation.

If the Engineer determines that the claim submittal with the additional information, records and documentation submitted is incomplete and not accepted as a claim, the Engineer will notify the Contractor in writing and the submittal will be rejected and will not be considered under 00199.40.

(c) Records Requirements - The Contractor shall comply with 00170.07.

(d) Compliance Required - Full compliance by the Contractor with the provisions of this Section is a condition precedent to the commencement of any lawsuit by the Contractor to enforce any claim.

00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies -

(a) Engineer Claim Review - The County intends to resolve claims at the lowest possible level. The Engineer or Project Manager will, as soon as practicable, consider and investigate a Contractor's

properly submitted claim for additional compensation, Contract Time, or for a combination of additional compensation and Contract Time. Once the Engineer or Project Manager determines the Agency is in receipt of a properly submitted claim, the Engineer or Project Manager will arrange a meeting, within 28 Calendar Days, or as otherwise agreed by the parties, with the Contractor in order to present the claim for formal review and discussion. A person authorized by the Contractor to execute Change Orders on behalf of the Contractor must be present and attend all claim meetings.

If the Engineer or Project Manager determines that the Contractor must furnish additional information, records, or documentation to allow proper evaluation of the claim, the Engineer will schedule a second meeting, to be held within 14 calendar days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The Engineer or Project Manager will advise the Contractor of the decision to accept or reject the claim. If the Engineer or Project Manager finds the claim has merit, an equitable adjustment will be offered. If the Engineer or Project Manager finds the claim has no merit, no offer of adjustment will be made and the claim will be denied.

If, at any step in the claim decision or review process, the Contractor fails to promptly submit requested information or documentation that the Agency deems necessary to analyze the claim, the Contractor is deemed to have waived its right to further review, and the claim will not be considered properly filed and preserved.

If the Engineer or Project Manager has denied a claim, in full or in part, for Contract Time only according to 00180.80, or has denied a claim, in full or in part, for correction of final compensation according to 00195.95, those disputed claims may then be resolved, in full or in part, at either of the two progressive steps of claim review procedure as specified in this Subsection. For all claims, all of the actions and review under each step of the review process shall occur before the review can be advanced to the next higher step.

(b) Director Claim Review - Upon request by the Contractor, the Department Director will review the Engineer or Project Manager's decision on the claim and advise the Contractor of the decision in writing. If the Department Director finds the claim has merit, and equitable adjustment will be offered. If the Department Director finds the claim has no merit, no offer of adjustment will be made and the claim will be denied.

Once the Engineer determines the Agency is in receipt of a properly submitted claim, the Engineer will arrange a meeting, within 21 Calendar Days or as otherwise agreed by the parties, with the Contractor in order to present the claim for formal review and discussion.

If the Engineer determines that the Contractor must furnish additional information, records or documentation to allow proper evaluation of the claim, the Engineer will schedule a second meeting, to be held within 14 Calendar Days or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The Department Director shall evaluate the claim based on the information provided by the Contractor to the Engineer or Project Manager. However, if the Department Director (or designee) determines that the Contractor must furnish additional information, records or documentation to allow proper evaluation of the claim, the Department Director (or designee) will schedule a meeting, to be held within 14 Calendar Days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The claim is subject to records review, if not all of the records requested by the Department Director (or designee) were furnished. If applicable, advancement of the claim is subject to the provisions regarding waiver and dismissal of the claim or portions of the claim.

The decision of the Department Director shall be the final decision of the Agency.

(c) Commencement of Litigation - If the Contractor does not accept the Department Director's decision, then the Contractor shall commence any suit or action to collect or enforce any claim filed in accordance with 00199.30 within a period of one year following the mailing of the decision or within one (1) year following the date of "Second Notification", whichever is later. If said suit or action is not commenced in said one (1) year period, the Contractor expressly waives any **and** all claims for additional compensation and any and all causes of suit or action for the enforcement thereof that he might have had.

The Contractor must follow each step in order and exhaust all available administrative remedies before resorting to litigation. Litigation of a claim that cannot be resolved through the process described above shall be initiated by filing a complaint in the Clackamas County Circuit Court for the State of Oregon.

In any litigation, the entire text of any order or permit issued by the County or any other governmental or regulatory authority, as well as any documents referenced or incorporated therein by reference, shall be admissible for purposes of Contract interpretation.

The Contract shall not be construed against either party regardless of which party drafted it. Other than as modified by the Contract, the applicable rules of contract construction and evidence shall apply. This Contract shall be governed by and construed according to the laws of the State of Oregon without regard to principles of conflict of laws.

The Contractor shall comply with 00170.00.

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CLACKAMAS COUNTY

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PLANS FOR GRADING, PAVING, DRAINAGE, ROADSIDE DEVELOPMENT, SIGNING, PAVEMENT MARKINGS, SIGNALS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

CLACKAMAS COUNTY
OREGON

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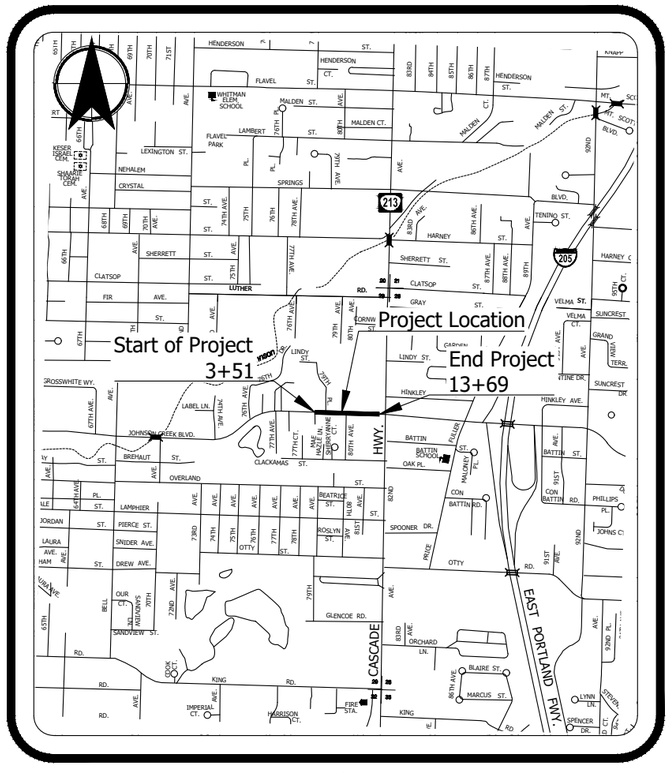
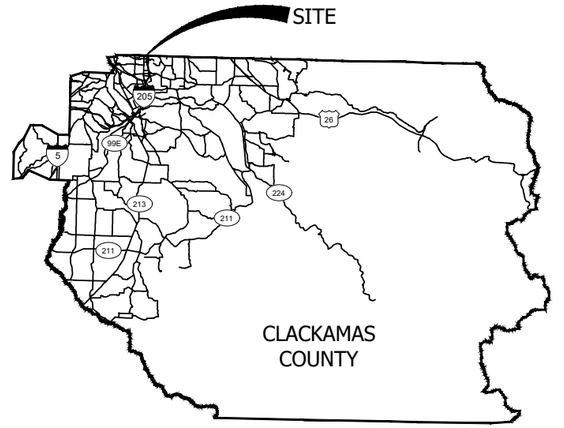


SEC. 29 T.1S. R.2E.

VICINITY MAP

SCALE: 1" = 2000'
Overall Project Length - 1018 feet



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ATTENTION: Oregon Law Requires You To Follow Rules Adopted By The Oregon Utility Notification Center. Those Rules Are Set Forth In OAR 952-001-0010 Through 952-001-0090. You May Obtain Copies Of The Rules By Calling The Center. (Note: The Telephone Number For The Oregon Utility Notification Center Is (503) 232-1987.)

BASIS OF BEARING:

BASIS OF BEARING WAS DERIVED FROM THE OREGON COORDINATE REFERENCE SYSTEM (OCRS), PORTLAND ZONE, LAMBERT CONFORMAL CONIC PROJECTION, NAD 83.

DATUM:

SEE SHEET A03

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CLACKAMAS COUNTY CONCURRENCE

CAPITAL PROJECT SUPERVISOR DATE

FEDERAL AID NO. C005(115)

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
90732PE
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

TITLESHEET

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. A01

Plot Stamp: 1/28/2025 1:49:14 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CDVA-TITLESHEET-K21636.dwg

ABBREVIATIONS

Δ	Delta Angle	MJ	Mechanical Joint	W	Water
AC	Asphalt Concrete	NO.	Number	WES	Water Environmental Services
ACP	Asphalt Concrete Pavement	NOM.	Nominal	WQ	Water Quality
AD	Area Drain	N.T.S./NTS	Not to Scale	WQMH	Water Quality Manhole
ADA	American Disabilities Act	ODOT	Oregon Department of Transportation		
BC	Bottom of Curb at Face	OSSC	2021 Oregon Standard Specifications for Construction		
BVC	Begin Vertical Curve	PC	Point of Curvature		
BW	Back of Sidewalk	PCC	Point of Compound Curvature		
CB	Catch Basin	PE	Plain End		
CI	Curb Inlet	PI	Point of Inflection		
COMP.	Composite	PSUE	Public Slope & Utility Easement		
DI	Ductile Iron	PRC	Point of Reverse Curvature		
DWG.	Drawing	PSE	Public Slope Easement		
Elec	Electrical	PT	Point of Tangency		
EA	Each	PUE	Public Utility Easement		
EAC	Edge of Asphalt Concrete	PVC	Poly Vinyl Chloride		
ELEV	Elevation	PVI	Point of Vertical Inflection		
EVC	End Vertical Curve	R	Radius		
Extg.	Existing	RCP	Reinforced Concrete Pipe		
F.L./FL	Flow Line	R/W	Permanent Right-of-Way Easement		
FLG	Flange	Rt.	Right		
FT	Feet	S	Slope		
F.T.	Flat Top	Sta.	Station		
G	Gas	SD	Storm Drain		
GV	Gas Valve	Sht.	Sheet		
IE	Invert Elevation	T	Telecom		
Len	Length	TBC	Top of Curb at Back		
LF	Linear Feet	TC	Top of Curb at Face		
Lt.	Left	Thkn.	Thickness		
LVC	Length of Vertical Curve	TRK	Truck		
Max.	Maximum	VC	Vertical Curve		
MH	Manhole	TCE	Temporary Construction Easement		
Min.	Minimum				

UTILITY CONTACTS

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PHONE: 503-742-4577
EMAIL: donkem@clackamas.us

COMMUNICATIONS
Lumen
CONTACT: Jonathan Myrick
ADDRESS: 8021 SW Capital Hill Road
Portland, OR 97219
EMAIL: Jonathan.Myrick@lumen.com

CONTACT: Scott Larson
PHONE: 612.916.4339
EMAIL: Scott.Larson@pearce-services.com

INDEX OF SHEETS CONTINUED

Sheet Number	Sheet Title
BA01 Thru BA02	Typical Sections
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BB03	Roadway Details
BC01 Thru BC08	Curb Ramp Details
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EA01 Thru EA05	Traffic Control Plans
FA01	Landscape Plan
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QA01	Signing and Striping Legend
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MC01 Thru MC05	Signal Details
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LEGEND

- Existing Minor Contour (251)
- Existing Major Contour (250)
- Existing Telephone Line
- Existing Cable TV Line
- Existing Sanitary Line
- Existing Sanitary Force Main Line
- Existing Waterline
- Existing Overhead Wires
- Existing Underground Power Lines
- Existing Underground Traffic Signal Lines
- Existing Fiber Optic Line
- Existing Fence Line
- Permanent Right Of Way Easement
- Existing Storm Sewer Line
- Existing NW Natural Gas Line
- Existing Permanent Easement
- Existing Property Line
- Existing Berm Top of Bank
- Remove/Abandon Existing Pipe
- Existing Deciduous/Coniferous Tree
- Existing Sanitary Manhole
- Existing Storm Manhole
- Existing Storm Curb Inlet
- Existing Water Valve
- Existing Fire Hydrant
- Existing Water Meter
- Existing Street Light
- Existing Utility Pole
- Existing Guy To Utility Pole
- Existing Gas Meter
- Existing Gas Valve
- Existing Sign
- Existing Mail Box
- Existing Telephone Junction Box (Riser)
- Existing Telephone Manhole
- Existing Signal Controller Cabinet
- Existing Signal Junction Box
- Existing Survey Monument
- Existing Tree Removal
- Proposed Public Utility Easement
- Proposed Public Slope and Utility Easement
- Proposed Slope Easement
- Temporary Construction Easement
- Proposed Permanent Right Of Way Easement
- Proposed Minor Contour (251)
- Proposed Major Contour (250)
- Proposed Curb/Gutter
- Proposed Conduit
- Proposed Storm Sewer Pipe
- Proposed Sawcut Line
- Proposed Grading Daylight - Fill
- Proposed Grading Daylight - Cut
- Proposed Storm Manhole
- Proposed Storm Inlet
- Proposed Signal Pole
- Proposed Utility Pole Mounted Street Light
- Proposed Pedestrian Signal Pole
- Proposed Junction Box
- Proposed Mailbox
- Proposed Sidewalk
- Variable Depth Grind and 4" Inlay
- Full Depth ACP Repair
- Bark Mulch Installation
- Permanent Seeding Installation
- Concrete Driveway Repair
- ACP Driveway Repair

Accompanied by WES Dwg.:
SAN-021, SWM-14, SWM-18, SWM-29, SWM-31, SWM-33, SWM-38, SWM-45, 4-11, 4-15, 4-20, 4-23

Accompanied by Clackamas County Dwg.:
D650, D675, NWS4700, NWS4710, R100, S100, S150, S180, S960, T100, T130, T150

Accompanied by ODOT Standard Dwg.:
RD100, RD101, RD362, RD700, RD706, RD815, RD820, TM240, TM457, TM460, TM462, TM466, TM467, TM470, TM471, TM472, TM482, TM485, TM500, TM501, TM502, TM503, TM679

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OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

LEGEND, ABBREVIATIONS, AND INDEX

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
A02

Plot Stamp: 2/4/2025 3:03:22 PM - Keisuke Harry
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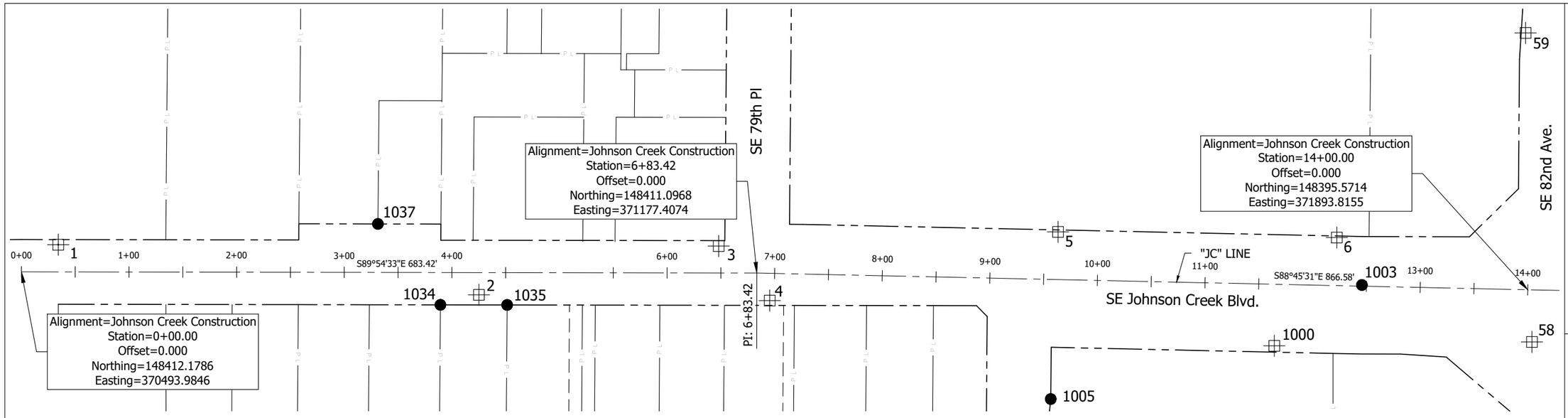

Found Monument Point Table					
Point #	Northing	Easting	Description	"JC" Station	"JC" Offset
1003	148399.96	371739.74	FOUND 5/8" IR WITH YPC, ILLEGIBLE, DOWN 0.4', PS 24624	12+45.87	1.05' Lt.
1005	148294.13	371450.57	FOUND 5/8" IR WITH 1-1/2" ALUM CAP ILLEGIBLE, DOWN 0.2', EIGHTY SECOND CENTER AT JOHNSON CREEK	09+59.06	111.02' Rt.
1034	148381.54	370883.43	FOUND 5/8" IR WITH YPC STAMPED "SCE INC", DOWN 0.1', SN 2005-161	03+89.49	30.00' Rt.
1035	148381.46	370945.39	FOUND 5/8" IR WITH YPC STAMPED "SCE INC", DOWN 0.4', SN 2005-161	04+51.45	30.00' Rt.
1037	148456.65	370825.33	FOUND 5/8" IR WITH YPC ILLEGIBLE, FLUSH, PS 27541	03+31.27	45.00' Lt.

Vertical Control Point Table				
Point #	Elevation	Northing	Easting	Description
1	205.56	148437.37	370528.21	SET 5/8" X 30" REBAR WITH RPC STAMPED "I ALLIANCE GEOMATICS CONTROL"
2	209.41	148390.88	370919.13	SET 5/8" X 30" REBAR WITH RPC STAMPED "I ALLIANCE GEOMATICS CONTROL"
3	209.52	148436.13	371141.98	SET MAGNETIC NAIL AND WASHER STAMPED "I ALLIANCE GEOMATICS CONTROL"
4	209.84	148385.54	371189.38	SET 5/8" X 30" REBAR WITH RPC STAMPED "I ALLIANCE GEOMATICS CONTROL"
5	210.90	148449.28	371457.31	SET MAGNETIC NAIL AND WASHER STAMPED "I ALLIANCE GEOMATICS CONTROL"
6	210.29	148444.00	371716.36	SET MAGNETIC NAIL AND WASHER STAMPED "I ALLIANCE GEOMATICS CONTROL"
58	210.92	148347.17	371897.71	FOUND 1-3/16" BRASS PLUG, STAMPED "ODOT CONTROL 58", FLUSH, SN 2019-041
59	210.28	148633.93	371891.81	FOUND 1-3/16" BRASS PLUG, STAMPED "ODOT CONTROL 58", FLUSH, SN 2019-041
1000	210.87	148343.56	371658.27	FOUND 1" BRASS PLUG STAMPED "COMPASS ENGR", FLUSH, SN 2005-017

Survey Control Notes:

1. Found monuments are vertical control are per Pre-Construction Record of Survey SN2023-101 dated May 31, 2023.
2. Oregon Coordinate Reference System (OCRS), Portland Zone, Lambert Conformal Conic Projection, NAD 83.
3. Units in International Feet.

Legend:
- Vertical Control Point
- Found Monument

Scale: 1" = 100'

100 50 0 100

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EXPIRES: 06/30/25

SURVEY CONTROL

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
A03

Plot Stamp: 1/28/2025 1:49:32 PM - Eric Germundson
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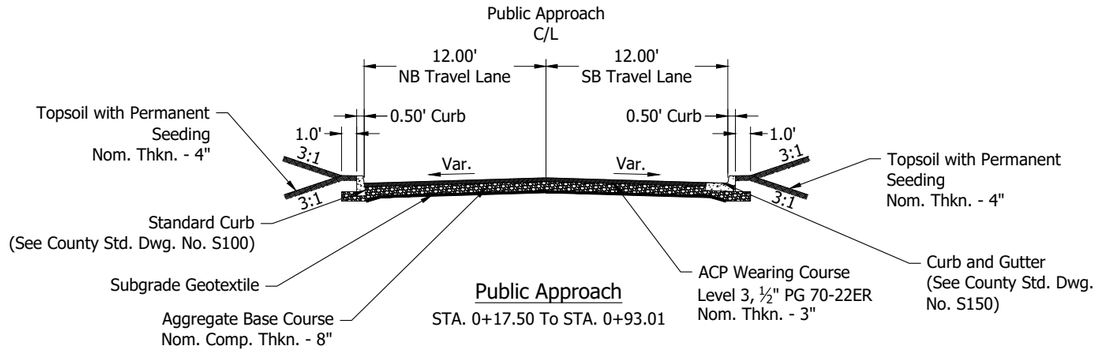

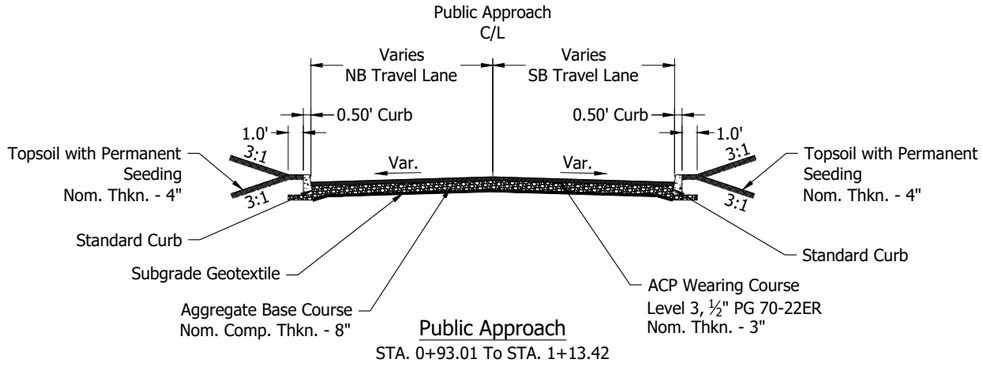

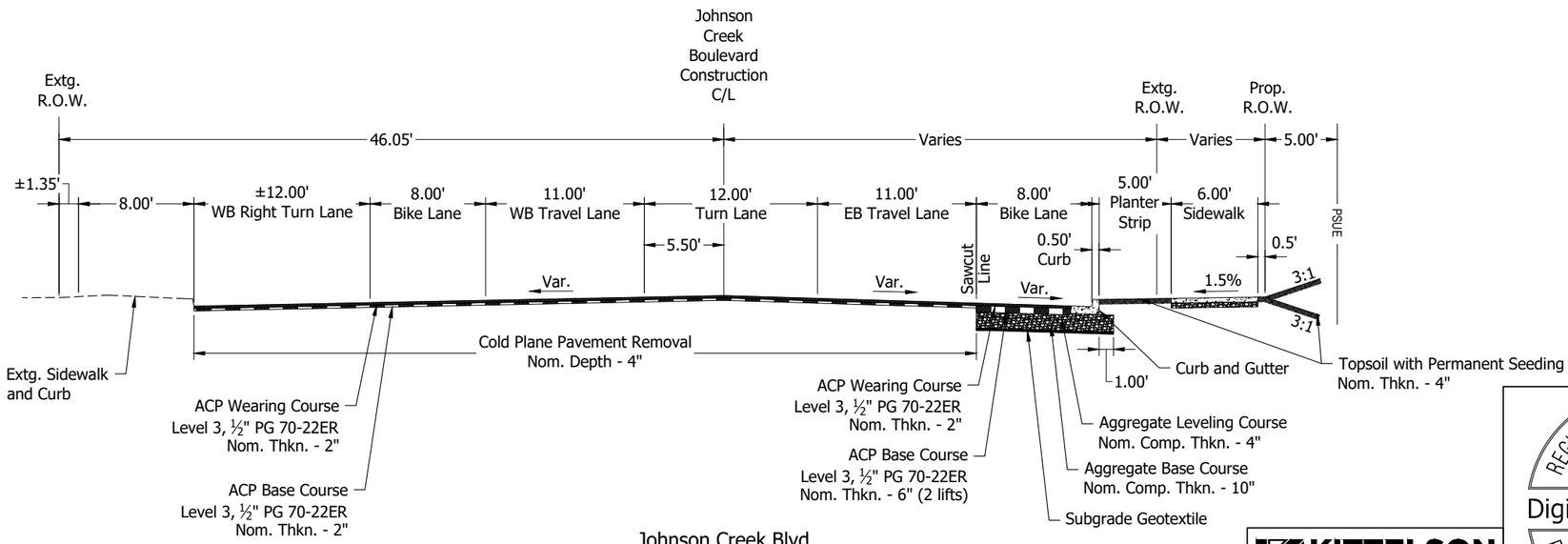

TYPICAL SECTIONS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
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150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
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CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BA01

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EXPIRES: 06/30/25

Plot Stamp: 1/28/2025 1:49:45 PM - Eric Germundson
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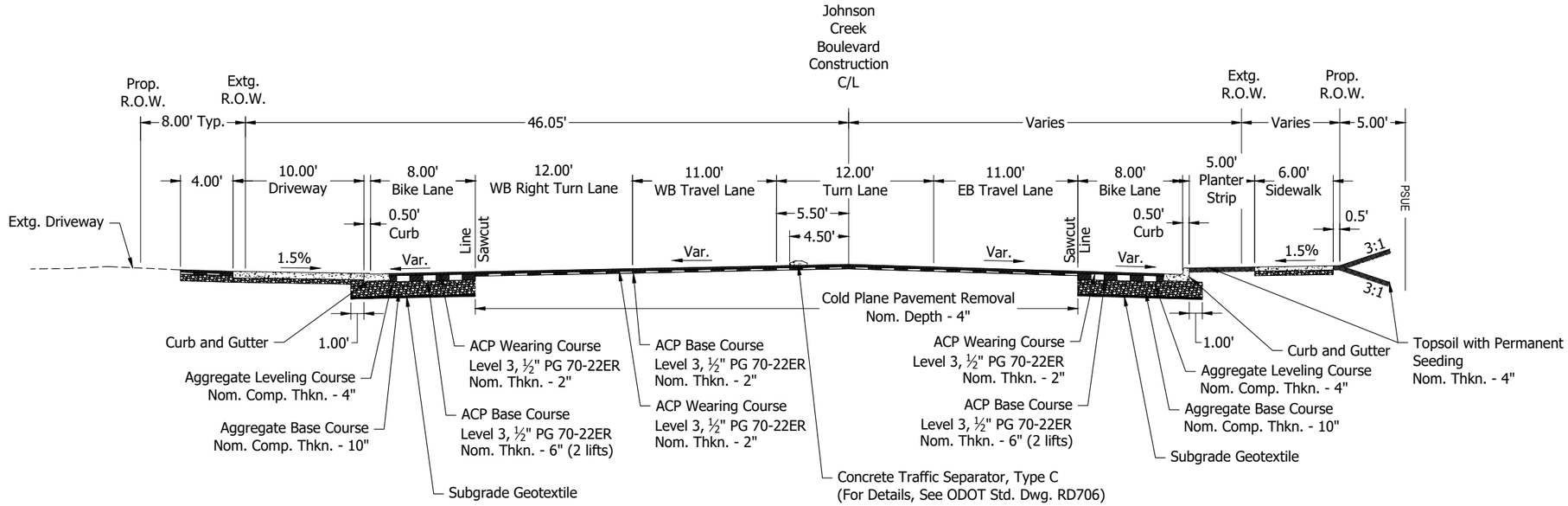
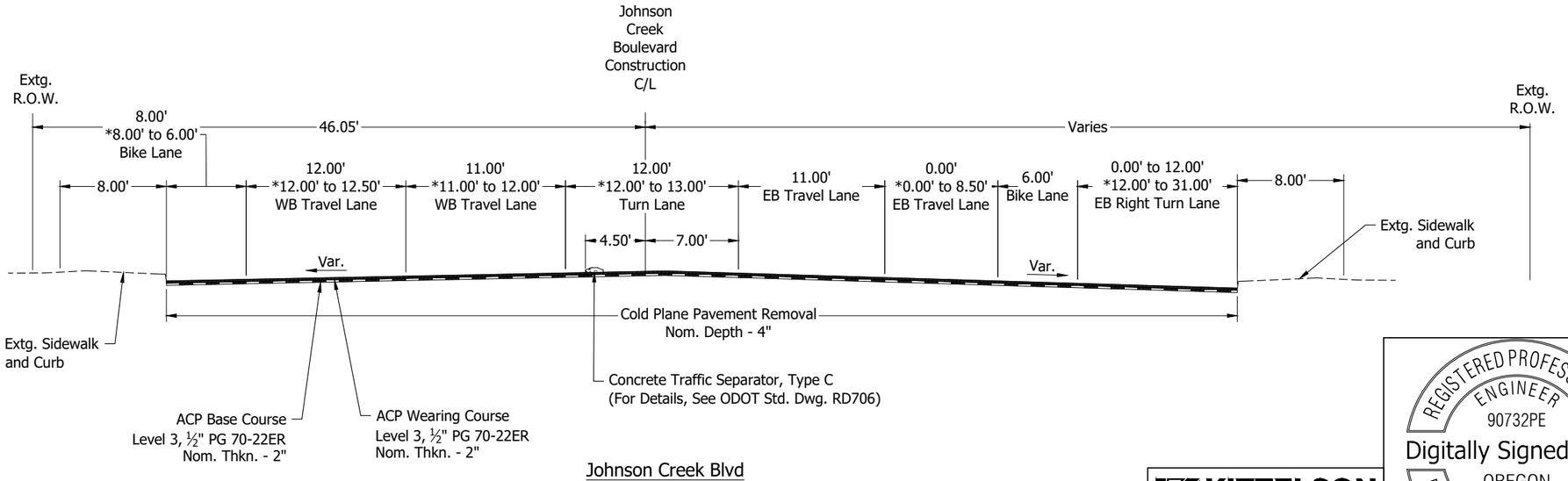


Johnson Creek Blvd

STA. 8+54.01 To STA. 9+64.53 (Intersection with 80th Ave)



Johnson Creek Blvd

STA. 9+64.53 To STA. 10+20.75

*STA. 10+20.75 To STA. 11+25.00

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MAY 14, 2019
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EXPIRES: 06/30/25

TYPICAL SECTIONS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
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DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
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CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. BA02

Plot Stamp: 1/28/2025 1:49:49 PM - Eric Germundson
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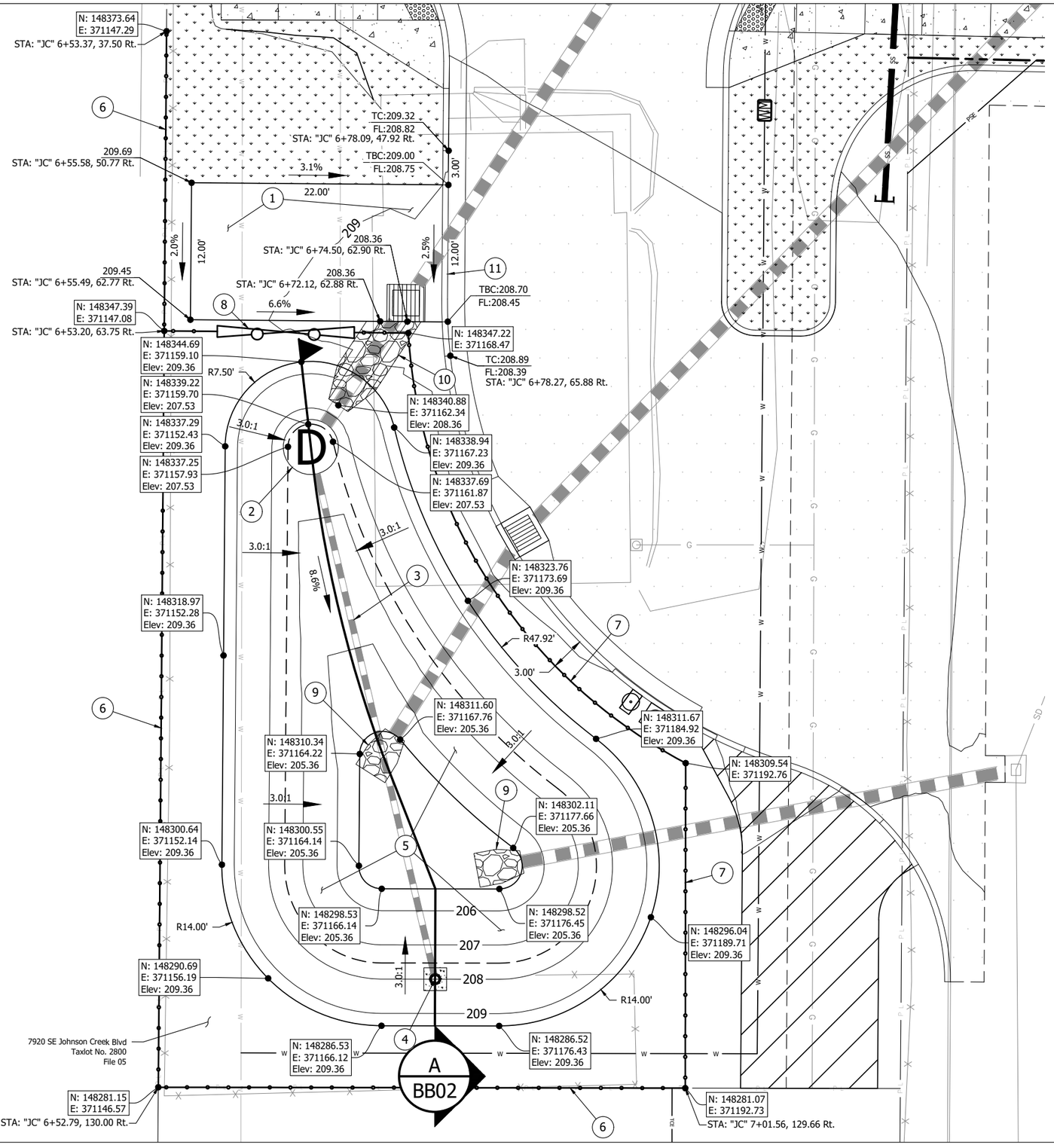

CONSTRUCTION NOTES

1. Construct AC access pad per this sheet and Detail B on Sheet BB02.
2. Install 48" standard concrete manhole with oval grate per WES Standard Drawing SWM-31 & SWM-33. See profile on sheet C01A for rim and invert elevations.
3. Install 6" perforated PVC underdrain pipe. Length and slope per sheet C01A.
4. Install 6" storm clean out per ODOT Standard Drawing RD362. See profile on sheet C01A for rim and invert elevations.
5. Construct Bioretention Pond, Water Quality Facility infiltration planter per this sheet and Detail A on Sheet BB02.
6. Construct type CL-6 chain link fence per ODOT Standard Drawing RD815.
7. Construct type CL-4 chain link fence per ODOT Standard Drawing RD815.
8. Construct 12' wide type CL-4 chain link fence double gate per ODOT Standard Drawing RD815.
9. Construct 1.5' thick ODOT Class 50 rip rap outfall protection per WES Standard Drawing SWM-45.
10. Construct 1.5' thick ODOT Class 50 rip rap spillway per this sheet and Detail D on Sheet BB02.
11. Construct 3" mountable curb at face of access pad. Tansition to std. curb and gutter over 3 feet as shown (See County std. dwg. no. S180)

Scale: 1" = 10'

10 5 0 10

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OREGON
Nov. 8, 2022
Daniel Evan Child
EXPIRES: 12/31/25

WATER QUALITY DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY
DAN JOHNSON
DIRECTOR

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BB01

Plot Stamp: 2/4/2025 3:20:13 PM - Keisuke Harry
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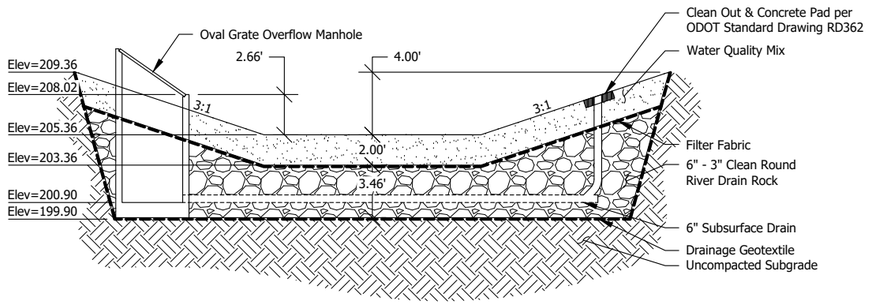


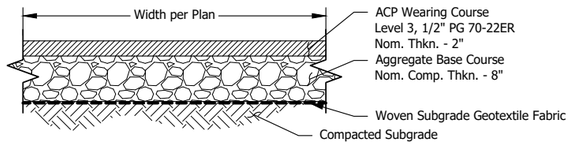
Water Quality Soil Media Properties	
Sieve Size	**Percent Passing (By Weight)**
1 inch	100
#4	85 - 100
#10	50 - 100
#40	20 - 60
#100	10 - 40
#200	10 - 20

General Notes

1. Water quality soil mix shall meet the requirements of Section 01040.14(d) of the 2020 City of Portland Standard Construction Specifications.
2. Underdrain must be 6" Schedule 40 well casing pipe manufactured with 0.050" slots, 6 slots per row. Conform with Oregon Plumbing Specialty Code (OSPC) requirements.
3. Landscaping and vegetation per Landscape Plan.

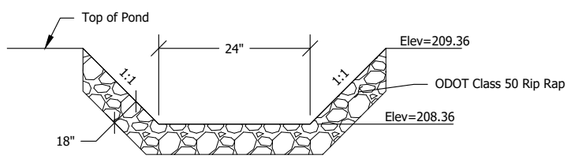
A Stormwater Quality Facility Section

SCALE: N.T.S.



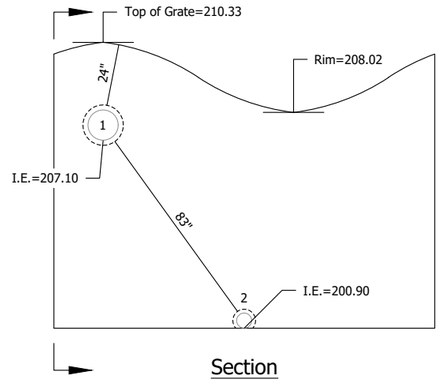
B Maintenance Access Pad Detail

SCALE: N.T.S.

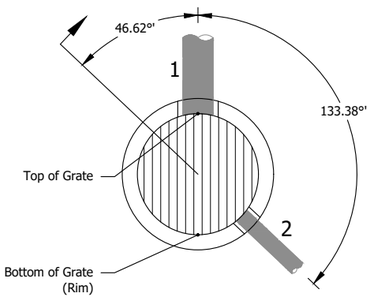


D Spillway Section Detail

SCALE: N.T.S.



Section



Plan

C Overflow Manhole Roll Out Diagram

SCALE: N.T.S.

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OREGON
Nov. 8, 2022
Daniel Evan Child
EXPIRES: 12/31/25

WATER QUALITY DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. BB02

Plot Stamp: 2/4/2025 1:41:03 PM - Keisuke Harry
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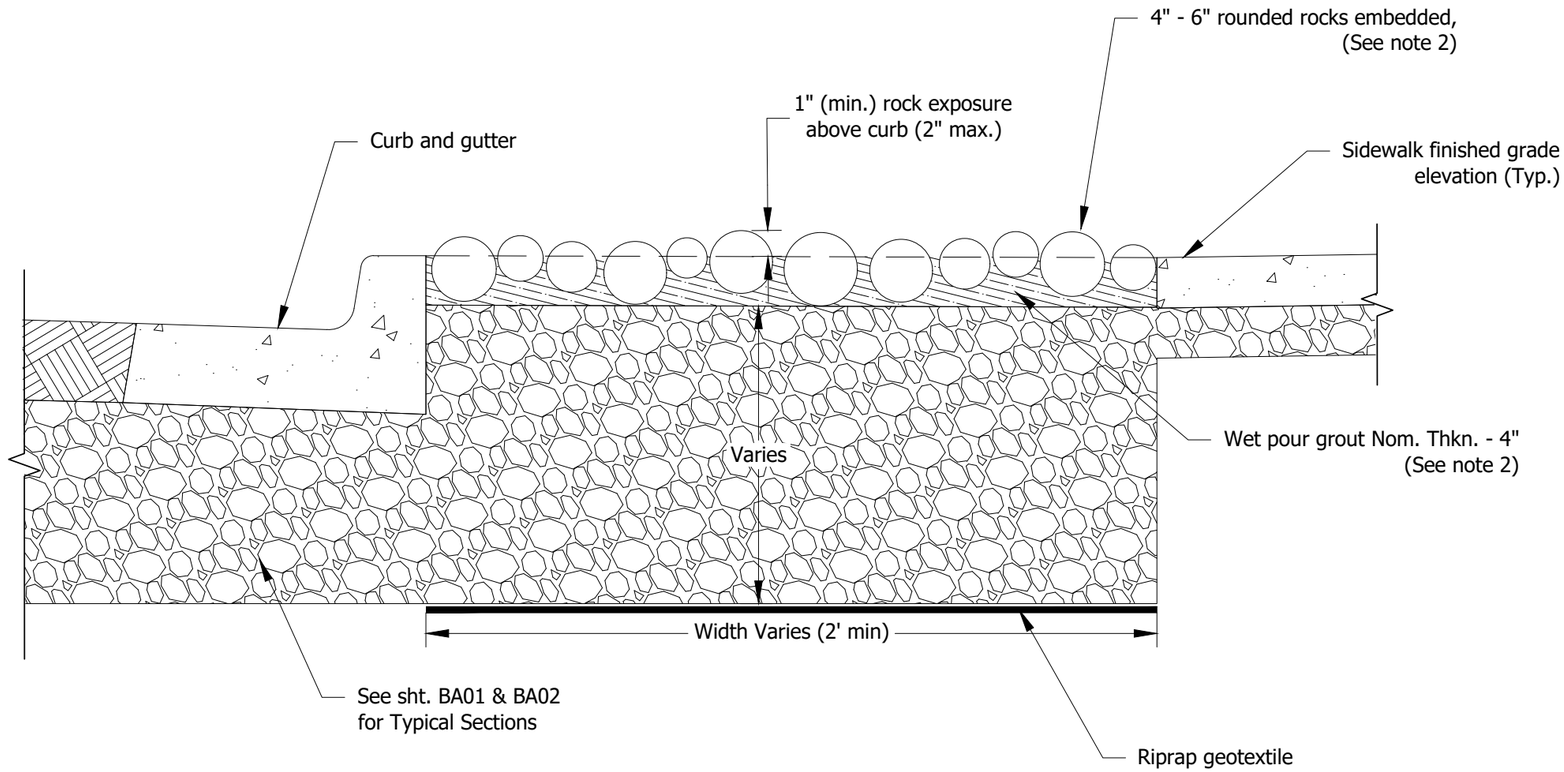

NOTES

1. See General Construction Plans and Curb Ramp Details for intended locations of grouted durable rock.
2. For grouted durable rock, after removal of forms from curbs and sidewalks, pour grout to the depths specified in sections. While grout is still wet take individual 4"-6" round non-angular rocks and press into the wet grout to the exposure depths shown. Wet grout will raise to an indeterminate height not to exceed the finished grade surface shown.
3. For grouted durable rock, place round rocks at random spacing without any continuous open gaps greater than 1".

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OREGON
MAY 14, 2019
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EXPIRES: 06/30/25

ROADWAY DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
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150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

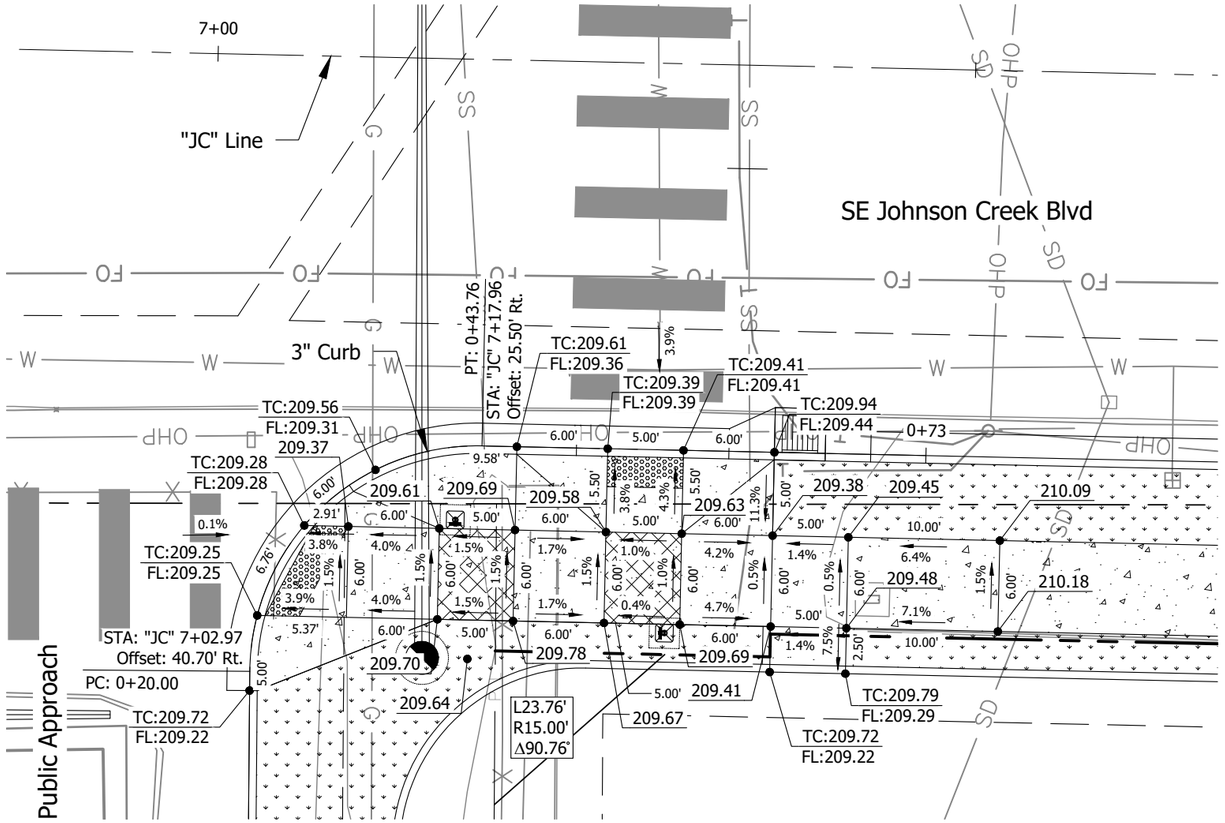
DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

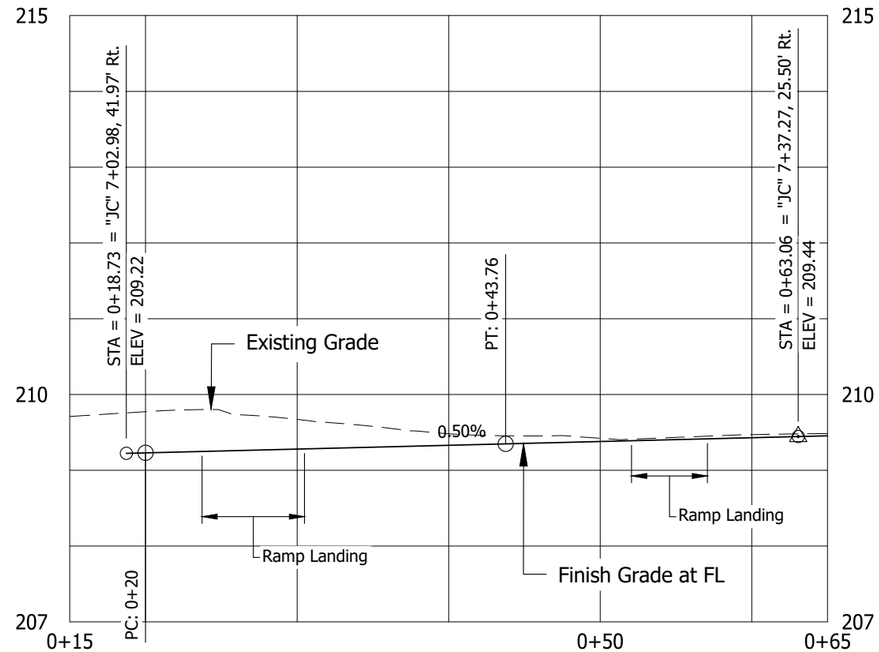
REVISIONS

NO.	DATE:

SHEET NO.
BB03

Plot Stamp: 1/28/2025 1:50:18 PM - Eric Germundson
File: H:\26\2667\5 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\BB-DETAILS -K21636.dwg





GENERAL NOTES

1. Slopes hold over elevations.
2. See ODOT Std. Dwgs. RD900 through RD960 for details not shown.
3. Contractor shall keep the concrete structure free from contact, strain, and public traffic for at least 7 calendar days or longer as directed according to standard specification 00759.51.
4. Contractor shall provide Working Drawings, a Curb Ramp Plan, and meet County personnel at a Preplacement Conference in accordance with Section 00759 of the Standard Specifications
5. Contractor shall take all necessary field measurements to verify plan design meets ADA compliance and notify the engineer if the ramps cannot be constructed as shown. Refer to specification section 00759 for full requirements.
6. Contractor shall notify Clackamas County once ramps are completed for a post ramp construction inspection.

ABBREVIATION

TC = Top Face of Curb (Elevation ft.)
BC = Bottom Face of Curb (Elevation ft.)
FL = Flow Line Along Gutter (Elevation ft.)
(XXX.XX) = Match Extg. Grade

LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

Scale: 1" = 10'

10 5 0 10

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CURB RAMP DETAILS

SE JOHNSON CREEK BLVD:
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CHECKED BY: T. ROOS

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NO.	DATE:

SHEET NO.
BC01

Plot Stamp: 2/4/2025 2:55:16 PM - Keisuke Harry
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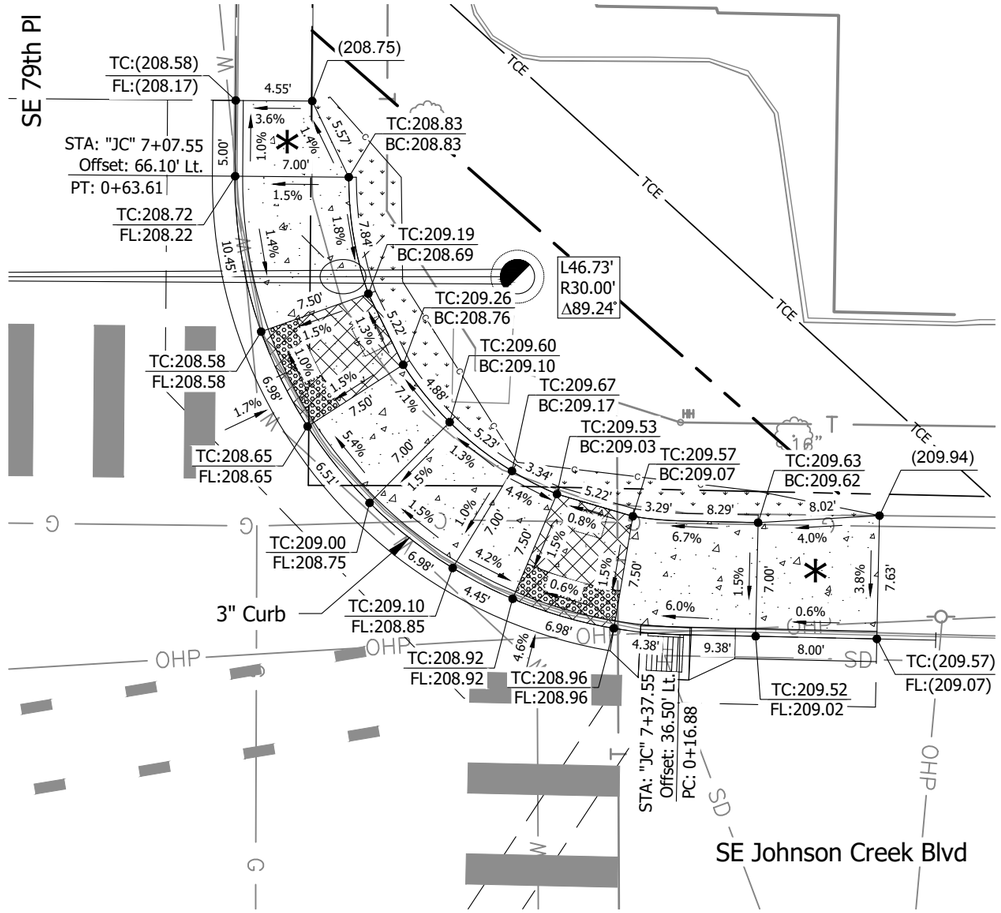

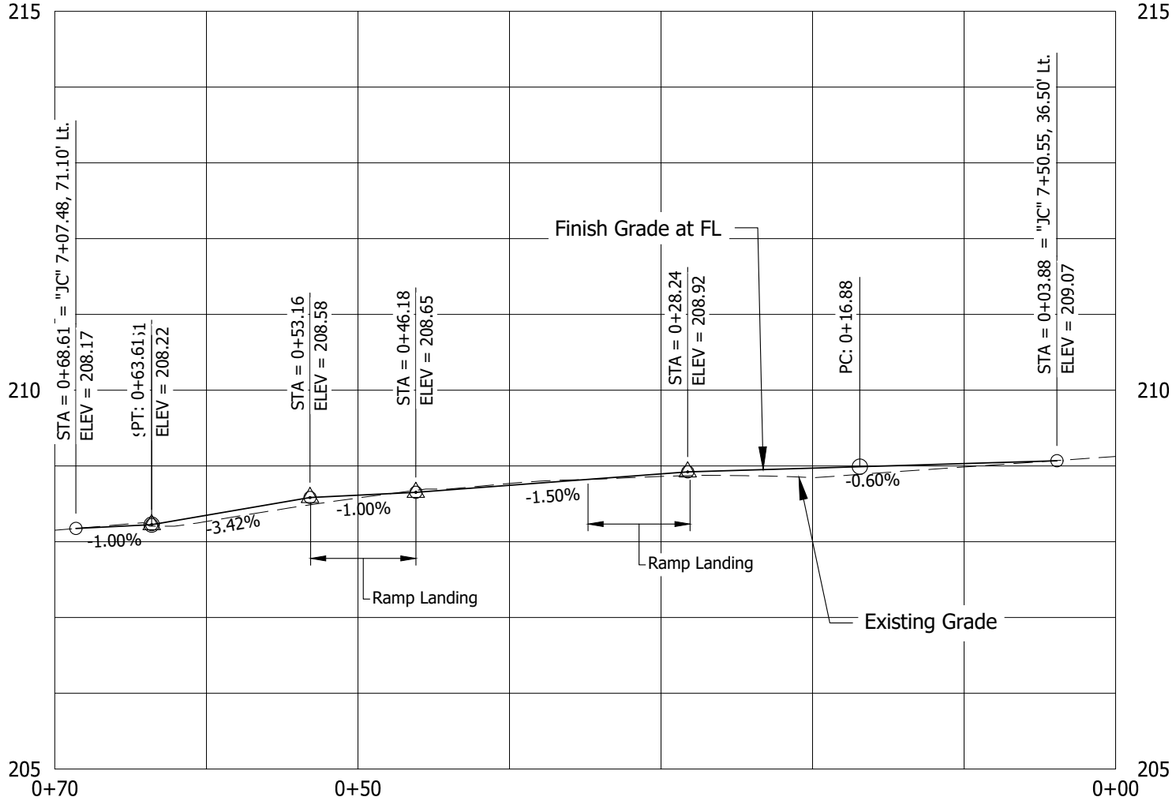

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

GENERAL NOTES

1. Slopes hold over elevations.
2. See ODOT Std. Dwgs. RD900 through RD960 for details not shown.
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ABBREVIATION

TC = Top Face of Curb (Elevation ft.)
BC = Bottom Face of Curb (Elevation ft.)
FL = Flow Line Along Gutter (Elevation ft.)
(XXX.XX) = Match Extg. Grade

LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

Scale: 1" = 10'

10 5 0 10

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON | DRAFTED BY: K. HARRY | CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. BC02

Plot Stamp: 2/4/2025 2:55:19 PM - Keisuke Harry
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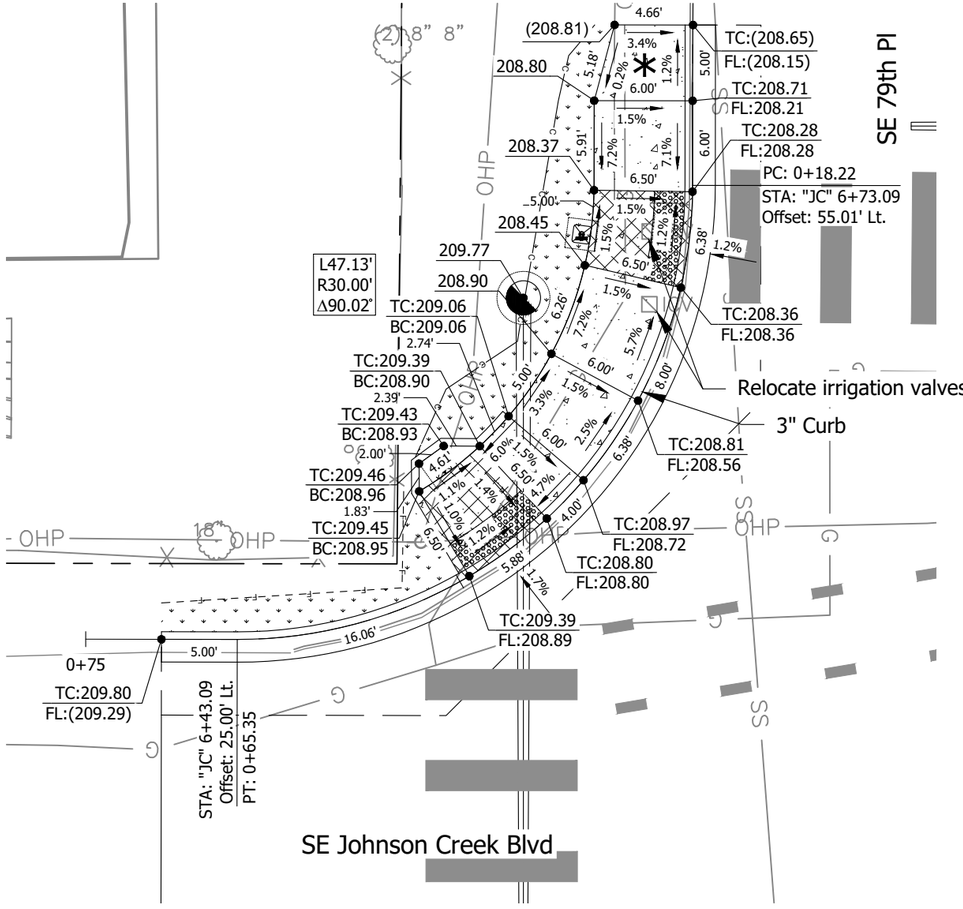

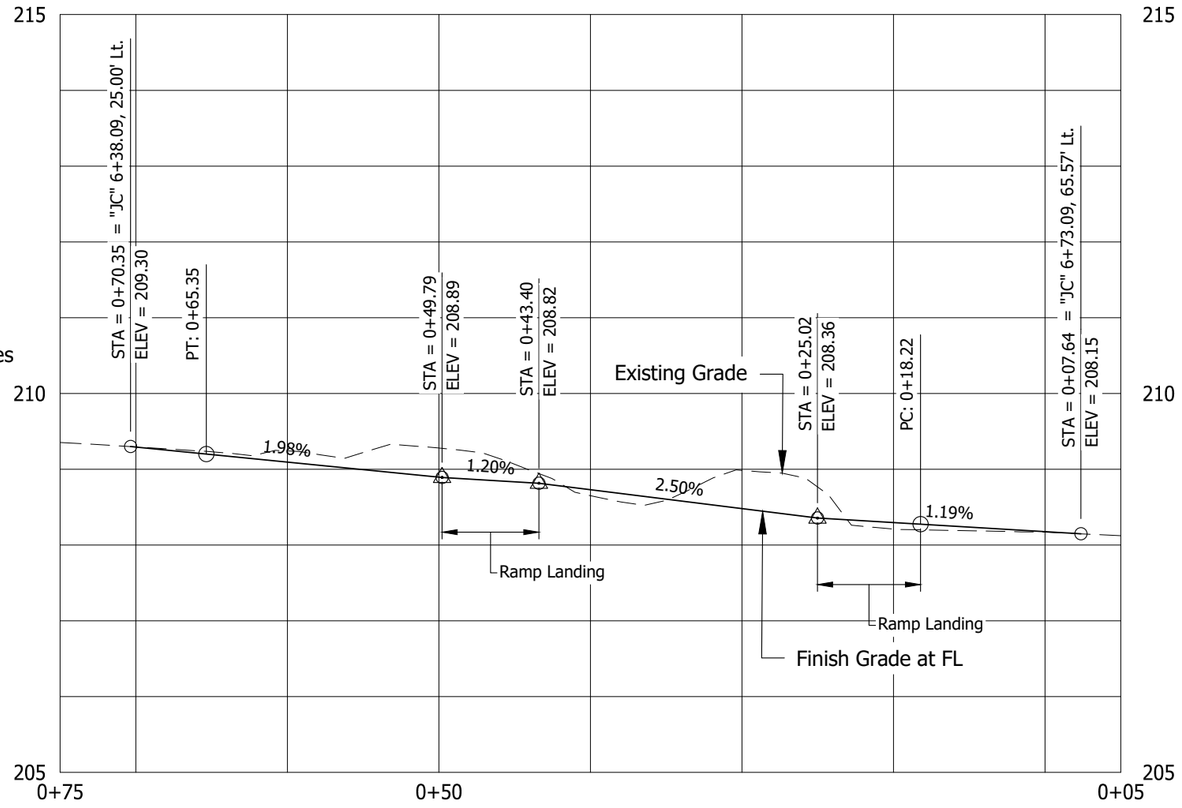

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

GENERAL NOTES

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LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

Scale: 1" = 10'

10 5 0 10

KITTELSON & ASSOCIATES
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

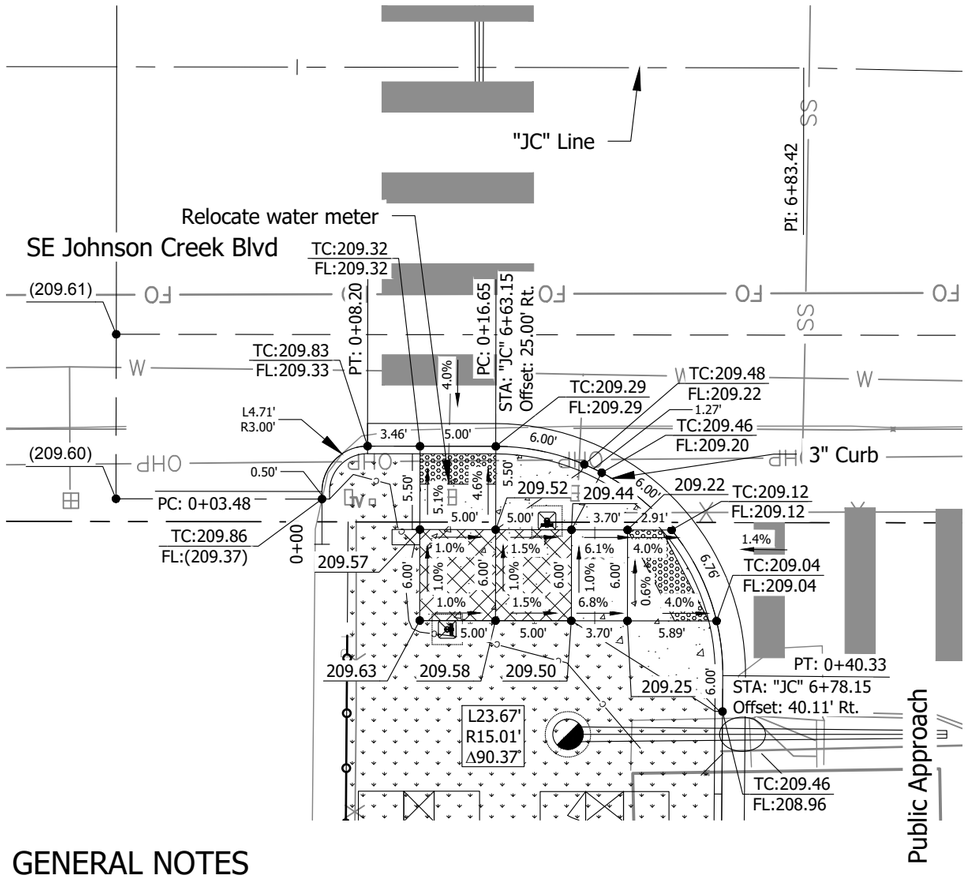
DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

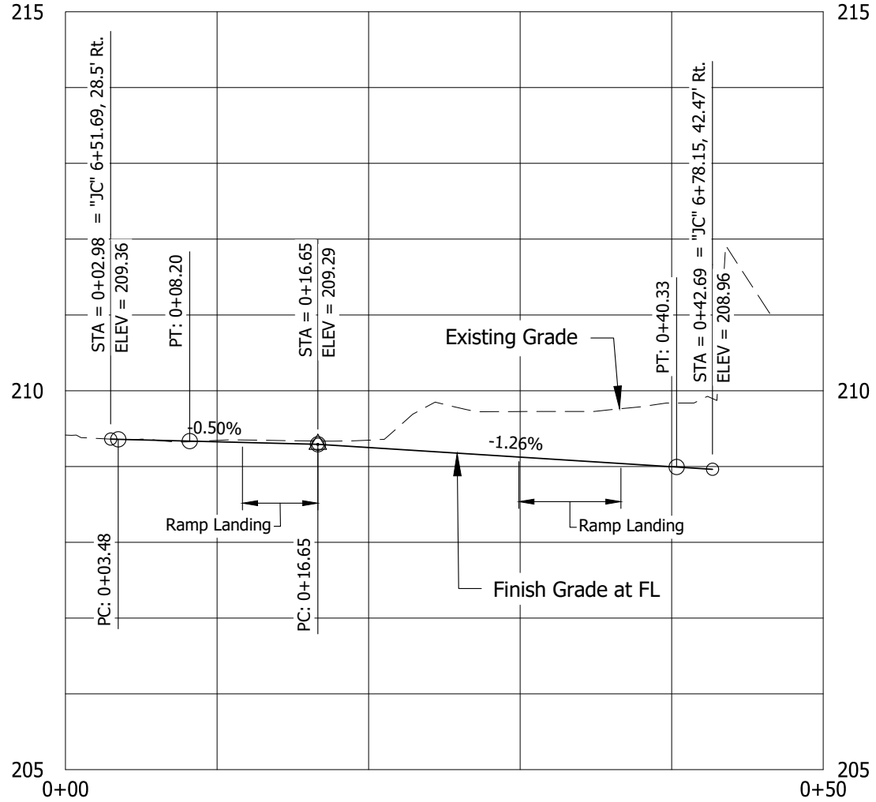
REVISIONS

NO.	DATE:

SHEET NO. BC03

Plot Stamp: 2/4/2025 2:55:22 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\BC-CURB RAMP DETAILS-K21636.dwg





GENERAL NOTES

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LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

Scale: 1" = 10'

10 5 0 10

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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BC04

Plot Stamp: 2/4/2025 2:55:25 PM - Keisuke Harry
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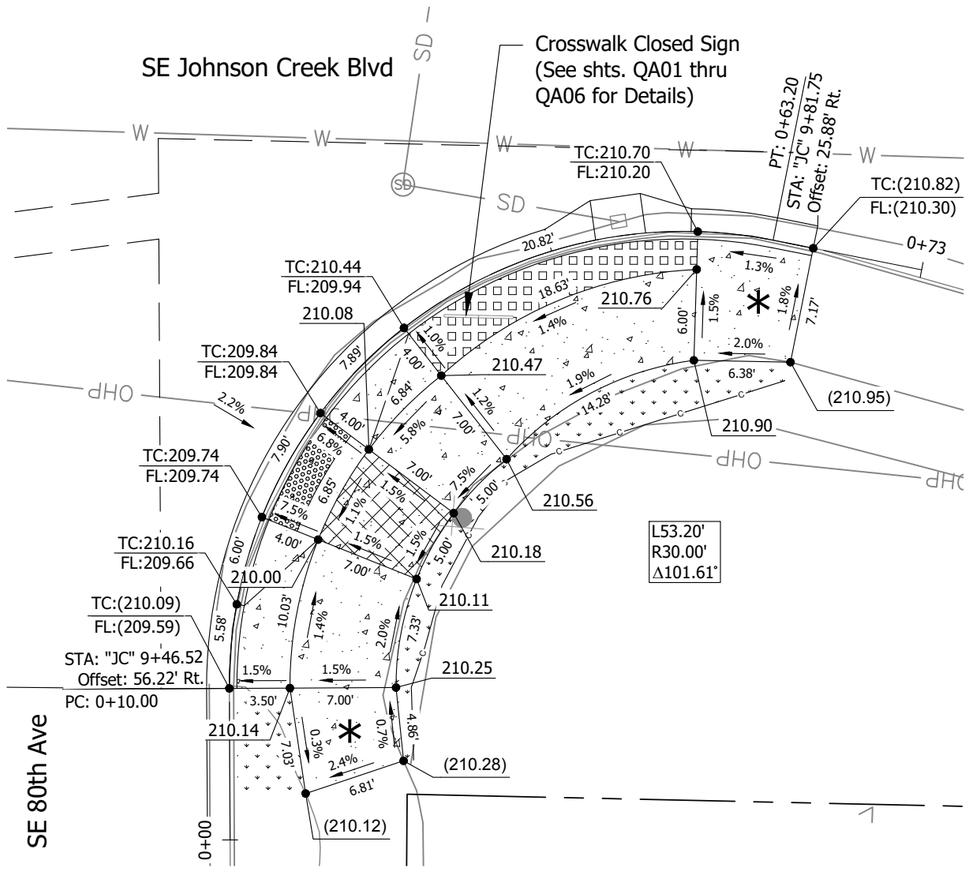

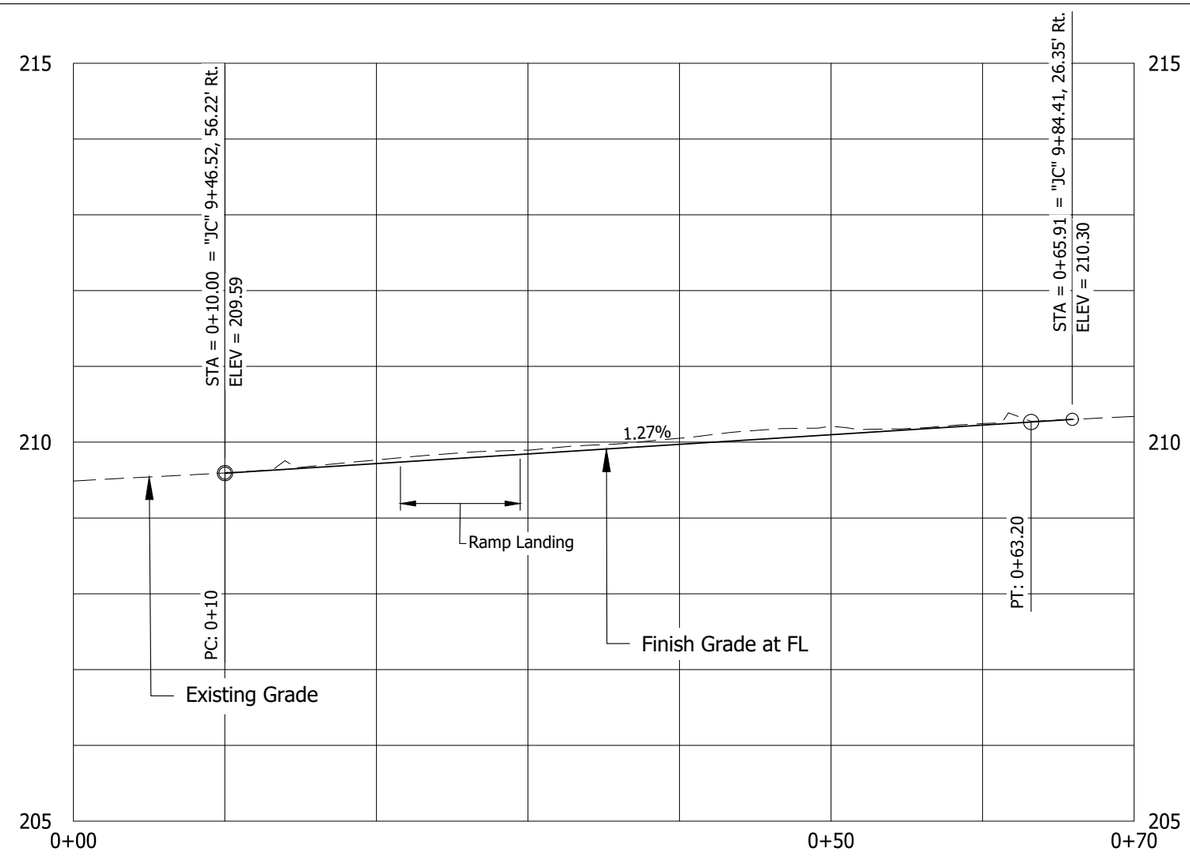

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

GENERAL NOTES

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(XXX.XX) = Match Extg. Grade

LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

Scale: 1" = 10'

10 5 0 10

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BC05

Plot Stamp: 2/4/2025 2:55:28 PM - Keisuke Harry
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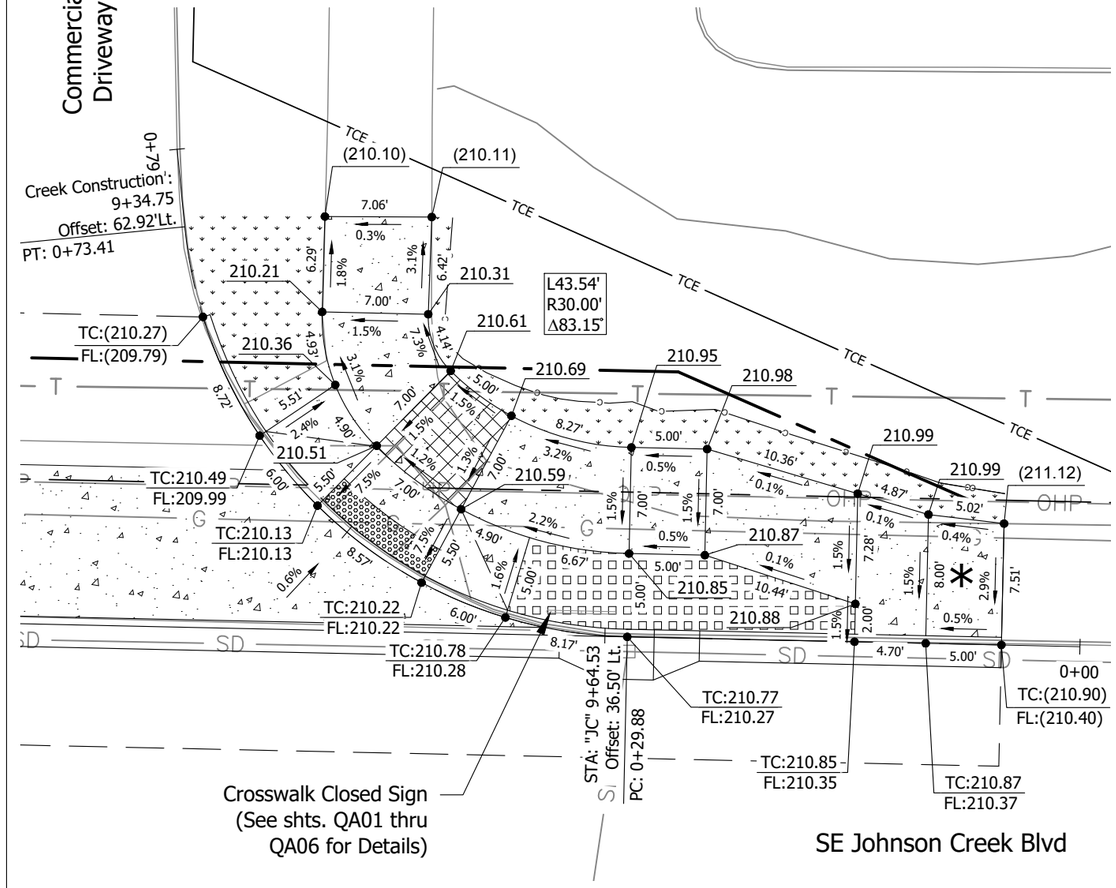

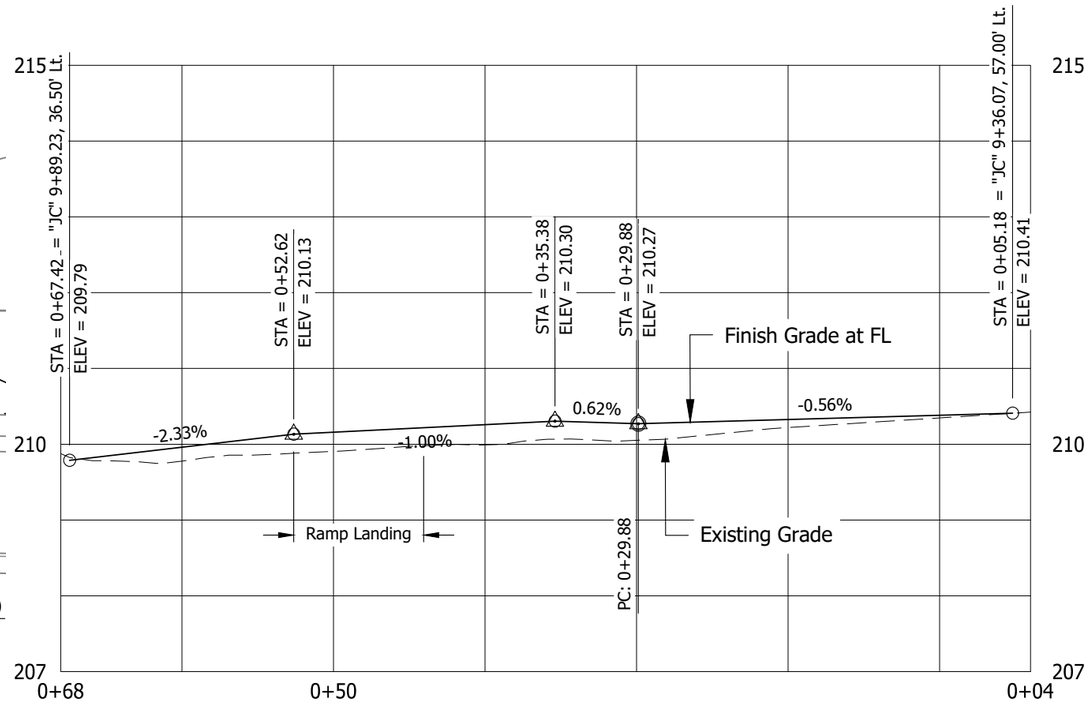

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

GENERAL NOTES

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LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

Scale: 1" = 10'

10 5 0 10

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

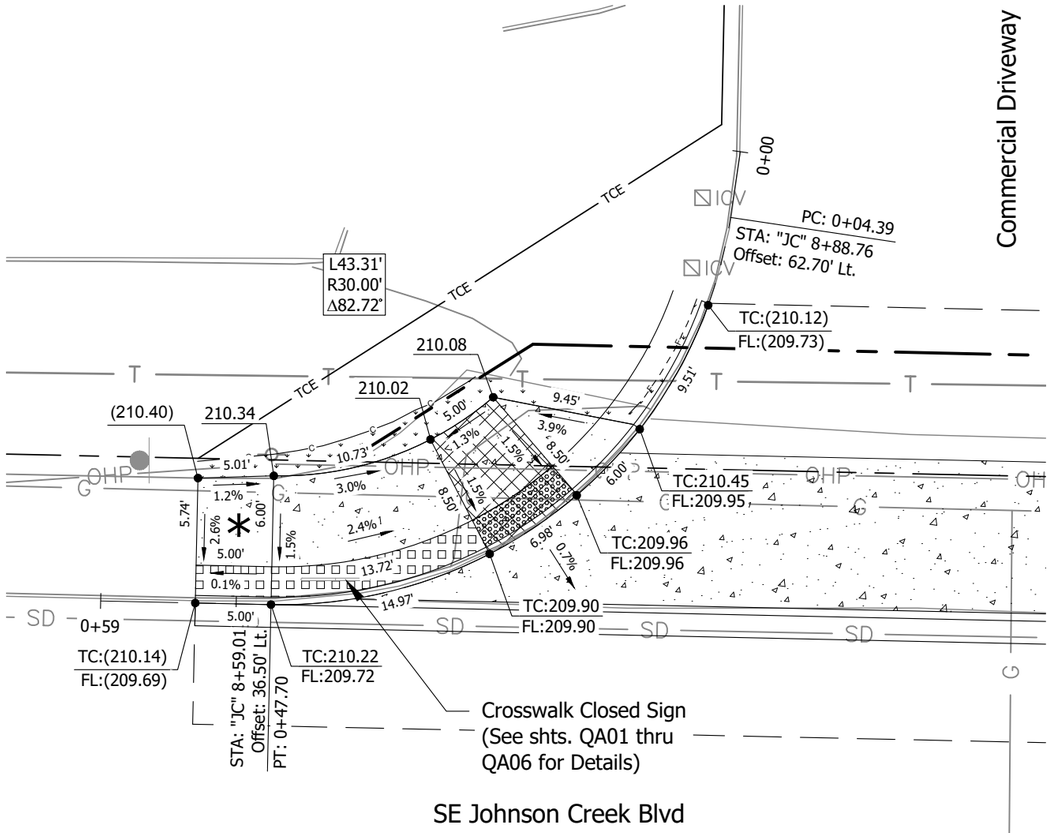
DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

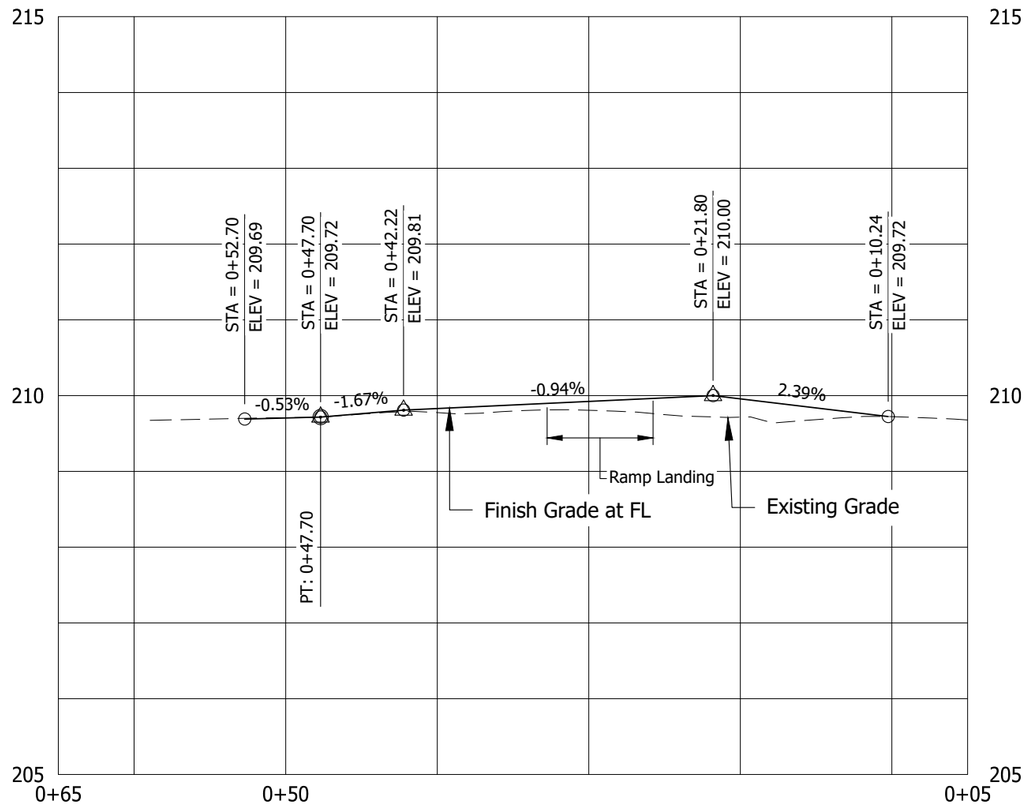
REVISIONS

NO.	DATE:

SHEET NO.
BC06

Plot Stamp: 2/4/2025 2:55:31 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\BC-CURB RAMP DETAILS-K21636.dwg





CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

GENERAL NOTES

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LEGEND

- Sidewalk
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- Grouted riprap
- * Transition panel

Scale: 1" = 10'
10 5 0 10

KITTELSON & ASSOCIATES
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PORTLAND, OR 97204
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BC07

Plot Stamp: 2/4/2025 2:55:33 PM - Keisuke Harry
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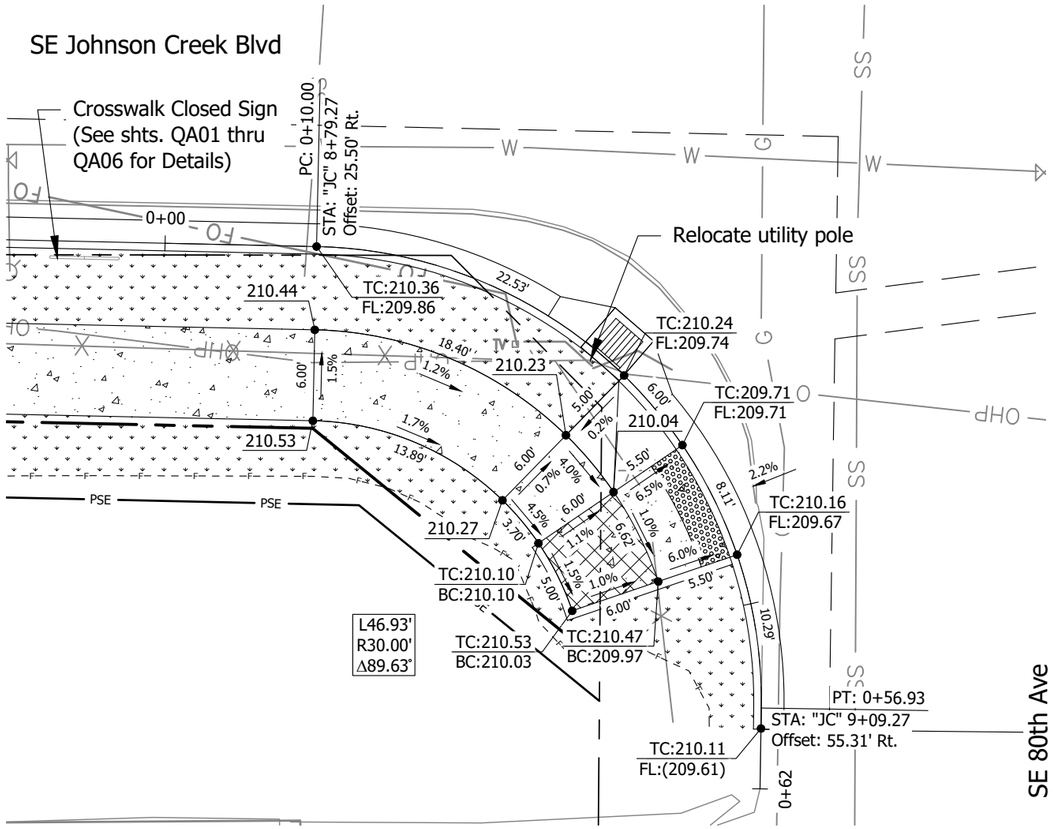

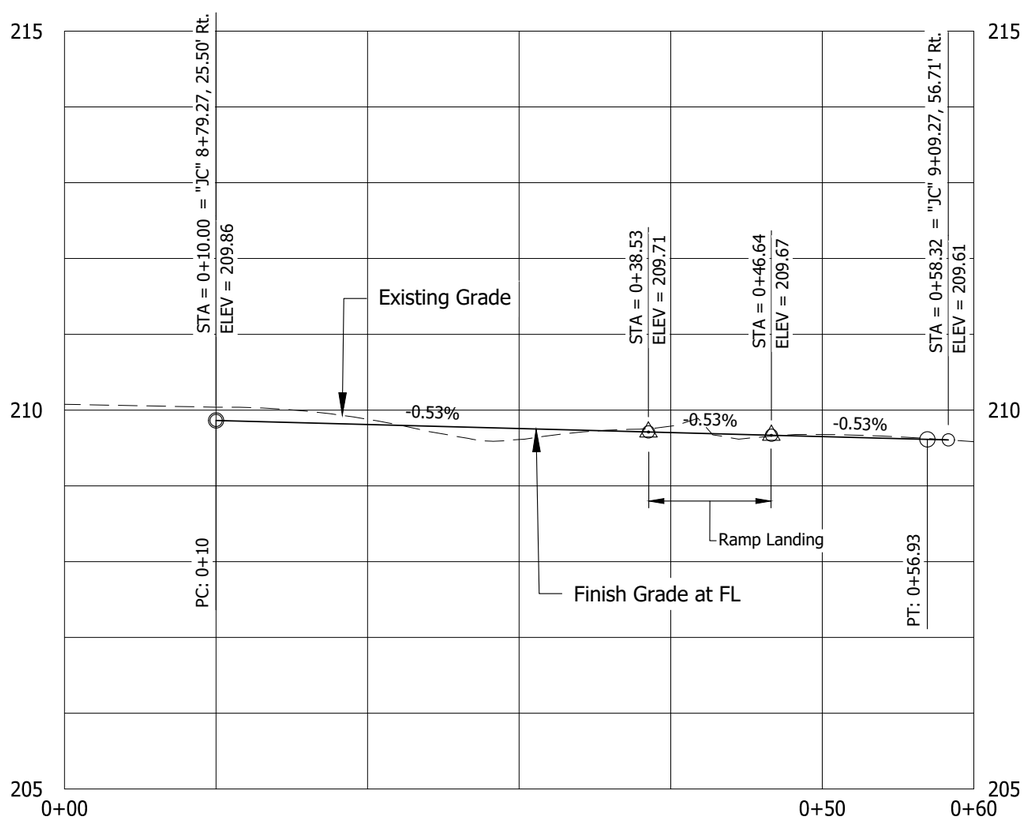

CURB RETURN PROFILE

Horizontal Scale: 1"=10'
Vertical Scale: 1"=2'

GENERAL NOTES

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LEGEND

- Sidewalk
- Turning space
- Truncated dome detectable warning surface
- Grouted riprap
- * Transition panel

Scale: 1" = 10'

10 5 0 10

KITTELSON & ASSOCIATES
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

CURB RAMP DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

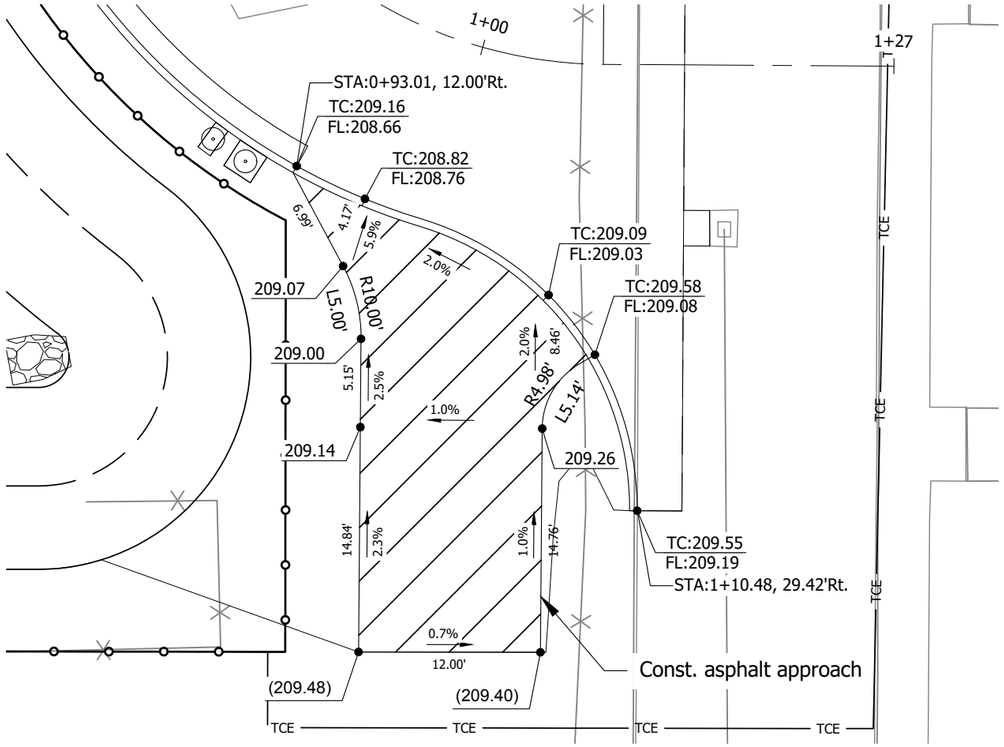
DESIGNED BY:	DRAFTED BY:	CHECKED BY:
E. GERMUNDSON	K. HARRY	T. ROOS

REVISIONS

NO.	DATE:

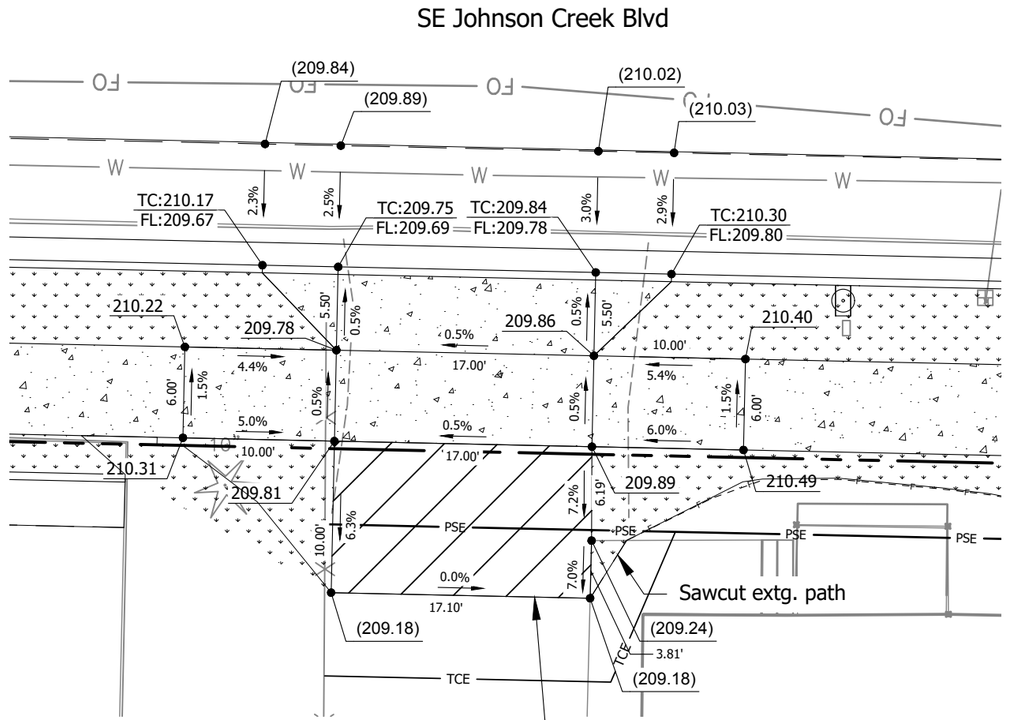
SHEET NO.
BC08

Plot Stamp: 2/4/2025 2:55:36 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\BC-CURB RAMP DETAILS-K21636.dwg



DRIVEWAY DETAIL

7922 SE Johnson Creek Blvd



DRIVEWAY DETAIL

7930 SE Johnson Creek Blvd

GENERAL NOTES

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2. See ODOT Std. Dwgs. RD900 through RD960 for details not shown.
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6. See Clackamas County Std. Dwgs. R100 for driveway details not shown.

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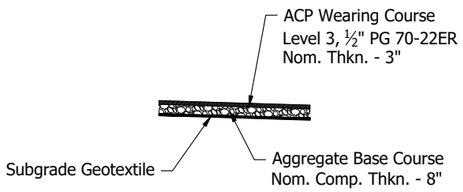
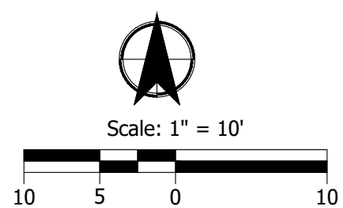


Asphalt Approach (Residential)
Structural Section



KITTELSON & ASSOCIATES
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PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

DRIVEWAY DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

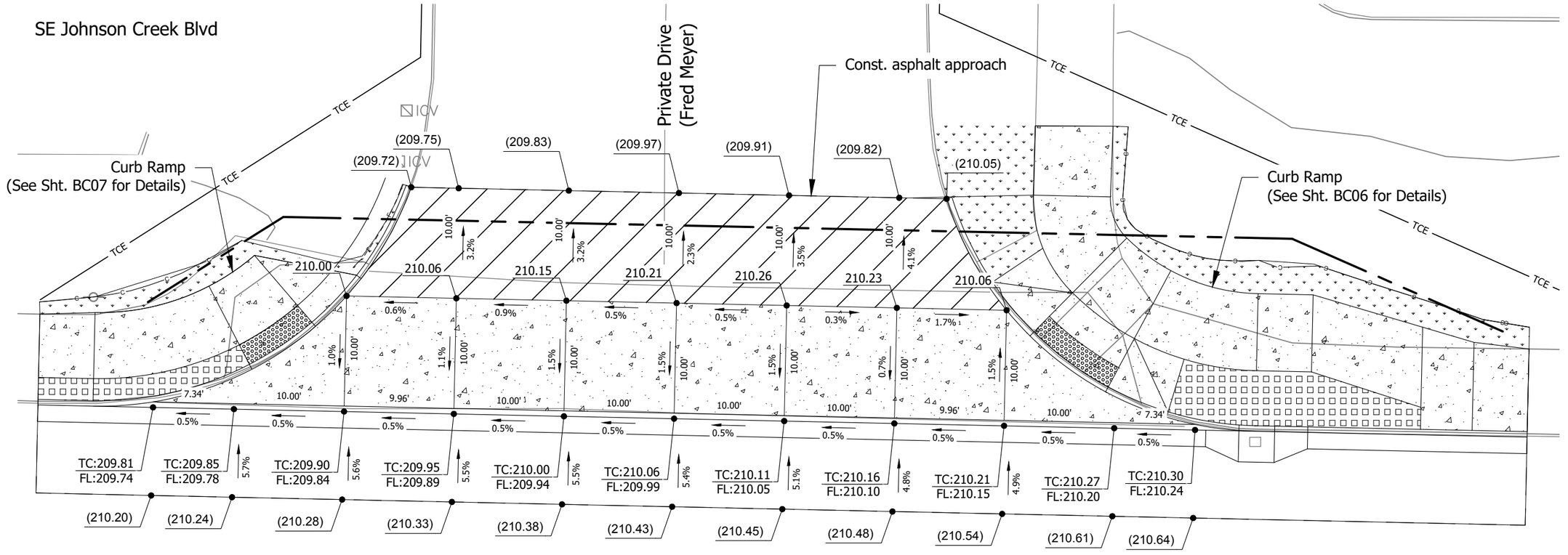
DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BD01

Plot Stamp: 2/4/2025 3:15:50 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\BD-DRIVEWAY DETAILS-K21636.dwg

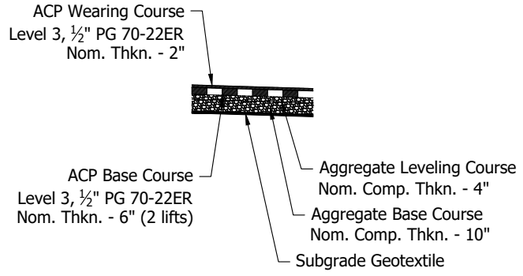


GENERAL NOTES

1. See Clackamas County Std. Dwg. R100 & D675 for details not shown.

ABBREVIATION

TC = Top Face of Curb (Elevation ft.)
FL = Flow Line Along Gutter (Elevation ft.)
(XXX.XX) = Match Extg. Grade



Asphalt Approach (Commercial)
Structural Section

Scale: 1" = 10'

10 5 0 10

KITTELSON & ASSOCIATES
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

DRIVEWAY DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS
NO. DATE:

SHEET NO.
BD02

Plot Stamp: 2/4/2025 3:15:52 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\BD-DRIVEWAY DETAILS-K21636.dwg

GENERAL NOTES

1. Elevations are top of pavement finished grade unless otherwise noted
2. Grid spacing is 10', unless noted otherwise
3. Existing and proposed contours clipped outside of driveway limits for clarity.

ABBREVIATION

TC = Top Face of Curb (Elevation ft.)
BC = Bottom Face of Curb (Elevation ft.)
FL = Flow Line along Gutter (Elevation ft.)
(XXX.XX) = Match Extg. Grade

SE Johnson Creek Blvd.

"South Driveway" Line

Public Approach

Sawcut

Extg. catch basin

PT: 1+08.06

PC: 0+60.86

1+27

1+00

0+50

Scale: 1" = 10'

10 5 0 10

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DRIVEWAY DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY:	DRAFTED BY:	CHECKED BY:
E. GERMUNDSON	K. HARRY	T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
BD03

Plot Stamp: 2/4/2025 3:15:53 PM - Keisuke Harry
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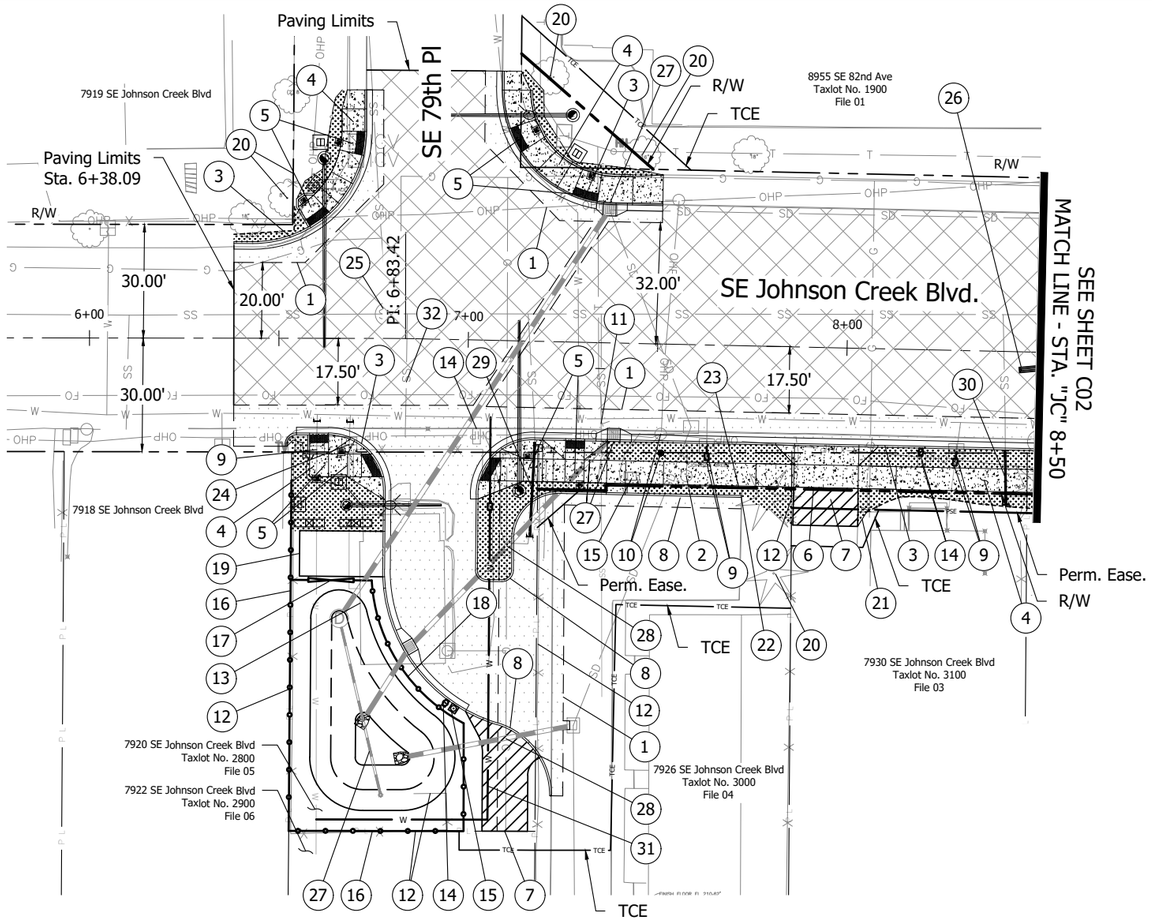

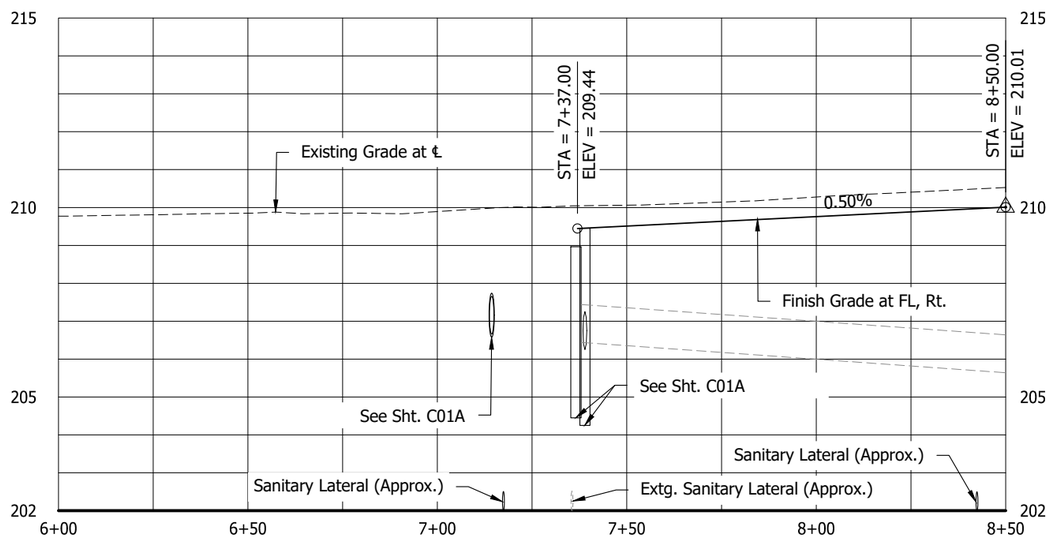

CONSTRUCTION NOTES

1. Sawcut & remove extg. pavement, sidewalk, and curb
2. Remove & replace extg. sign (Coordinate with property owner)
3. Const. curb & gutter (See County std. dwg. no. S150)
   Sta. "JC" 6+38.09, 25.00' Lt. to Sta. "JC" 6+73.09, 65.59' Lt.
   Sta. "JC" 6+54.68, 25.00' Rt. to Sta. "JC" 7+01.62, 97.60' Rt.
   Sta. "JC" 7+07.48, 71.10' Lt. to Sta. "JC" 7+50.55, 36.50' Lt.
   Sta. "JC" 7+02.98, 41.97' Rt. to Sta. "JC" 9+09.27, 56.71' Rt.
4. Const. concrete walks (See County std. dwg. no. S960)
5. Const. curb ramp
   Inst. truncated domes on new surfaces
   (See shts. BC01 thru BC08 for details)
6. Const. concrete driveway (See County std. dwg. no. D650 and sht. BD01 for details)
7. Const. asphalt approach (See County std. dwg. no. R100 and sht. BD01 for details)
8. Const. standard curb (See County std. dwg. no. S100)
9. Water meter to be relocated by Clackamas River Water District and existing water service to be abandoned at main.
10. Utility pole to be relocated by PGE
11. Protect extg. sanitary sewer pipe
12. Remove extg. fence. Coordinate with adjacent property owner.
13. Remove building and foundation, coordinate with utilities to abandon services. Locate existing cesspool and backfill with suitable fill in accordance with permit.
14. Inst. single mailbox support - 2 ea.
    Remove and reinstall extg. mailbox
    (See ODOT std. dwg. nos. RD100 & RD101)
15. Remove and reinstall existing multi-unit mailbox - 1 ea.
    Inst. mailbox on new foundation
16. Const. 6 foot chain link fence, type CL-6R with black PVC coating - 139 ft.
    (See ODOT std dwg. no. RD815)
17. Const. 12 foot x 48 inch chain link double gate - 1 ea.
    (See ODOT std dwg. no. RD820)
18. Const. 4 foot chain link fence, type CL-6R with black PVC coating - 85 ft.
    (See ODOT std dwg. no. RD815)
19. Const. maintenance access pad (See sht. BB01 and BB02 for details)
20. Protect extg. fence and tree
21. Sawcut and remove concrete. Coordinate with property owner.
22. End standard curb, match extg. (See County std. dwg. no. S100)
23. Remove extg. curb
24. Water service to be abandoned at main by Clackamas River Water
25. Minor adjust manhole - 1 ea.
26. Const. concrete traffic separator, Type C
    Sta. "JC" 8+45.59, 4.84' Lt. to Sta. "JC" 11+19.72, 4.92' Lt.
    (See ODOT std. dwg. no. RD706)
27. Stormwater infrastructure
    (See shts. C01A and C01B for details)
28. Natural gas service line to be relocated by NW Natural
29. Inst. 6 inch sanitary sewer pipe - 25 ft.
    Connect to extg. lateral, 8 ft. depth
    Inst. 6 inch PVC pipe cap
    (See WES std. dwg. no. SAN-021)
30. Inst. 6 inch sanitary sewer pipe - 15 ft.
    Connect to extg. lateral, 8 ft. depth
    Inst. 6 inch PVC pipe cap
    (See WES std. dwg. no. SAN-021)
31. Inst. 1 inch copper water service line 127 ft.
    Connect to relocated water meter
    Connect to extg. water service line
32. Abandon 6 inch sanitary sewer pipe

Scale: 1" = 40'

40 20 0 40

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OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

GENERAL CONSTRUCTION

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

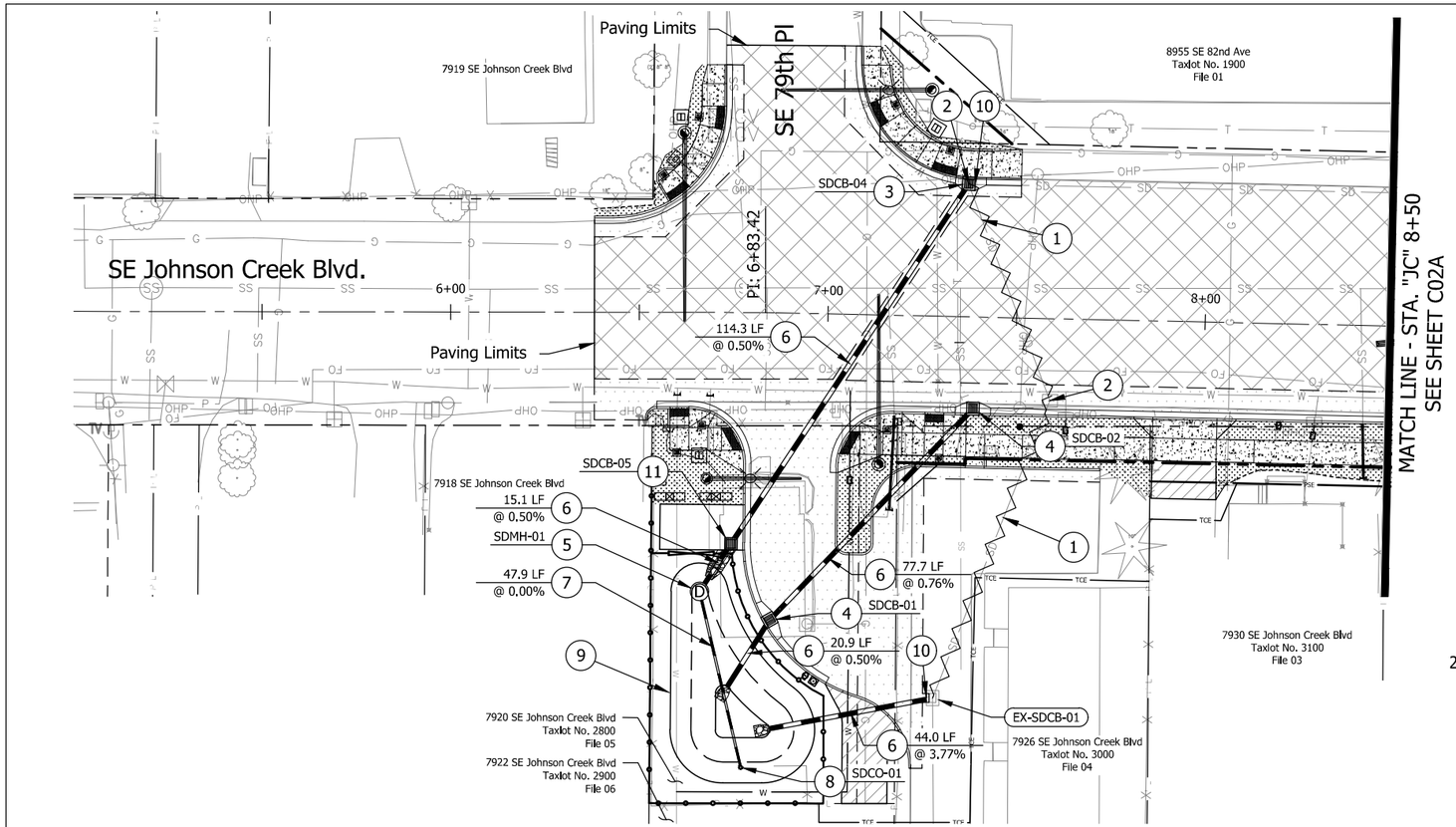
DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. C01

Plot Stamp: 1/28/2025 1:52:04 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\C-GENERAL CONSTRUCTION-K21636.dwg

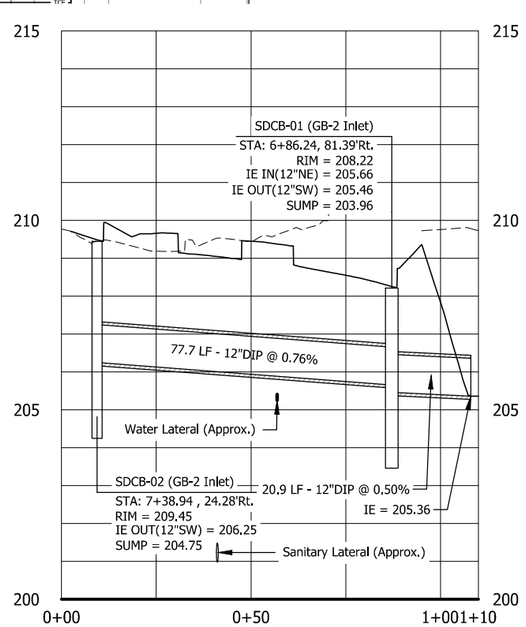


CONSTRUCTION NOTES

1. Abandon existing storm line after construction and acceptance of new storm sewer.
2. Remove existing storm drain inlet.
3. Install curb inlet with GB basin and 18" sump per WES Standard Drawing SWM-14 & SWM-18. See Profile A on this sheet for rim and invert elevations.
4. Install curb inlet with GB basin and 18" sump per WES Standard Drawing SWM-14 & SWM-18. See Profile B on this sheet for rim and invert elevations.
5. Install 48" standard concrete manhole with oval grate per WES Standard Drawing SWM MH-31 & SWM-33. See Profile A on this sheet for rim and invert elevations and Detail C on Sheet BB02 for roll out diagram.
6. Install 12" ductile iron pipe using open trench method. Length and slope per this sheet. Bedding and backfill per WES Standard Drawing SWM-38.
7. Install 6" perforated PVC underdrain pipe. Length and slope per this sheet.
8. Install 6" storm clean out per ODOT Standard Drawing RD362 and Sheet BB01. See Profile A on this sheet for rim and invert elevations.
9. Construct Bioretention Pond, Water Quality Facility per Sheet BB01.
10. Connect pipe to structure per WES Standard Drawing SWM-29.
11. Install area drain with GB basin and 18" sump per WES Standard Drawing SWM-14 & SWM-18, not including curb and gutter. See Profile A on this sheet for rim and invert elevations.

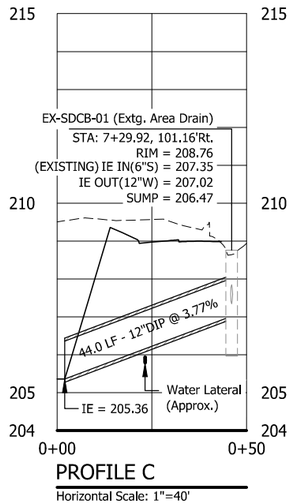
PROFILE A

Horizontal Scale: 1"=40'
Vertical Scale: 1"=4'



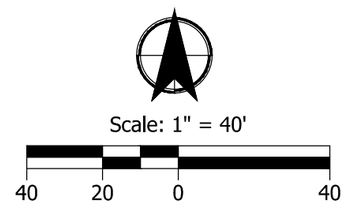
PROFILE B

Horizontal Scale: 1"=40'
Vertical Scale: 1"=4'



PROFILE C

Horizontal Scale: 1"=40'
Vertical Scale: 1"=4'



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REGISTERED PROFESSIONAL ENGINEER
101413PE
Digitally Signed 2025.02.05
OREGON
Nov. 8, 2022
Daniel Evan Child
EXPIRES: 12/31/25

STORMWATER CONSTRUCTION

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR

CLACKAMAS COUNTY
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
C01A

Plot Stamp: 2/4/2025 11:57:02 AM - Daniel Child
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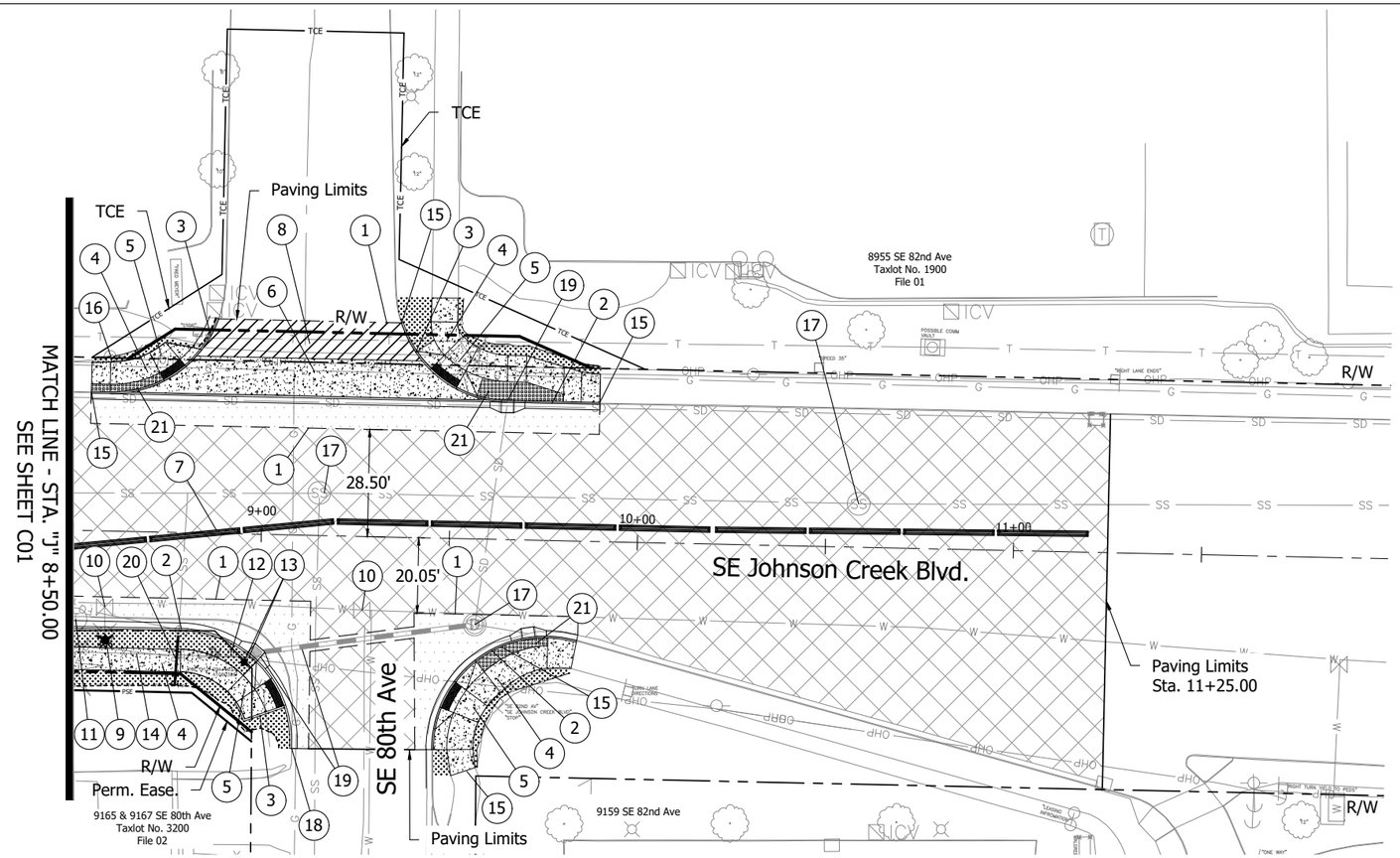

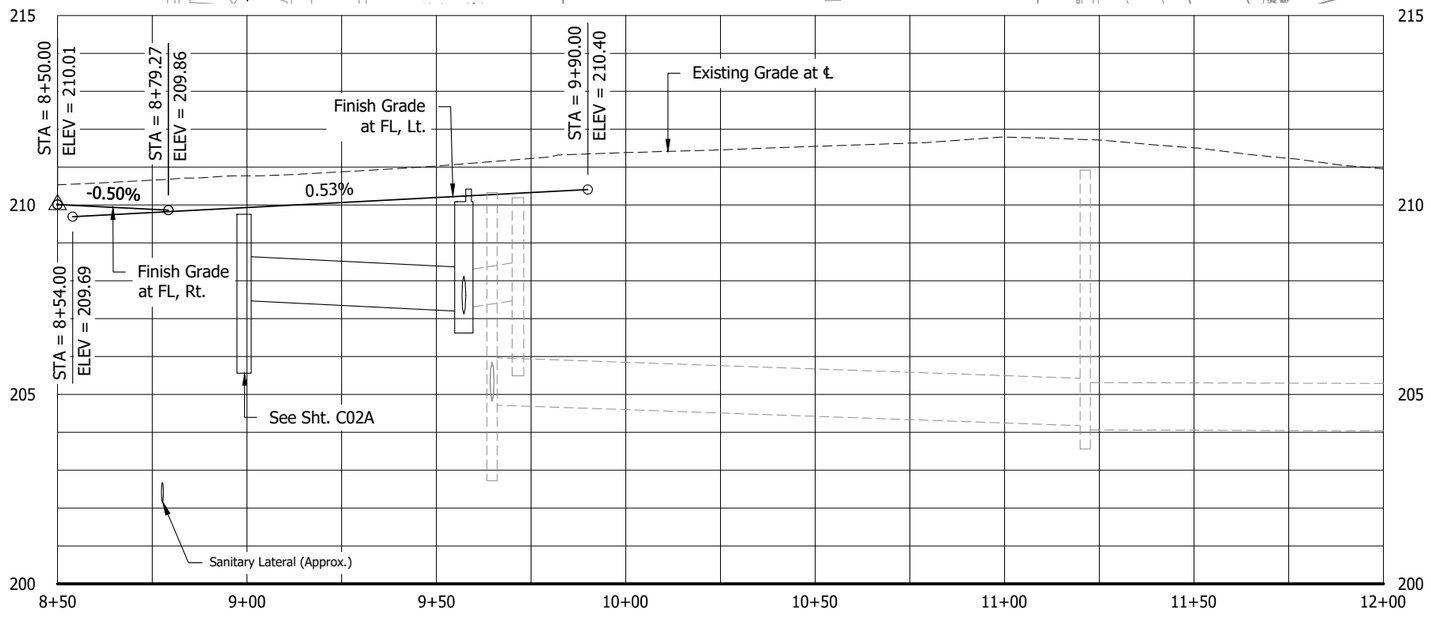

CONSTRUCTION NOTES

1. Sawcut & remove extg. pavement, sidewalk, and curb
2. See sht. C01, note 3
   Const. curb & gutter (See County std. dwg. no. S150)
   Sta. "JC" 8+54.01, 37.00' Lt. to Sta. "JC" 9+89.23, 37.00' Lt.
   Sta. "JC" 9+46.52, 5647' Rt. to Sta. "JC" 9+64.46, 28.19' Rt.
3. Const. standard curb (See County std. dwg. no. S100)
4. Const. concrete walks (See County std. dwg. no. S960)
5. Const. curb ramp
   Inst. truncated domes on new surfaces
   (See shts. BC01 thru BC09 for details)
6. Const. reinforced commercial concrete driveway
   (See County std. dwg. no. D675 and sht. BD02 for details)
7. See sht. C01, note 26
   Const. concrete traffic separator, Type C
8. Const. asphalt approach (See County std. dwg. no. R100
   and sht. BD02 for details)
9. Fire hydrant to be relocated by Clackamas River Water District
10. Adjust water valve box to grade - 2 ea.
11. Telecommunications manhole to be adjusted by Lumen
12. Telecommunications pedestal to be relocated by Lumen
13. Utility pole to be relocated by PGE
14. Remove extg. chain link fence - 75 ft.
    Sta. "JC" 8+46.50, 32.22' Rt. to Sta. "JC" 9+03.46, 56.36' Rt.
15. End curb & gutter and sidewalk, match extg.
16. Protect existing utility pole
17. Minor adjust manhole - 3 ea.
18. Const. concrete curb ending
    (See ODOT std. dwg. no. RD700 for details)
19. Stormwater infrastructure
    (See sht. C02A for details)
20. Inst. 6 inch sanitary sewer pipe - 13 ft.
    Connect to extg. lateral, 8 ft. depth
    Inst. 6 inch PVC pipe cap
    (See WES std. dwg. no. SAN-021)
21. Const. grouted riprap
    (See sht. BB03 for details)

Scale: 1" = 40'

40 20 0 40

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OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

GENERAL CONSTRUCTION

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. C02

Plot Stamp: 1/28/2025 1:52:56 PM - Eric Germundson
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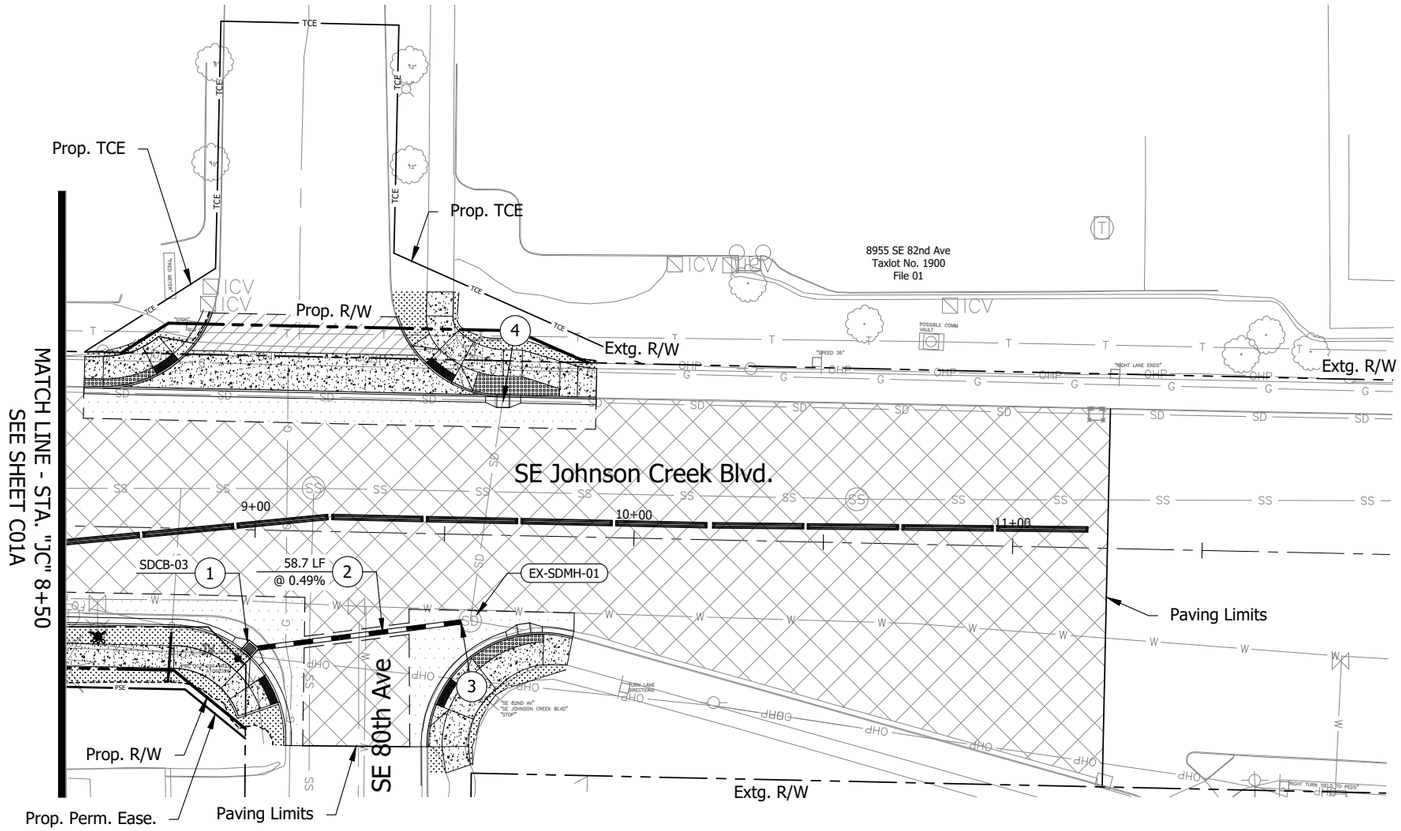

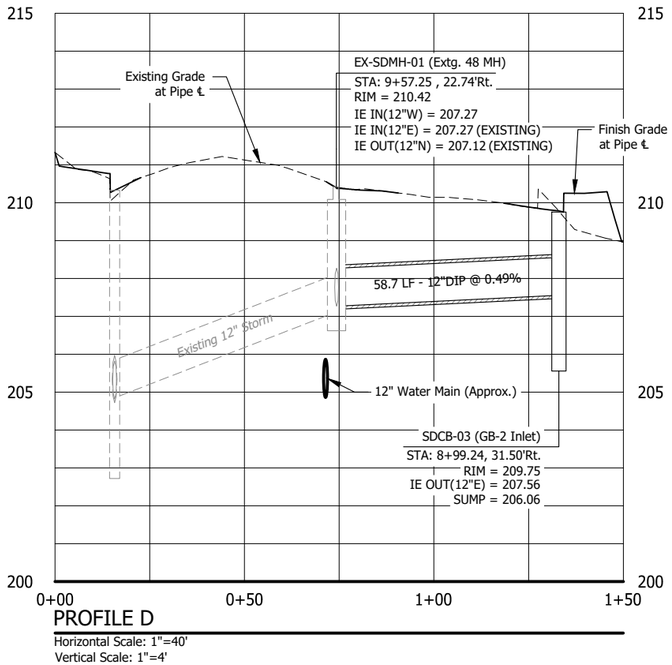

PROFILE D

Horizontal Scale: 1"=40'
Vertical Scale: 1"=4'

CONSTRUCTION NOTES

1. Install curb inlet with GB basin and 18" sump per WES Standard Drawing SWM-14 & SWM-18. See Profile D on this sheet for rim and invert elevations.
2. Install 12" ductile iron pipe using open trench method. Length and slope per Profile D on this sheet. Bedding and backfill per WES Standard Drawing SWM-38.
3. Connect pipe to existing manhole per WES Standard Drawing SWM-29.
4. Adjust existing catch basin frame and grade to finish grade.

Scale: 1" = 40'

40 20 0 40

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OREGON
Nov. 8, 2022
Daniel Evan Child
EXPIRES: 12/31/25

STORMWATER CONSTRUCTION

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. C02A

Plot Stamp: 2/4/2025 3:23:38 PM - Keisuke Harry
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TRAFFIC CONTROL GENERAL NOTES:

1. Signs and other traffic control devices shown are the minimum required.
2. Refer to ODOT std. dwg. TM800, TM810, TM820, TM821, TM840, TM841, TM844, and TM851 for additional details.
3. Contractor to provide 48-hour notice to all adjacent affected property owners prior to sidewalk closure activities.
4. Maintain driveway access to all properties to the greatest extent possible. coordinate all work and driveway impacts with property owners.
5. All signs are 36"x36" unless otherwise shown. Use fluorescent orange sheeting for the background of all temporary warning signs.
6. Cover existing, conflicting signs as needed.
7. Pre-construction posted speeds:
   - Johnson Creek Blvd = 35 MPH
   - SE 79th Pl = 25 MPH
   - SE 80th Ave = 25 MPH
8. do not locate sign supports in locations designated for bicycle or pedestrian traffic.
9. Maintain all existing regulatory and warning signs in work area on temporary sign support (TSS) as directed by the Engineer.
10. All traffic control is to be in accordance with the current MUTCD (Manual on Uniform Traffic Control Devices) and Oregon supplement.
11. Contractor to use abrupt edge detail ODOT standard drawing TM800 for shoulder drop off.
12. Contractor to construct one curb ramp per intersection at a time. Temporary pedestrian detour routes must be provided as shown in plans or by using the 3 open corners per ODOT standard drawing TM844.
13. Construct in sequence to maximize pedestrian access and crossings.

LEGEND

- Sign on Post
- Type III Barricade
- Temporary Sign Support (TSS) as shown on ODOT Std. Dwg. No. TM821
- Direction of Traffic
- Type II Barricade
- Pedestrian Channelizing Devices
- TPAR — Temporary Pedestrian Accessible Route (TPAR)
- 28" Tubular Markers on 20' maximum spacing
- Under Construction
- (ND) Iinstall Temporary Painted Narrow Double No-Pass Two 4" Yellow Lines
- (W) Install Temporary Painted 4" White Line
- (W-2) Install Temporary Painted 8" White Line
- (WD) Install Temporary Painted 4" White Dotted Line
- (WD-2) Install Temporary Painted 8" White Dotted Line

TRAFFIC CONTROL PLAN - NOTES & LEGEND

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
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OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: A. LOVEDAY
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CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
EA01

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MAY 14, 2019
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EXPIRES: 06/30/25

Plot Stamp: 1/28/2025 1:53:32 PM - Eric Germundson
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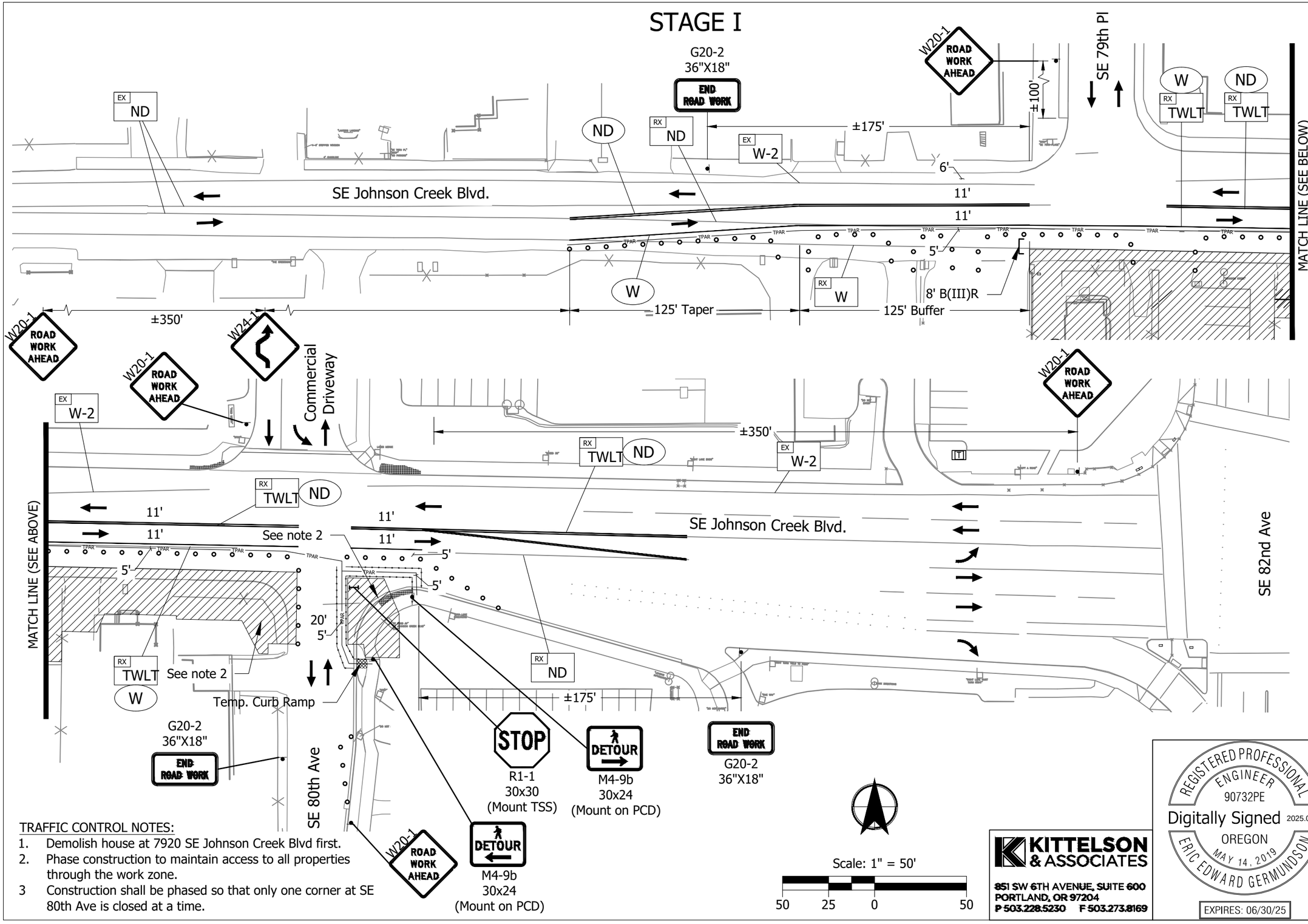
STAGE I



TRAFFIC CONTROL NOTES:

1. Demolish house at 7920 SE Johnson Creek Blvd first.
2. Phase construction to maintain access to all properties through the work zone.
3 Construction shall be phased so that only one corner at SE 80th Ave is closed at a time.

Scale: 1" = 50'

50 25 0 50

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EXPIRES: 06/30/25

TRAFFIC CONTROL PLAN - STAGE I

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

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CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

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DRAFTED BY: A. LOVEDAY
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO. EA02

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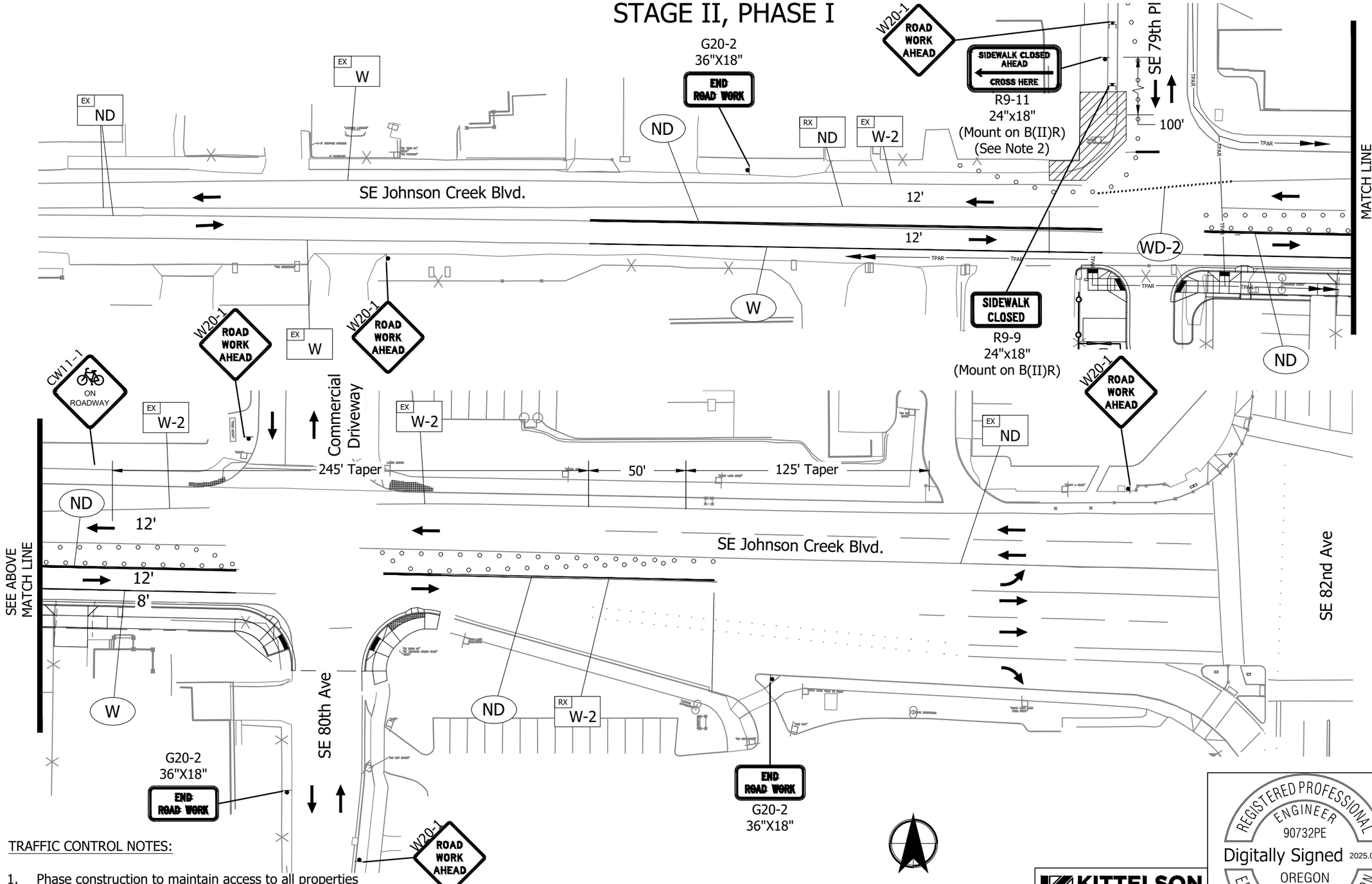
STAGE II, PHASE I



TRAFFIC CONTROL NOTES:

1. Phase construction to maintain access to all properties through the work zone.
2. Place barricade and sign on the SW corner of the Lindy Ln intersection directing pedestrians to use the sidewalk on the east side of 79th Pl.

Scale: 1" = 50'

50 25 0 50

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OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

TRAFFIC CONTROL PLAN - STAGE II, PHASE 1

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

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CHECKED BY: W. SCARBROUGH

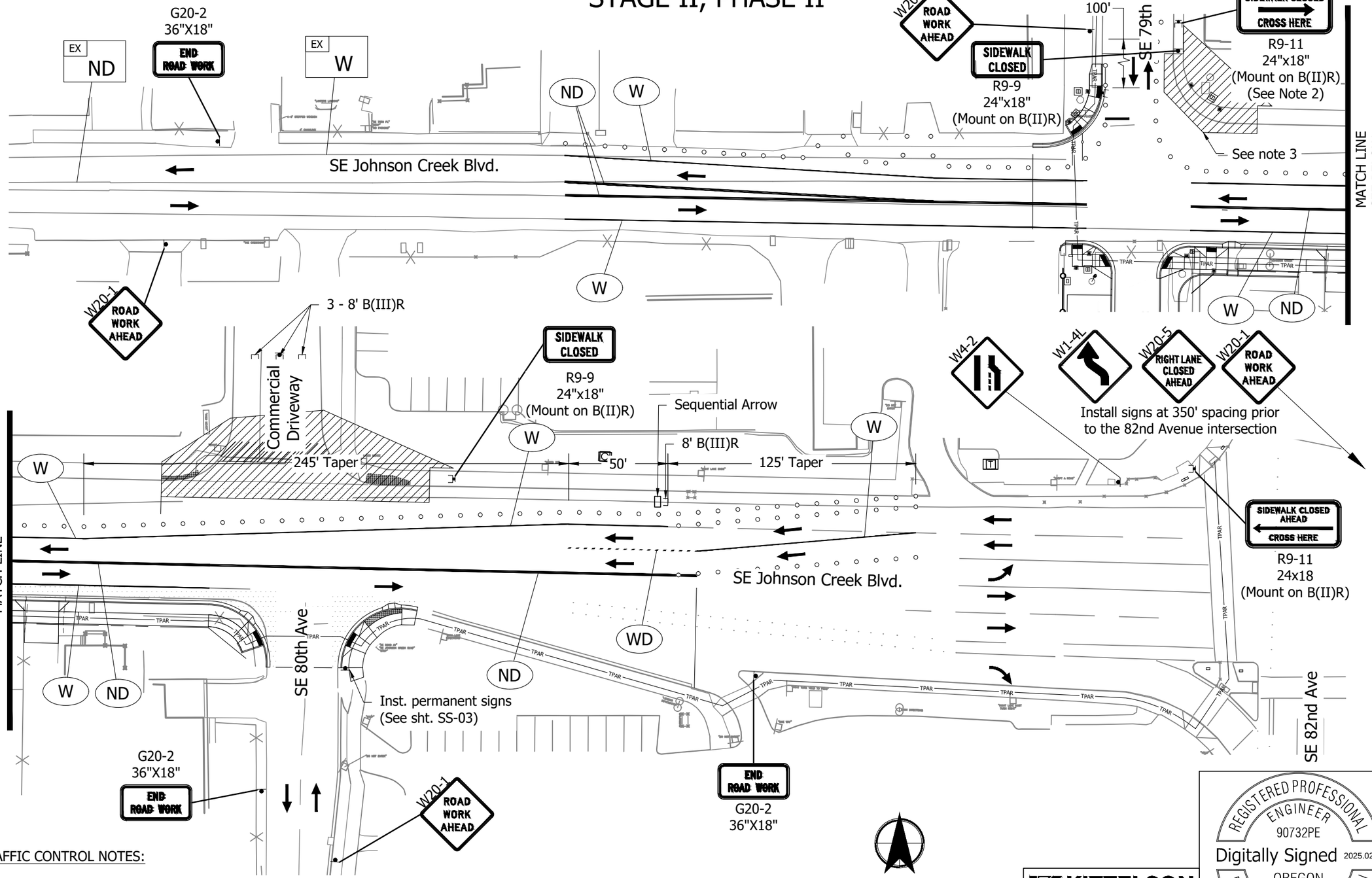
REVISIONS

NO.	DATE:

SHEET NO. EA03

Plot Stamp: 1/28/2025 1:53:50 PM - Eric Germundson
File: H:\26\266\75 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\EA-STAGING_ST2-K21636.dwg

STAGE II, PHASE II



TRAFFIC CONTROL NOTES:

1. Phase construction to maintain access to all properties through the work zone.
2. Place barricade and sign on the SE corner of the Lindy Ln intersection directing pedestrians to use the sidewalk on the west side of 79th Pl.
3. Corner to be constructed prior to closure of commercial driveway.

Scale: 1" = 50'

50 25 0 50

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

TRAFFIC CONTROL PLAN - STAGE II, PHASE 2

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY:	DRAFTED BY:	CHECKED BY:
A. LOVEDAY	A. LOVEDAY	W. SCARBROUGH

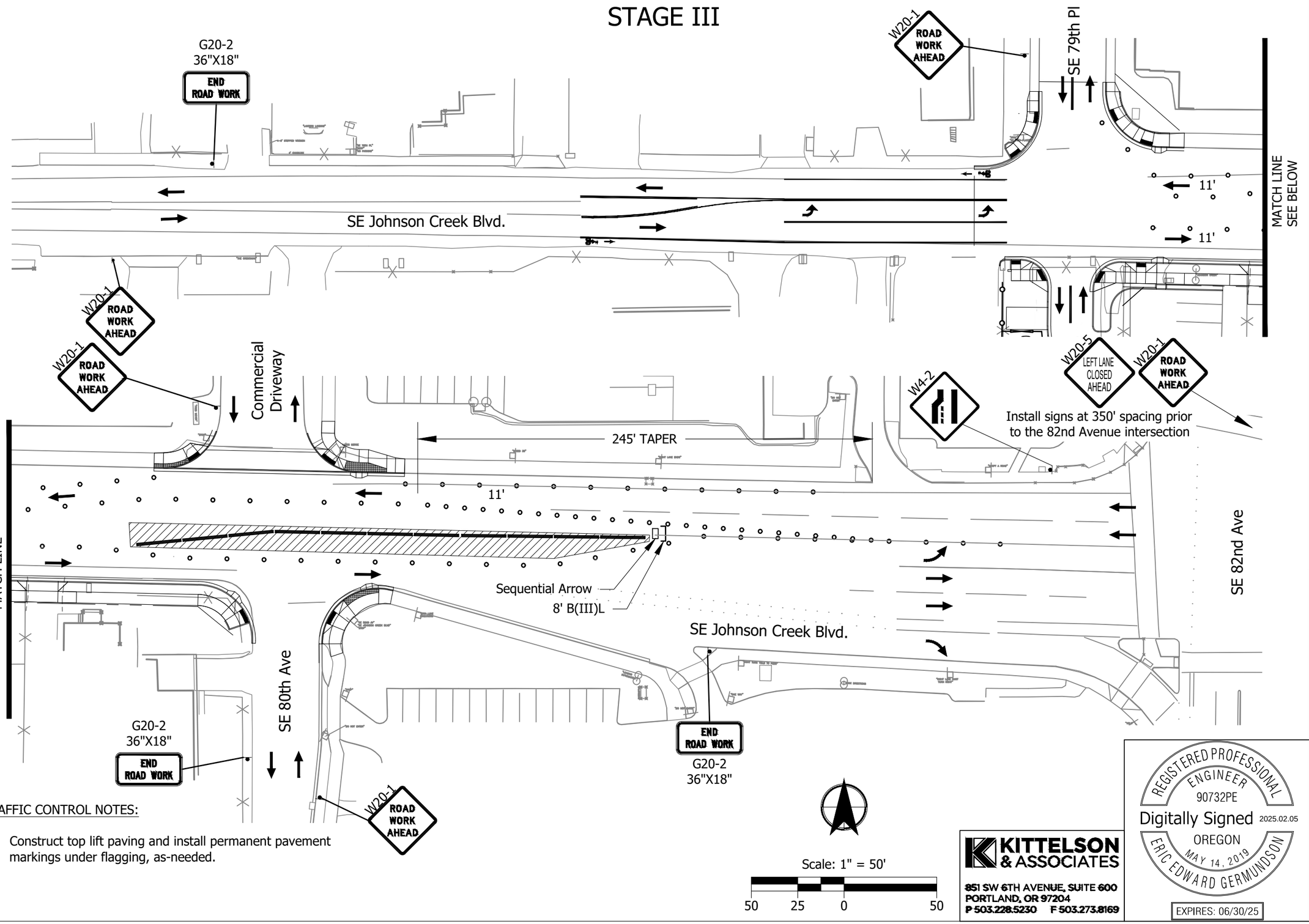
REVISIONS

NO.	DATE:

SHEET NO.
EA04

Plot Stamp: 1/28/2025 1:53:56 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\EA-STAGING_ST2-K21636.dwg

STAGE III



TRAFFIC CONTROL NOTES:

1. Construct top lift paving and install permanent pavement markings under flagging, as-needed.

Scale: 1" = 50'

50 25 0 50

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

TRAFFIC CONTROL PLAN - STAGE III

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY
DAN JOHNSON
DIRECTOR

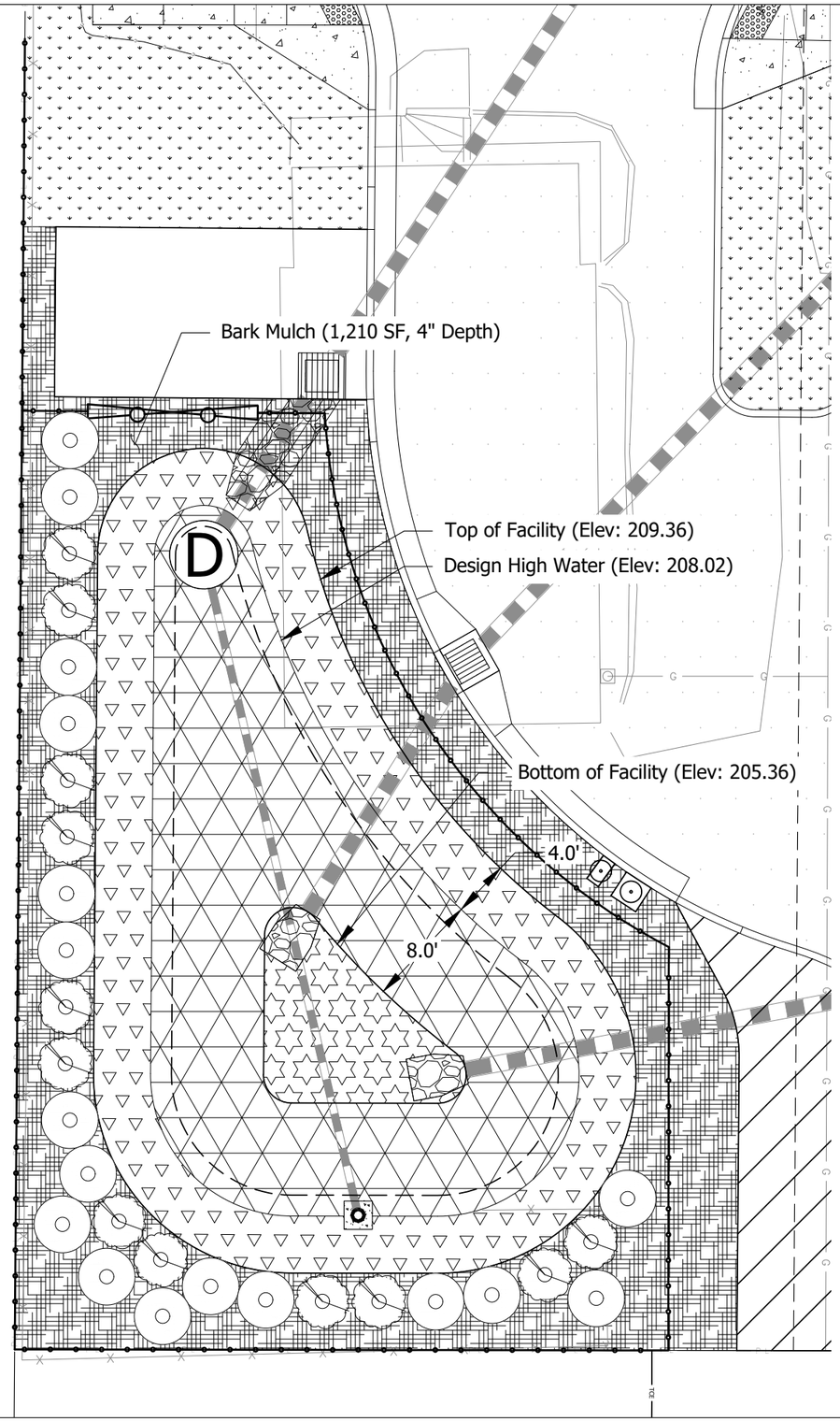
DESIGNED BY: A. LOVEDAY
DRAFTED BY: A. LOVEDAY
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
EA05

Plot Stamp: 1/28/2025 1:54:09 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\EA-STAGING_ST3-K21636.dwg

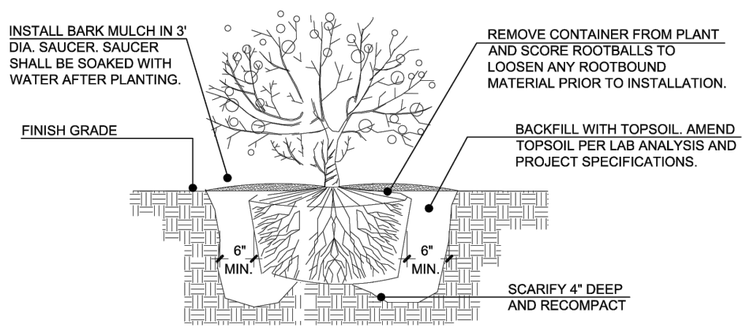


WATER QUALITY FACILITY PLANT LIST

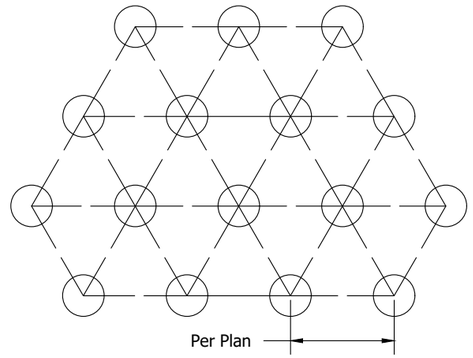
SYMBOL	QTY.	COMMON NAME/Latin Name	SIZE	SPACING
ZONE S (106 SF)				
	140	SPREADING RUSH/Juncus patens	6" plug	1' o.c.
ZONE B (772 SF)				
	834	SPREADING RUSH/Juncus patens	6" plug	1' o.c.
	124	SNOWBERRY/Symphoricarpos albus	1 gal./18" ht.	3' o.c.
ZONE A (586 SF)				
	633	TUFTED HAIR GRASS/Deschampsia cespitosa	6" plug	1' o.c.
	94	SNOWBERRY/Symphoricarpos albus	1 gal./18" ht.	3' o.c.
SHRUBS				
	17	RED FLOWERING CURRANT/Ribes sanguimeum	1 gal./18" ht.	4' o.c.
	12	RED TWIG DOGWOOD/Cornus sericea	1 gal./18" ht.	4' o.c.

GENERAL NOTES:

- Contractor to verify all plant quantities
- All plants are to be fully foliages, well branched, and true to form
- Contractor to evenly space plants to ensure consistent coverage across planting zones
- Contractor to notify Engineer or County representative of any site changes or unforseen conditions that may be detrimental to plant health, or cause future problems to any structural elements of the project
- Plastic and mesh tubes are prohibited from use for planting within the facility



NOTE:
EVERY PLANT IS TO BE TAGGED AND THE TAG MUST BE KEPT ON DURING THE ENTIRE ESTABLISHMENT PERIOD.



ALL PLUGS/SHRUBS SHALL BE PLANTED ON CENTER AT EQUAL TRIANGULAR SPACING PER THE SPACING DISTANCE SPECIFIED IN THE PLANTING SCHEDULE.

PLUG AND SHRUB SPACING DIAGRAM
SCALE: NOT TO SCALE

Scale: 1" = 10'

10 5 0 10

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851 SW 6TH AVENUE, SUITE 600
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REGISTERED
1070
JOHN WEESNER
OREGON
03/14/21
LANDSCAPE ARCHITECT
EXPIRES 03/31/25

LANDSCAPE PLAN

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

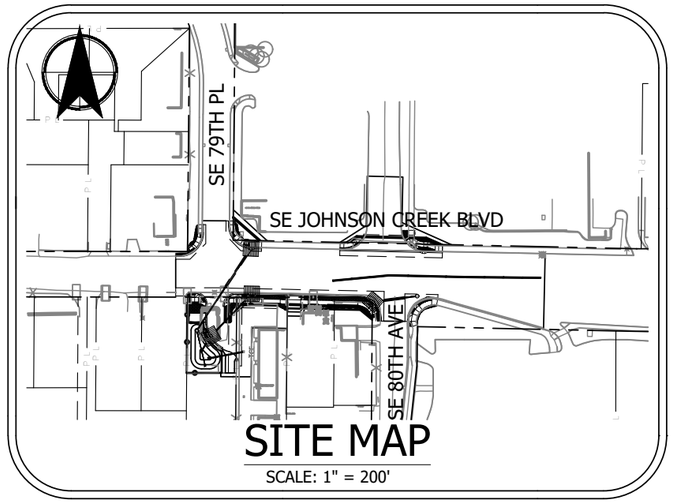
REVISIONS

NO.	DATE:

SHEET NO.
FA01

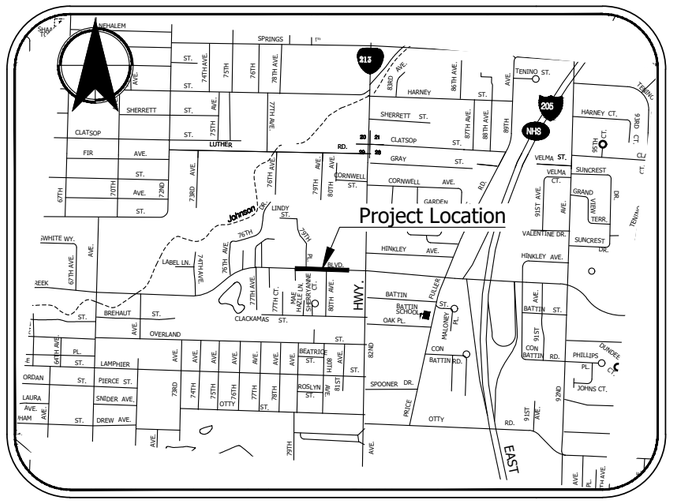
Plot Stamp: 2/4/2025 4:41:33 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CDI\FA-LANDSCAPE-K21636.dwg

JOHNSON CREEK BLVD: 79TH PL - 82ND AVE GRADING & EROSION CONTROL



SITE MAP

SCALE: 1" = 200'



VICINITY MAP

SCALE: 1" = 2,000'

PROJECT LOCATION:

45°27'25.3"N 122°34'55.3"W

PROPERTY DESCRIPTION:

PUBLIC RIGHT-OF-WAY

OWNER

OWNER: Clackamas County
CONTACT: Joel Howie, PE
ADDRESS: 150 Beavercreek Rd
ADDRESS: Oregon City, OR 97045
PHONE: (503) 742-4658

PLANNING / ENGINEERING /

ENGINEERING FIRM

Kittelson & Associates, Inc.
CONTACT: Eric Germundson, PE
ADDRESS: 851 SW 6th Ave, Suite 600
ADDRESS: Portland, OR 97204
PHONE: 503-535-7501

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

Paved Street with intermittent sidewalks and roadside ditches and inconsistence storm system

DEVELOPED CONDITIONS

Paved Street with Sidewalk

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

* CLEARING (Date TBD)
* MASS GRADING (Date TBD)
* UTILITY INSTALLATION (Date TBD)
* STREET CONSTRUCTION (Date TBD)
* FINAL STABILIZATION (Date TBD)

TOTAL SITE AREA = 1.51 ACRES

TOTAL DISTURBED AREA = 1.14 ACRES

SITE SOIL CLASSIFICATION:

ON-SITE SOILS ARE FILL: LOOSE TO DENSE, SANDY SILTY GRAVEL, WITH COBBLES (GM); AND MEDIUM DENSE, GRAVEL WITH SOME SAND (GP-GM); AND FLOOD DEPOSITS: DENSE TO VERY DENSE, SILTY GRAVEL WITH VARYING AMOUNTS OF SAND AND WITH COBBLES (GM); AND GRAVELLY CLAY WITH SOME SAND (CH), WITH 0 TO 7 PERCENT SLOPES.

RECEIVING WATER BODIES:

NEAREST WATER BODY: JOHNSON CREEK

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ's GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP's WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

_____
INITIAL

PERMITTEE'S SITE INSPECTOR: Josh Mitchell

COMPANY/AGENCY: Clackamas County
PHONE:
FAX:
E-MAIL: jmitchell@clackamas.us

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-CA PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-CN PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-CA PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

SHEET INDEX

FB01	GRADING AND EROSION CONTROL COVER SHEET
FB02	GRADING AND EROSION CONTROL PLAN

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

KITTELSON & ASSOCIATES
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PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON

EXPIRES: 06/30/25

EROSION & SEDIMENT CONTROL COVER SHEET

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO.
FB01

Plot Stamp: 1/28/2025 1:54:47 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\FB-GRADING & EC-K21636.dwg

Protect inlet approx. 150' north of intersection

Protect inlet approx. 150' north of intersection

Protect inlet approx. 150' east of intersection

Protect inlet approx. 150' east of intersection

SE 79th Pl

SE Johnson Creek Blvd

SE 80th Ave

R/W

6+00 7+00 8+00 9+00 10+00 11+00

LEGEND

- Sediment Fence
- Existing ROW Line
- Proposed ROW Line
- Existing Major Contours (250)
- Existing Minor Contours (249)
- Proposed Major Contours (250)
- Proposed Minor Contours (249)
- Extg./Proposed MH
- Extg./Proposed CB
- Inlet Protection
- Trees to Remain
- Trees to Removed
- Flow Arrow
- Biofilter bags

CONSTRUCTION NOTES

1. Install Inlet Protection, Type 4. (See WES Std. Dwg. No. 4-23)
2. Install Sediment Fence. (See WES Std. Dwg. No. 4-15)
3. Area of Seed Restoration
4. Install Construction Entrance and Concrete Wash Out in contractors preferred location

Scale: 1" = 40'

40 20 0 40

KITTELSON & ASSOCIATES
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REGISTERED PROFESSIONAL ENGINEER
90732PE
Digitally Signed 2025.02.05
OREGON
MAY 14, 2019
ERIC EDWARD GERMUNDSON
EXPIRES: 06/30/25

EROSION & SEDIMENT CONTROL PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: E. GERMUNDSON
DRAFTED BY: K. HARRY
CHECKED BY: T. ROOS

REVISIONS

NO.	DATE:

SHEET NO. FB02

Plot Stamp: 2/4/2025 3:30:08 PM - Keisuke Harry
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\FB-GRADING & EC-K21636.dwg

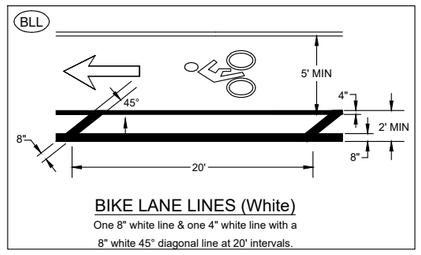
STRIPING LEGEND

EX CW	Retain and protect existing standard crosswalk.
EX ND	Retain and protect existing 4" narrow double yellow stripe.
EX WD-2	Retain and protect existing 8" white dotted line.
EX W-2	Retain and protect existing 8" white line.
EX WB	Retain and protect existing 4" white broken line.
EX SA	Retain and protect existing straight arrow.
EX LA	Retain and protect existing left turn arrow.
EX RA	Retain and protect existing right turn arrow.
CW-SC	Install staggered continental crosswalk 2' white bars per Oregon Standard Drawing TM503.
ND	Install 4" narrow double stripe (yellow) per Oregon Standard Drawing TM500.
WD-2	Install 8" dotted line (white) per Oregon Standard Drawing TM500.
W-2	Install 8" line (white) per Oregon Standard Drawing TM500.
E-LA	Install elongated left turn arrow (white) per Oregon Standard Drawing TM501.
E-RA	Install elongated right turn arrow (white) per Oregon Standard Drawing TM501.
S	Install stop bar per Oregon Standard Drawing TM503.
BD	Install bicycle detector pavement marking (white) per 2023 MUTCD 11th Edition, Figure 9E-16 and detail on this sheet.
BS	Install bike lane symbol (white) per Oregon Standard Drawing TM503.
BLL	Install bike lane buffer lines (white) per detail on this sheet.
BLE-G	Install supplemental bicycle lane dotted line extension (green) per Oregon Standard Drawing TM503.
ND R-20	Install narrow double yellow positioning guide reflectors with two 4" yellow lines.
Y R-20	Install yellow positioning guide reflectors with a 4" yellow line.
DLL-2 2R-12	Install wide dotted lane line supplementation reflectors with 8" dotted lane line (white).
WB R-40	Install white broke line supplementation reflectors with 4" broken line (white).
W-2 R-20L	Install channelizing line positioning guide reflectors with 8" line (white).
W-2 R-20R	Install channelizing line positioning guide reflectors with 8" line (white).

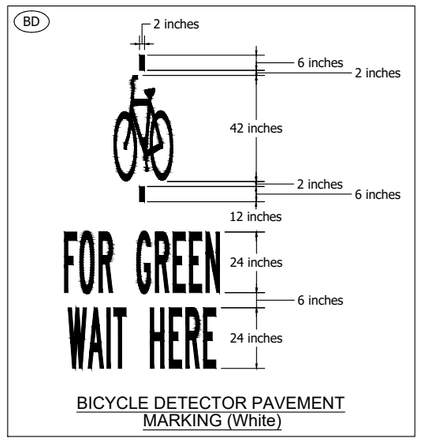
SIGNING LEGEND

N	Install new sign (N).
N / M	Install new sign (N) on new (M) sign support.
EXN	Retain and protect existing sign (N) and support.
RXN / M	Remove existing sign (N) and (M) sign support.
RXN	Remove existing sign (N) from existing sign support.
RSN / M	Remove and save existing sign (N) and remove (M) sign support.
RIN / M	Reinstall existing sign (N) on new (M) sign support.

N = Sign Number
M = Material options are:
S = Perforated Steel Square Tube Sign Support
CCS = Crosswalk Closure Support (see STD. DWG. TM240)



BIKE LANE LINES (White)
One 8" white line & one 4" white line with a 8" white 45° diagonal line at 20' intervals.



BICYCLE DETECTOR PAVEMENT MARKING (White)

STRIPING GENERAL NOTES

1. All pavement markings shall conform to the requirements and specifications of the Manual on Uniform Traffic Control Devices (M.U.T.C.D.) 2009 Edition, and the Oregon Supplement to the M.U.T.C.D. 2009 Edition, and the 2024 Oregon Standard Specifications for construction.
2. All pre-markers for pavement markings and striping locations shall be approved by the Engineer prior to final placement.
3. All longitudinal pavement striping shall be method "A" thermoplastic, extruded, surface, non-profiled.
4. All pavement bars and legends shall be Type B-HS.
5. Existing markings not shown are to remain in place unless otherwise directed by the Engineer.
6. Existing striping removed during scoring and repaving to be installed as shown.
7. Refer to ODOT Standard Drawings TM500, TM501, TM502, and TM503 for all pavement marking details.

SIGNING GENERAL NOTES

1. All signing shall conform to the requirements and specifications of the Manual on Uniform Traffic Control Devices (M.U.T.C.D.) 2009 Edition, and the Oregon Supplement to the M.U.T.C.D.
2. The locations of sign installation shown are approximate with the exact location to be determined in the field.
3. Existing signs not shown are to remain in place unless otherwise shown.
4. Signs located on traffic signal poles reference the signal design plans.
5. Traffic sign legend and mounting details are shown on sheets SS05 and SS06.

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
93121PE
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

SIGNING & STRIPING LEGEND

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
QA01

Plot Stamp: 1/28/2025 1:55:12 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg

SE JOHNSON

SE 78TH F

EX W-2

EX ND

EX14

EX1

EX W-2

Match Existing
STA:3+51

STA:4+26

Lane Shift

STA:5+36

W-2

E-LA

120'
W-2
R-20L

SE Johnson Creek Blvd

5.4'
14.2'
5.6'
11.5'
6.7'

6'
11'
12'
2'
11'
5'

1+00
2+00
3+00
4+00
5+00
6+00

MATCH LINE - STA. 6+00
SEE SHEET QA03

ND
R-20

BS

W-2

BLL

Scale: 1" = 40'

40 20 0 40

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REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS

RENEWS: 12/31/26

SIGNING & STRIPING PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

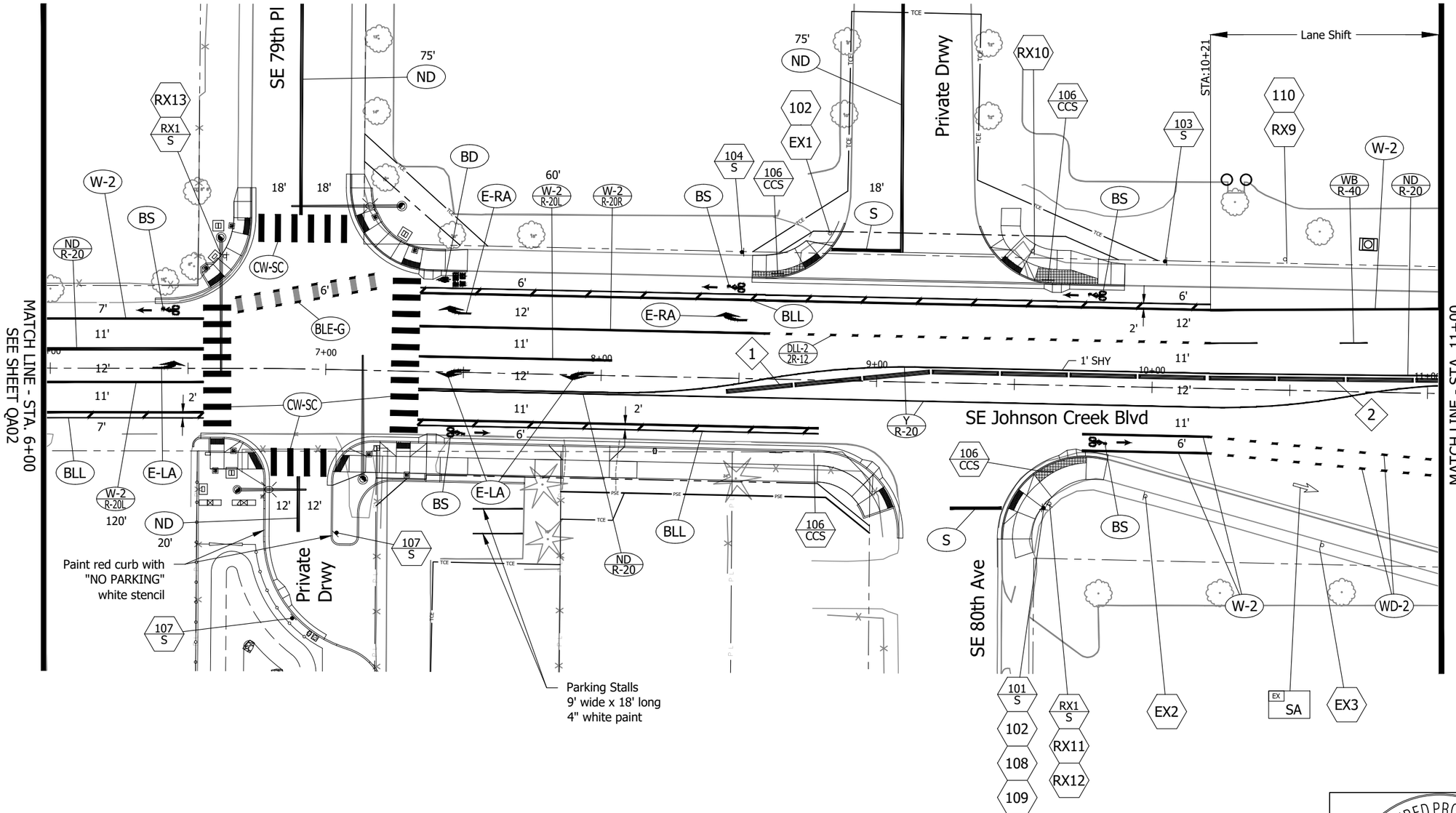
DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
QA02

Plot Stamp: 1/28/2025 1:55:16 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg



CONSTRUCTION NOTE

1. Paint traffic separator yellow.
2. Install yellow raised pavement markers at 10' spacing.

Scale: 1" = 40'

40 20 0 40

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
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REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

SIGNING & STRIPING PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
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OREGON CITY, OR 97045

CLACKAMAS COUNTY

DIRECTOR DAN JOHNSON

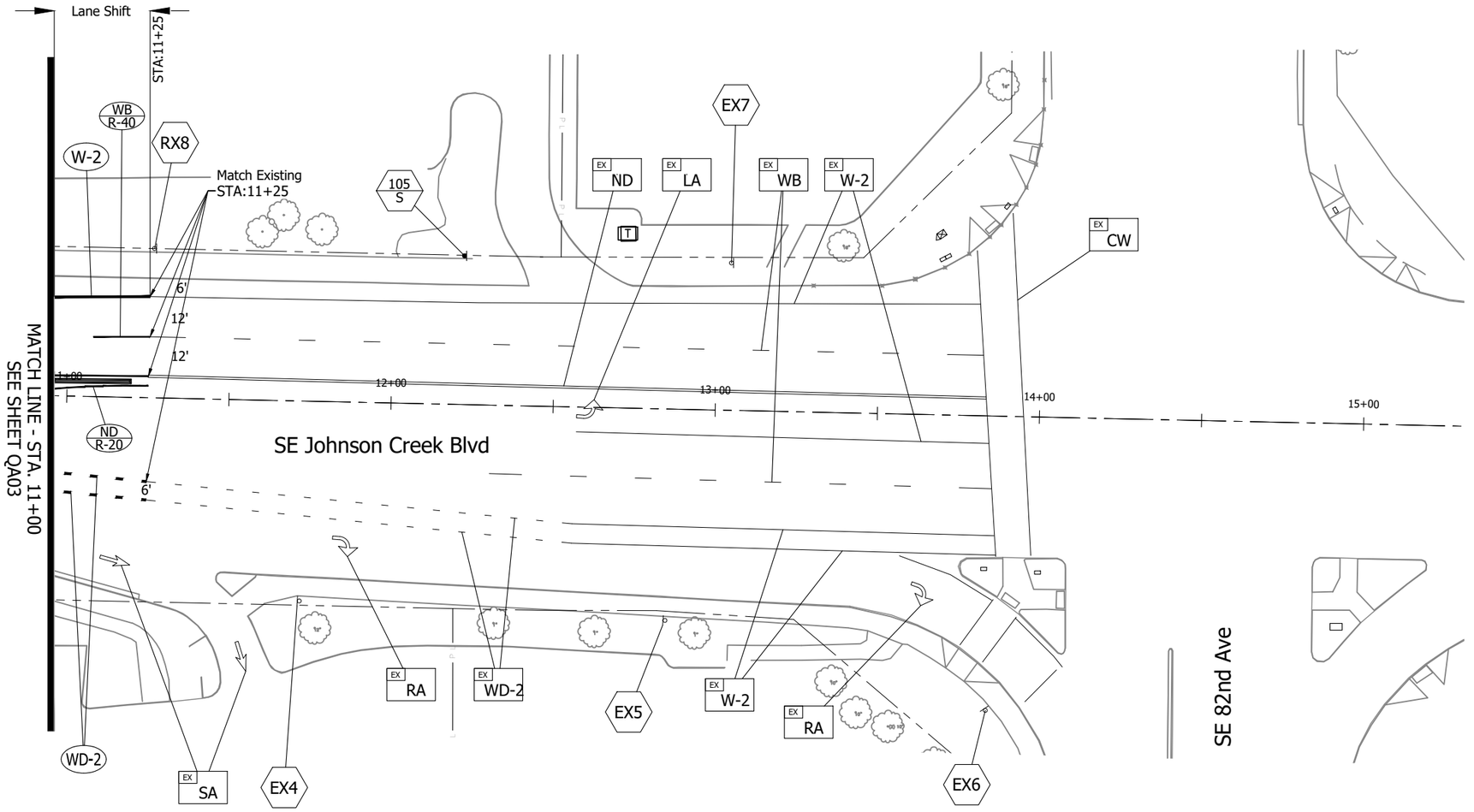
DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO. QA03

Plot Stamp: 1/28/2025 1:55:21 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg



Scale: 1" = 40'

40 20 0 40

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REGISTERED PROFESSIONAL ENGINEER
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Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

SIGNING & STRIPING PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

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CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY

DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
QA04

Plot Stamp: 1/28/2025 1:55:26 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg

EXISTING SIGN LEGEND

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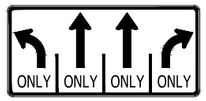

2

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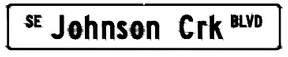

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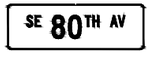

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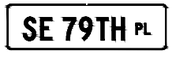

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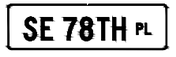


14

PROPOSED SIGN LEGEND

101 R1-1
30"x30"
1 Required

102 R3-5
30"x36"
2 Required

103 R4-4
36"x30"
1 Required

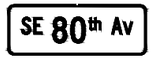
104 R3-7R
30"x30"
1 Required

105 W4-7
36"x36"
1 Required

106 OR22-7
30"x18"
8 Required

107 R8-3
12"x18"
2 Required

108 D3-1
54"x8"
1 Required



109 D3-1
33"x12"
1 Required

110 R2-1
24"x30"
1 Required

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS

RENEWS: 12/31/26

SIGNING DETAILS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY

DIRECTOR DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO. QA05

Plot Stamp: 1/28/2025 1:55:33 PM - Eric Germundson
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SIGN NO.	SIGN LOCATION 4/ (TM200-TM201, TM635)	SIGN DIMENSIONS		SUB-STRATE			COLOR 1/					LEGENED		SIGN NO. 2/	TYPE OF SUPPORT																							POST		FOOTING		REMARKS
							BACKGROUND		LEGEND																														SECONDARY SIGN (TM676 & TM678)			SIZE	LENGTH	LOCATION 3/	MIN. DEPTH 5/	
		WIDTH	HEIGHT	PLYWOOD	SHEET ALUMINUM	EXTRUDED ALUM. (TM675)	ASTM TYPE III OR TYPE IV	ASTM TYPE IX	ASTM TYPE III OR TYPE IV	ASTM TYPE IX	NON-REFLECTIVE	PERMANENT	REMOVABLE (TM230-TM233)		WOOD POST (TM670-TM671, TM676)	SQ. TUBE SIGN SUPPORT (TM671, TM676, TM681, TM687-TM689)	TRIANGULAR BASE BREAKAWAY (TM602)	H-FRAME	MULTI-POST BREAKAWAY (TM220, TM600-TM601)	STAINLESS STEEL CLAMP (SSC) (TM677)	SIGNAL POLE MOUNT (TM680)	MAST ARM SIGN MOUNT (TM679)	BRIDGE STRUCTURE MOUNT (TM677)	CANTILEVER / BUTTERFLY (TM622-TM627)	SIGN BRIDGE (TM606-TM612, TM614-TM620)	EXIT NUMBER SIGN MOUNT (TM220, TM225)	ROUTE MARKER FRAME (TM678)	MILEPOST MARKER POST (TM221-TM222)	CROSSWALK CLOSURE BARRICADE (TM490)	VERTICAL SIGN MOUNTS ON EXISTING STRUCTURE	CUSTOM VARIABLE SUPPORT	C 4X5.4	C 4X7.25	LENGTH	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)			
102	STA. 9+62 R	30"	36"		X		W				BK	X		102		X																					2 1/4" & 2 1/2" 12GA	18'		34"	Use Triangular Slip Base (TM688)
101	-	30"	30"		X		R		W			X		101																											Mount Above Sign #102
108	-	54"	8"		X		G		W			X		108																											Mount Above Sign #101
109	-	33"	12"		X		G		W			X		109																											Mount Above Sign #108
102	STA. 8+82 L	30"	36"		X		W				BK	X		102																											Mount Above Existing Sign #1 (Existing Support)
103	STA. 10+04 L	36"	30"		X		W				BK	X		103		X																							2 1/2" x 12GA	13'		34"	Use Triangular Slip Base (TM688)
104	STA. 8+50 L	30"	30"		X		W				BK	X		104		X																							2 1/2" x 12GA	13'		34"	Use Triangular Slip Base (TM688)
105	STA. 12+22 L	36"	36"		X		Y				BK	X		105		X																							2 1/2" x 12GA	13'		34"	Use Triangular Slip Base (TM688)
106	STA. 8+63 L	30"	18"		X		W				BK	X		106																	X										
106	STA. 8+78 R	30"	18"		X		W				BK	X		106																	X										
106	STA. 9+61 L	30"	18"		X		W				BK	X		106																	X										
106	STA. 9+62 R	30"	18"		X		W				BK	X		106																	X										
107	STA. 6+90 R	12"	18"		X		W		R		BK	X		107		X																							2" x 12GA	12'		32"	Use Anchor Base (T-150)
107	STA. 7+05 R	12"	18"		X		W		R		BK	X		107		X																							2" x 12GA	12'		32"	Use Anchor Base (T-150)
110	STA 10 + 47 L	24"	30"		X		W				BK	X		110																											Mount on Existing Sign #9 Support

1/
BK= BLACK
BL= BLUE
BR= BROWN
FY= FLUORESCENT YELLOW
G= GREEN
O= ORANGE
R= RED
RB= RED-BLUE
SW= SILVER-WHITE
W= WHITE
Y= YELLOW
YG= YELLOW-GREEN

2/ NOTE: L, C, R ARE LOCATIONS OF POSTS FACING THE SIGN.
L = LEFT POST
C=CENTER POST
R=RIGHT POST

3/ DISTANCE FROM ENDGE OF TRAVEL LANE, FACE OF CURB, GUARDRAIL, OR BARRIER TO THE CENTERLINE OF FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM601, TM602, AND TM635.

4/ NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE EXCEPT FOR SPEED ZONES, SCHOOL ZONES, OBJECT MARKERS AND MILEPOST MARKERS. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

5/ MINIMUM DEPTH OF FOOTING FOR TRIANGULAR BASE BREAKAWAY AND MULTI-POST BREAKAWAY INSTALLATIONS IS FOR A 2' DIAMETER FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM601 AND TM602.

SIGN AND POST DATA TABLE

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS

RENEWS: 12/31/26

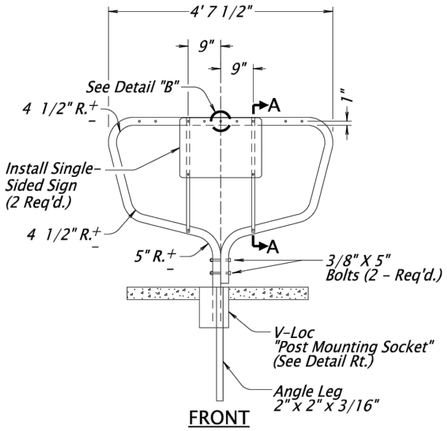
DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

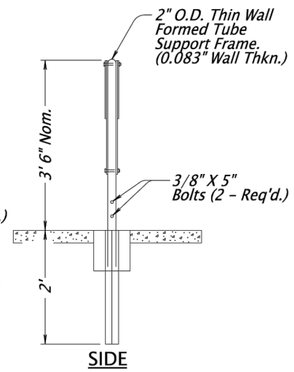
REVISIONS

NO.	DATE:

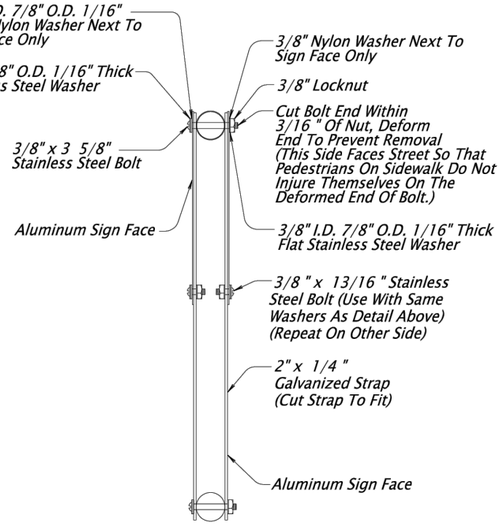
SHEET NO.
QA06

Plot Stamp: 1/28/2025 1:55:34 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg

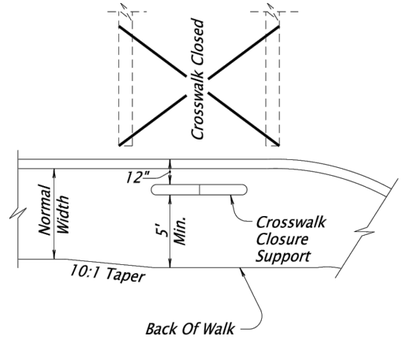




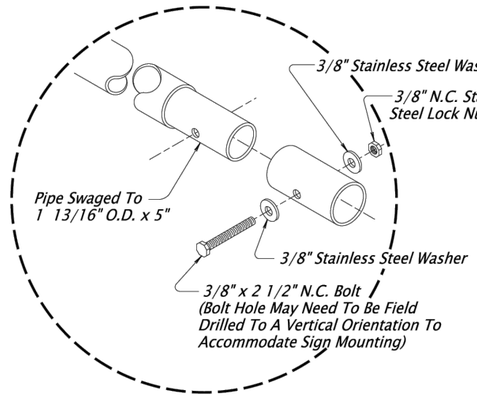
CROSSWALK CLOSURE SUPPORT DETAIL



SECTION A-A



PLAN VIEW



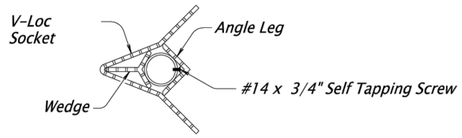
DETAIL "B"

GENERAL NOTES:

1. All Holes In The Tube Support Frame To Be Predrilled By The Manufacturer. (1/32" Larger Than Mounting Bolt)
2. Pipe Swaged By The Manufacturer.

SIGN DETAIL
OR22-7
24" x 18"

Drill 3/8" Dia. Bolt Hole At Each Corner Where Needed.



POST MOUNTING SOCKET
For Additional Details See Standard Drg. No. RD100

NOTE:
Care Shall Be Taken That No Concrete Is Placed Within Mounting Socket.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CROSSWALK CLOSURE DETAIL

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 02-JUL-2018 | **TM240**

Effective Date: December 1, 2023 - May 31, 2024

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS

RENEWS: 12/31/26

CROSSWALK CLOSURE SIGN AND SUPPORT DETAIL

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO. QB01

02-JUL-2018

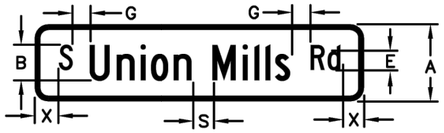
TM240.dgn

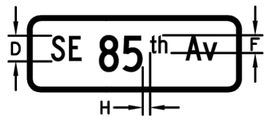
Plot Stamp: 2/5/2025 8:45:30 AM - Dasly Amurao
File: H:\26\266575 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg

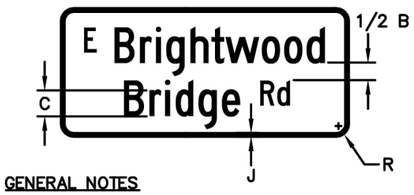
LEGEND DIMENSIONING TABLE

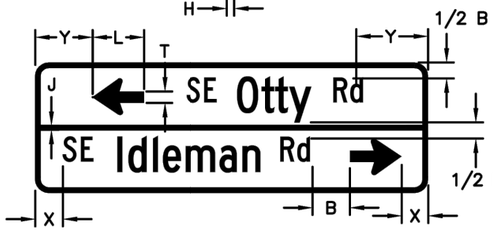
LOCATION	STREET CLASSIFICATION	POSTED SPEED (MPH)	PANEL HT.	PRIMARY LETTER HT.	LOWER-CASE LETTER HT.	SUPPLEMENTAL LETTERING SIZE		SUPER-SCRIPT HT.			BORDER/ DIVIDER THICK-NESS	BOR-DER RAD.	ARROW TAIL THICK-NESS	ARROW LENGTH
						UPPER	LOWER							
			A	B	C	D	E	F	G	H	J	R	T	L
GROUND MOUNT	ARTERIAL/COLLECTOR 4+ LANES	> 40	15	8	6	5	3 ¾	4	3 ⅛	1	½	1 ½		
	ARTERIAL/COLLECTOR 4+ LANES	≤ 40	12	6	4 ½	4	3	3	2 ½	¾	½	1 ½		
	ARTERIAL/COLLECTOR 2-3 LANES	ALL												
	LOCAL	> 25												
	ALTERNATE *		10	5	4	4	3	2 ½	2	½	½	1 ½		
	STACKED LEGEND	ALL	21	6	4 ½	4	3	3	2 ½	¾	½	1 ½	2 ¼	9
	LOCAL/CONNECTOR	≤ 25	8	5	3 ¾	3	1 ⅞	2 ½	1 ½	½				
	PRIVATE	ALL												
OVERHEAD MAST ARM	ALL	ALL	21	12	9	8	6	6	5	1 ¾	1	3		
	ALTERNATE **		18	10	8	6	4 ½	5	3 ¾	1 ¼	1	3		
	STACKED LEGEND	ALL	30	8	6	5	3 ¾	4	3 ⅛	1	1	3	3	12

NOTES: ALL UNITS IN INCHES UNLESS SHOWN OTHERWISE.
S = SPACE BETWEEN WORDS = ⅝ B.
X, Y = ½ OF REMAINING SPACE. SHOULD BE APPROXIMATELY EQUAL TO LETTER HT (B) AND NO LESS THAN ½ B.
* GROUND MOUNTED: MAY BE USED IF 6" LETTERS YIELD SIGNS GREATER THAN 60" LENGTH.
** OVERHEAD: MAY BE USED IF 12" LETTERS YIELD SIGNS GREATER THAN 12' LENGTH.









GENERAL NOTES
1. ALL SIGN CORNERS SHALL BE ROUNDED.
2. BORDERS SHALL BE FLUSH WITH EDGE OF SIGN. BORDERS ARE NOT REQUIRED ON 8" PANELS.
3. LEGEND HEIGHT FOR ALL SIGNS AT AN INTERSECTION DICTATED BY THE HIGHEST CLASSIFICATION ROADWAY.
4. SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEERING FOR REVIEW PRIOR TO INSTALLATION.
5. SEE T130 FRO ADDITIONAL REQUIREMENTS.

SIGN LEGEND
1. ALL LEGENDS ARE SUBJECT TO THE ENGINEER'S APPROVAL PRIOR TO FABRICATION.
2. LETTERING SHALL BE FHWA SERIES C AT 100% WIDTH UNLESS SPECIFIED OTHERWISE.
3. THE PREFIX SHALL BE ABBREVIATED UPPER-CASE LETTERS.
4. THE STREET NAME SHALL CONSIST OF LOWER-CASE LETTERS WITH AN INITIAL UPPER-CASE LETTER.
5. THE SUFFIX SHALL BE ABBREVIATED AND CONSIST OF AN INITIAL UPPER-CASE LETTER FOLLOWED BY LOWER-CASE LETTER(S).
6. THE DESCENDERS OF LOWERCASE LETTERS SHALL NOT BE USED IN THE VERTICAL SPACING OF THE LEGEND.

MATERIALS
1. ALL SIGN MATERIALS SHALL CONFORM TO THE CURRENT MUTCD AND ODOT STANDARD SPECIFICATIONS.
2. GROUND MOUNTED: GREEN TYPE III OR TYPE IV BACKGROUND WITH SILVER-WHITE TYPE III OR TYPE IV PERMANENT LEGEND, OR SILVER-WHITE TYPE III OR TYPE IV SHEETING BACKGROUND OVERLAID WITH GREEN TRANSPARENT PASTE BACKGROUND WITH RETROFLECTIVE SILVER-WHITE SCREENED LEGEND.
3. OVERHEAD MOUNTED: GREEN TYPE III OR TYPE IV SHEETING BACKGROUND WITH WHITE TYPE IX PERMANENT LEGEND.
4. PRIVATE STREETS: SILVER-WHITE TYPE III OR TYPE IV SHEETING BACKGROUND WITH BLACK NONREFLECTIVE SCREENED, CUT-OUT PERMANENT LEGEND.

REVISION	DATE	BY
BORDER THICKNESS	1/13	CLS
suffix ltr. upper/lwr	1/13	CLS
	11/19	BP

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY

APPROVAL DATE: 6/1/2020 SCALE: N.T.S.

STREET NAME SIGNS & DETAILS

STANDARD DRAWING
T100

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

STREET NAME SIGNS & DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

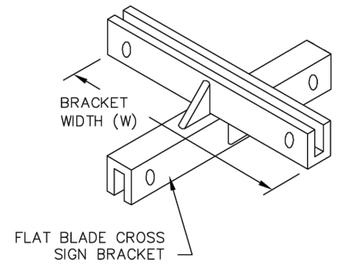
DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

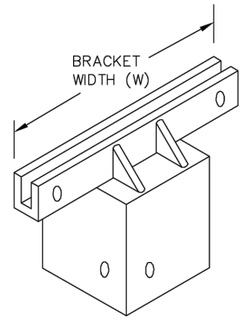
REVISIONS

NO.	DATE:

SHEET NO.
QB02

Plot Stamp: 1/28/2025 1:55:45 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg





FLAT BLADE SIGN BRACKETS

SIGN BRACKET SIZE

SIGN WIDTH (IN.)	MOUNTING
< 30	POST TOP BRACKET, W = 5 ¼"
30 TO 48	POST TOP BRACKET, W = 12"
> 48	RIVET TO POST

OVERHEAD MOUNTING

1. SIGNS TO BE MOUNTED USING REUSABLE BANDING TYPE ADJUSTABLE BRACKET (SKY BRACKET OR APPROVED EQUAL) UNLESS OTHERWISE SPECIFIED.
2. NEW PROJECTS: SIGNAL MAST ARM SIGNS TO BE INCLUDED ON SIGNING PLANS.
3. EXISTING SIGNAL POLES: PERFORM POLE STRUCTURAL ANALYSIS PRIOR TO ADDING OR ENLARGING SIGNS.

ABBREVIATIONS FOR STREET NAME SUFFIXES

AV = Avenue	CT = Court	LN = Lane	PKWY = Parkway	RD = Road	TER = Terrace
BLVD = Boulevard	DR = Drive	LP = Loop	PL = Place	ST = Street	WY = Way
CIR = Circle					

REVISION	DATE	BY

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

APPROVAL DATE: 1/1/10 SCALE: N.T.S.

STREET NAME SIGNS & DETAILS (CONTINUED)

STANDARD DRAWING
T130

S:\Engineering\Roadway Standards\2010 Roadway Standards\2010 Standards for Publish\Drawings\DWGs\ T100-T250.dwg

Plot Stamp: 1/28/2025 1:55:49 PM - Eric Germundson
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REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

STREET NAME SIGNS & DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

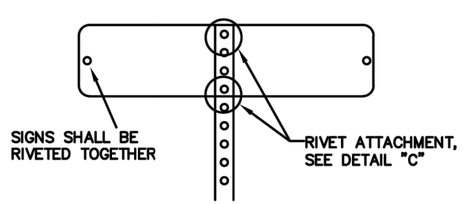
DIRECTOR
DAN JOHNSON

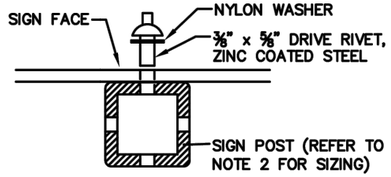
DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

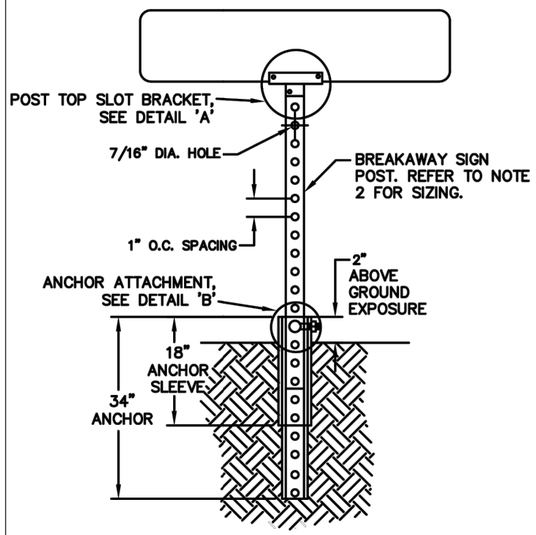
NO.	DATE:

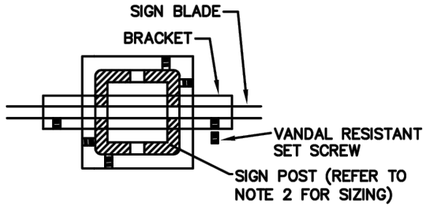
SHEET NO.
QB03



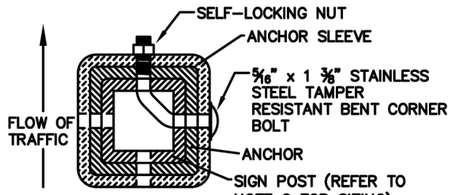


RIVET ATTACHMENT
(DETAIL 'C', TOP VIEW)





POST TOP BRACKET ATTACHMENT
(DETAIL 'A', TOP VIEW)



ANCHOR ATTACHMENT
(DETAIL 'B', TOP VIEW)

NOTES

1. SIGN COMBINATION AND MINIMUM SIGN MOUNTING HEIGHT SHALL DETERMINE POST LENGTH. A 10' (MIN.) POST SHALL BE USED. A COMBINATION OF SIGNS GREATER THAN 36" IN HEIGHT SHALL REQUIRE A 12' (MIN.) POST.
2. SIGN POST SIZING SHALL BE BASED ON OREGON STANDARD DRAWING TM681 (PERMANENT PERFORATED STEEL SQUARE TUBE TABLE – 85 MPH). THE MINIMUM POST SIZE SHALL BE 2" X 2" 12–GA. SQUARE TUBE. IF SIGN PANEL AREA IS GREATER THAN THAT ALLOWED BY A 2.5" X 2.5" 12–GA. SQUARE TUBE, THEN A 2.5" X 2.5" 10–GA. SQUARE TUBE POST SHALL BE USED, WITH A SLIP BASE FOUNDATION PER OREGON STANDARD DRAWING TM688.
3. SIGN POSTS IN CONCRETE AREAS SHALL BE INSTALLED ON SURFACE–MOUNTED BREAKAWAY BASES.
4. NYLON SPACERS SHALL BE USED TO PREVENT CONTACT BETWEEN GALVANIZED STEEL AND ALUMINUM MATERIAL SURFACES.

REVISION	DATE	BY
REV 1	11/19	BP
REVISION	3/20	RM

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY

APPROVAL DATE: 6/1/2020 SCALE: N.T.S.

SIGN MOUNTING AND ATTACHMENTS

STANDARD DRAWING T150

SIGN MOUNTING AND ATTACHMENTS DETAIL

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
QB04

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REGISTERED PROFESSIONAL ENGINEER
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Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

Plot Stamp: 1/28/2025 1:55:54 PM - Eric Germundson
File: H:\26\26675 - SE Johnson Creek Blvd and SE 79th Pl\design_CD\QA-SIGNING&STRIPING PLANS-K21636.dwg

SIGNAL, DETECTOR, AND INTERCONNECT LEGEND

CONTROLLERS / CABINETS

- C / ATC — Install model ATC controller (Intelight part number YCT-2070LDX-7A) in model 332S cabinet with MaxView ATMS software (single license).
- 332S — Install model 332 stretch cabinet (with C11 harness wired for 40 detector inputs) and controller equipment with riser frame, orient louvered door as shown (see Oregon Std Dwg TM482).
- BMCL — Install base mounted service cabinet 100A, 120/240 volt, metered, for signal and illumination systems. (see service cabinet details, MC05).
- CID — Install "Arc6" Cabinet Interface Device (CID) and mounting shelf for radar detection system.
- RTC — Install recessed terminal cabinet in traffic signal pole per Clackamas County standards with copper neutral bar and Marathon 1112 or equivalent terminal blocks as connectors
- C — Controller (See Signal Plan).

POLES

- CCSM / TL — Install (T=type) Clackamas County standard traffic signal mast arm pole with luminaire pole extension (35 ft mounting height) per Clackamas County Std. Dwg. NWS4700 and NWS4710.
- CCSM / T — Install (T=type) Clackamas County standard traffic signal mast arm pole per Clackamas County Std. Dwg. NWS4700 and NWS4710.
- MA / L — Install (L=Length) foot traffic signal mast arm.
- LA / L — Install (L=Length) foot luminaire arm.
- PP / N — Install pedestal with frangible base on number (N=number) foundation. (See TM457 for details)
- EX / 1 — Retain and protect existing power pole (power source). Coordinate with PGE.

SIGNALS

- C/A / Ph — Install phase (Ph=phase) countdown pedestrian signal with clamshell mount and push button with mount. Include phase (Ph=phase) audible pedestrian signal (Polara iNS2 with 9"x15" sign and pedestrian head control unit iPHCU3W).
- V / Ph — Install phase (Ph=Phase) vehicle signal.

LUMINAIRES

- LED — Install Leotek Green Cobra LED luminaire. (Catalog No. GCM2-40H-MV-WW-2R-GY-700 S)
- PE — Install photoelectric control relay inside the BMCL, see detail MC05.

JUNCTION BOXES

- JB / 2 — Install 22"x12"x12" (min. dimension) precast concrete junction box.
- JB / 2A — Install 22"x12"x12" (min. dimension) precast concrete junction box with concrete apron.
- JB / 3TA — Install tandem 30"x17"x12" (min dimension) precast concrete junction box (see Oregon Std. Dwg. TM472 for details) with concrete apron.
- JB / C — Install communications junction box, Type "C". See detail on sheet MD04.
- EX / JB — Maintain and protect existing junction box.
- RX / JB — Remove existing junction box.
- JB / IC — Interconnect Junction box. See Interconnect Plans.
- UJB — Install 17"x30"utility junction box. See Illumination Plans for pre-approved equipment.

CONDUITS

- S — Install (S=Size) inch conduit.
- HDD — Install conduit by horizontal directional drilling, open trench not allowed.
- IC — Interconnect conduit (see Interconnect Plan).
- W (S) — Install (S=size) conduit and wiring to connect to power source as required by PGE.

WIRES

- X-N / G — Install (X=number of cables) control cables with (N=number) AWG No. (G=AWG wire size) conductors. See Special Provisions.
- N | G — Install (N=Number) No. (G=AWG wire size) XHHW wires.
- PL — Install poly pull line (1800 lbf min. strength)
- LW — Install one No.16 AWG. THWN (locate wire) per Oregon Standard Specifications Section 00960.
- N-C — Install (N=number) No. 8 AWG THWN (signal system common).
- EQP / NET — Install Industrial Ethernet cable (EQP = Equipment).
- 12 / PFO — Install strand single mode fiber optic cable for fiber optic connection patch panel.
- EXFO / N — Retain and protect existing (N=number) strand single mode fiber optic cable.
- EX / 6P — Retain and protect existing 6 twisted pair PE-39 (gel filled) interconnect cable.

FIRE PREEMPTION

- FF / Ch — Install channel (Ch=channel) fire preemption detector feeder cable.
- FN / Ch — Install channel (Ch=channel), (N=number) barrel fire preemption detector unit.

DETECTION

- FL — Install TrafiSense AI 645 detection camera for bicyclists with TI BPL3 to be hardwired into the input file. See green sheets.
- R-N / T — Install near range radar unit (T=Radar) (see Oregon Std. Dwg. TM466 for mounting details).
- R-F / T — Install far range radar unit (T=Radar) (see Oregon Std. Dwg. TM466 for mounting details).
- RCC / T — Install radar control cable (T=radar).
- TDF / Ph — Install 3-conductor cable for phase (Ph=Phase) thermal detection camera.

SIGNS

- SNS / N — Install new aluminum street name sign (N = number), see Sheet MC02 for details and County Std. Dwg. T100 for additional details (See Oregon Std. Dwg. TM679 for mounting details).
- PR / 6R — Install (36"x36") no right turn symbol part time restriction sign (R3-1).
- AL / X — Install (12"x21") bicycle signal sign (R10-41) per 2023 MUTCD 11th Edition, Figure 9B-1. See Sheet MC02 for detail.

COMMUNICATIONS

- COM — Furnish and install communications equipment as shown in Communications Component Schedule on Sheet MD02
- EX / SPC — Retain and protect existing splice closure. See Sheet MD03 for splice details.

GENERAL NOTES

1. All materials and workmanship shall conform to Clackamas County ordinances and special provisions, the 2024 Oregon Standard Specifications for Construction, and the Oregon Standard Drawings listed below.
2. The contractor shall supply all equipment, materials, and labor required for the signal operations shown on this plan. All signal control equipment shall be tested at the ODOT signal lab in Salem at the contractors expense per specification.
3. The contractor shall verify the locations of existing utilities and coordinate this work with the utility companies/agencies to eliminate any conflicts.
4. The engineer shall field verify the location of all signal equipment before installation.
5. Clackamas County will provide signal timing.
6. All junction boxes shall be placed in sidewalk or concrete apron.
7. Install #12 stranded copper (orange) tracer wire in all conduits. Ground all tracer wires.
8. Conduit shall be placed in the same trench with other conduits when possible.
9. Top of signal and pedestrian pole foundations shall match top of finished grade of sidewalk.
10. All conduit runs shall be placed within the right-of-way.
11. Install poly pull tape (1800 lbf min. Strength, non-conductive) in all conduits.
12. All underground conduits and fittings shall be schedule 80 PVC.
13. All un-used tenons shall be capped.
14. Radar Detectors to be calibrated in the field by the Engineer and Wavetronix representative. Radar shall be aimed to achieve the maximum detection zone possible given field conditions. Provide Engineer at least 14 days notice prior to radar programming/setup.
15. Video Detectors to be calibrated in the field by the Engineer and vendor representative. Video detection shall be aimed to achieve maximum detection zone possible given field conditions. Provide Engineer at least 14 days notice prior for programming/setup.

MISCELLANEOUS

- PTZ — Furnish and install AXIS Q6135-LE PTZ Network Camera on new pole mount. See detail on Sheet MC02. Connect camera to Category 6 network cable.

SIGNAL HEAD TYPES

2 = 12" R, 12" Y, 12" G
6L = 12" RLTA, 12" YLTA, 12" FYLTA, 12" GLTA
6R = 12" RRTA, 12" YRTA, 12" FYRTA, 12" GRTA
12 = 12" RB, 12" YB, 12" GB

RADAR MOUNTING OPTIONS

MA = Mast arm mount

SIGN MOUNTING OPTIONS

AB = Adjustable skybracket (no tenon)

SIGNAL MOUNTING OPTIONS

B = Adjustable signal bracket assembly w/rain cap(s)
(Install 1 inch metallic chase nipple)

ACCOMPANIED BY DWGS:

TM457, TM460, TM462, TM466, TM467, TM470, TM471, TM472, TM482, TM485, TM679

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Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

TRAFFIC SIGNAL LEGEND

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY
DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
MA01

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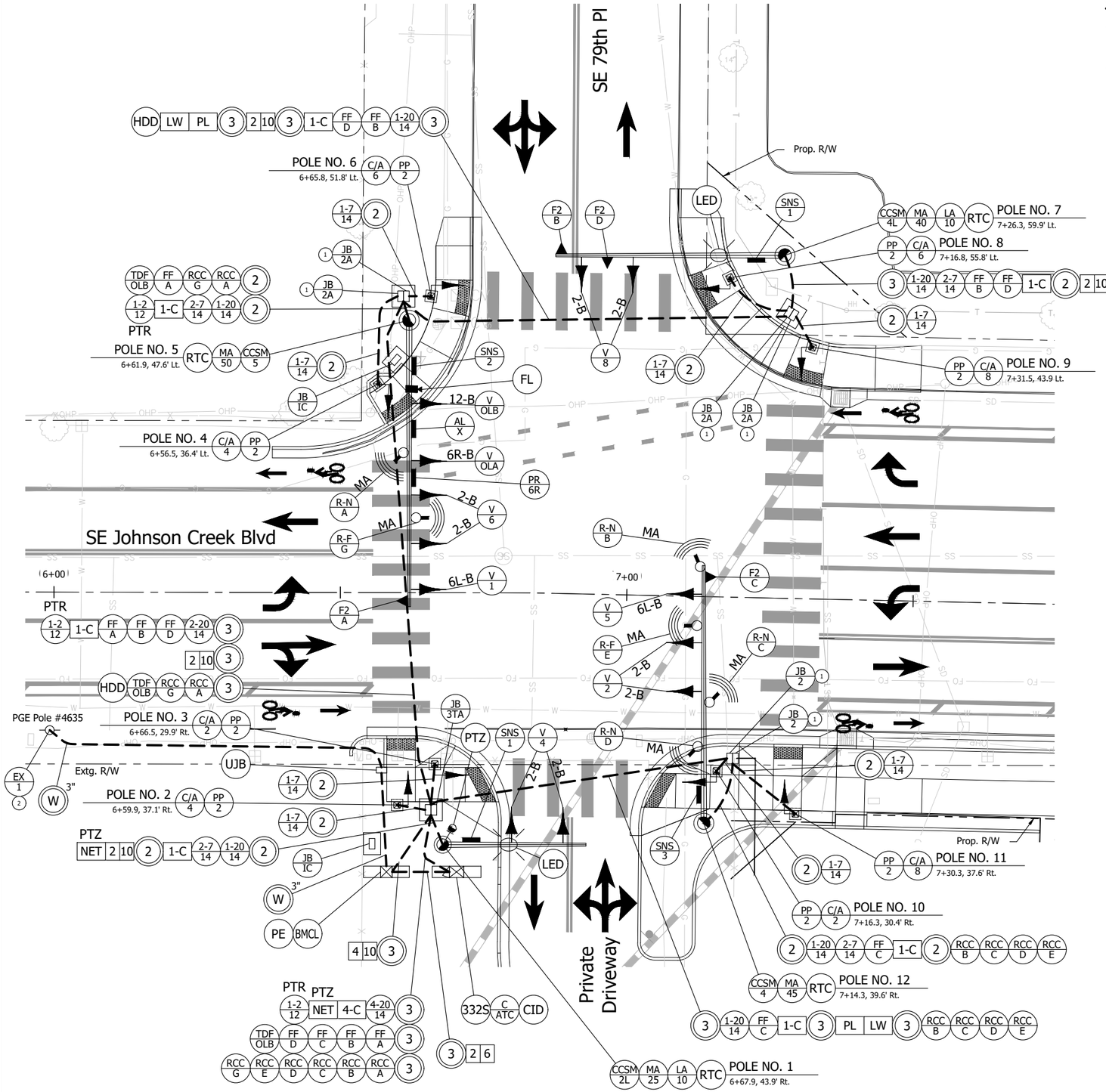
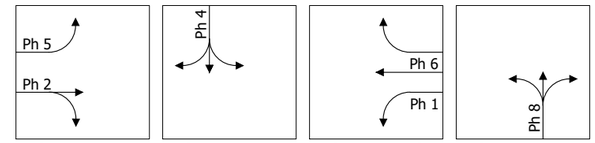
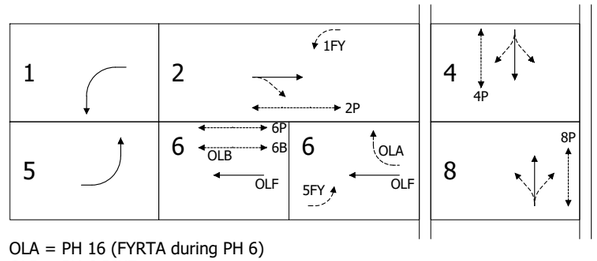


CONSTRUCTION NOTE

1. Use one junction box for detection system and one junction box for signal system.
2. Power source to be coordinated and confirmed prior to construction. See PGE Job #M3238606.

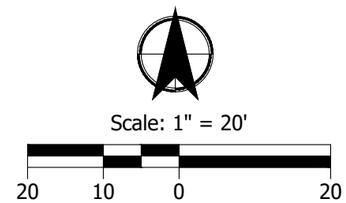


FIRE PREEMPTION OPERATION



OLA = PH 16 (FYRTA during PH 6)
OLB = PH 6 BIKE
OLF = PH 6 + PH 16
*PTR sign to be activated when PH 6 Bike Signal (OLB) is green or yellow.

NORMAL PHASE ROTATION



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REGISTERED PROFESSIONAL ENGINEER
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OREGON
March 9, 2021
SARA PARKS

RENEWS: 12/31/26

SIGNAL PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR: DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO. MB01

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POLE ENTRANCE CHART

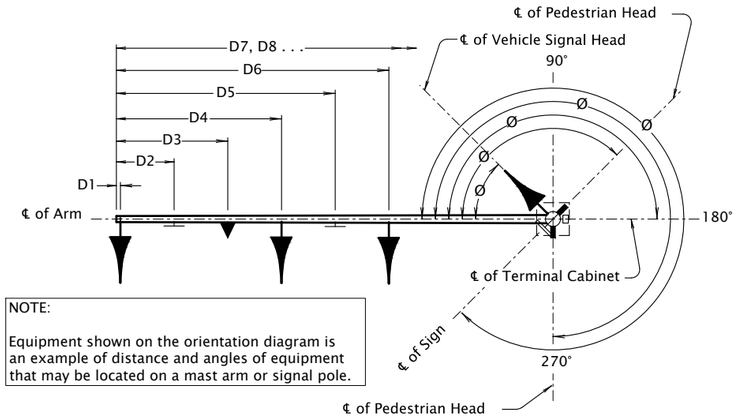
			EQUIPMENT ON POLE							EQUIPMENT ON MAST ARM (Length in Feet and Equipment Type)												LUMINAIRES							FOUNDATION INFORMATION (See Clackamas County Std. Dwg. NWS4710)	
POLE NO.	DWG. NO.	TYPE	PED. SIGNAL DEG.	PED. PUSHBUTTON DEG.	TERM. CABINET DEG.	SIGN DEG.	TRAFFIC SIGNAL DEG.	PHOTO CELL DEG.	PTZ CAM DEG.	ARM LENGTH	D 1	D 2	D 3	D 4	D 5	D 6	D 7	D8	D9	D10	D11	D12	ARM LENGTH	ARM DEG.	MOUNTING HEIGHT	FIXTURE TYPE	DISTRIBUTION TYPE	WATTAGE	COLOR TEMP.	REQUIRED FOUNDATION DEPTH	FOUNDATION CONTROL POINT ELEVATION
1	MB01	CCSM2L	-	-	180	-	-	-	315	25	4.0	13.0	20.0	-	-	-	-	-	-	-	-	-	10	0	35	LED	Type II	88	3000K	9.0'	209.9'
											V2	V2	SNS																	
2	MB01	PP	90	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	209.8'
3	MB01	PP	180	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	209.4'
4	MB01	PP	90	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	208.9'
5	MB01	CCSM5	-	-	180	-	-	-	-	50	1.0	3.0	11.0	15.5	19.5	22.5	25.5	27.5	31.0	35.5	38.0	42.0	-	-	-	-	-	-	-	11.5'	209.8'
											F	V6L	V2	RAD	V2	PTR	V6R	RAD	SA	V12	CAM	SNS									
6	MB01	PP	0	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	208.6'
7	MB01	CCSM4L	-	-	180	-	-	-	-	40	1.0	4.5	9.0	13.5	35.0	-	-	-	-	-	-	-	10	0	35	LED	Type II	88	3000K	11.5'	210.3'
											F	V2	F	V2	SNS																
8	MB01	PP	180	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	208.8'
9	MB01	PP	270	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	209.2'
10	MB01	PP	180	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	209.6'
11	MB01	PP	270	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE TM457	209.9'
12	MB01	CCSM4	-	-	180	-	-	-	-	45	1.0	2.0	5.0	10.5	13.5	22	24.5	31.0	40.0	-	-	-	-	-	-	-	-	-	-	10.5'	209.8'
											RAD	F	V6L	RAD	V2	V2	RAD	RAD	SNS												

BRACKET MOUNT

V2 = Traffic Signal Type 2, Adjustable Bracket Mount (See Std. Dwg. TM462)
V6L = Traffic Signal Type 6L, Adjustable Bracket Mount (See Std. Dwg. TM462)
V6R = Traffic Signal Type 6R, Adjustable Bracket Mount (See Std. Dwg. TM462)
V12 = Traffic Signal Type 12, Adjustable Bracket Mount (See Std. Dwg. TM462)
PTR = Part-Time Restriction Sign, Adjustable Bracket Mount (See Std. Dwg. TM462)
SA = Sign, Aluminum w/Adjustable Bracket Mount (See Std. Dwg. TM462)
SNS = Street Name Sign, Aluminum w/Signal Mast Arm Mount Tenon Not Required (See Std. Dwg. TM679)

MISC. ITEMS

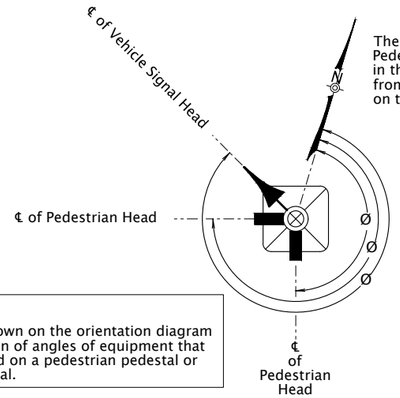
CAM = FLIR Camera
F = Fire Preemption (See Std. Dwg. TM465)
RAD = RADAR unit
PP = Pedestrian Signal Pedestal



NOTE:

Equipment shown on the orientation diagram is an example of distance and angles of equipment that may be located on a mast arm or signal pole.

MAST ARM POLE ORIENTATION DIAGRAM



NOTE:

Equipment shown on the orientation diagram is a clarification of angles of equipment that may be located on a pedestrian pedestal or vehicle pedestal.

PEDESTRIAN PEDESTAL / VEHICLE PEDESTAL ORIENTATION DIAGRAM

The north arrow shown relates to zero degrees on Pedestrian and Vehicle signal poles. Degrees shown in the pole entrance chart show the degrees clockwise from plan sheet north arrow (zero) to equipment located on the pole.

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Digitally Signed 2025.02.05
OREGON
March 9, 2021
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RENEWS: 12/31/26

SIGNAL DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

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CLACKAMAS COUNTY
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DESIGNED BY: S. PARKS
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REVISIONS

NO.	DATE:

SHEET NO.
MC01

Plot Stamp: 1/28/2025 1:56:29 PM - Eric Germundson
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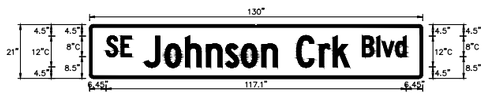
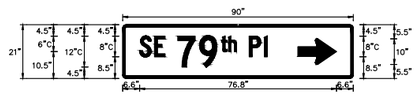
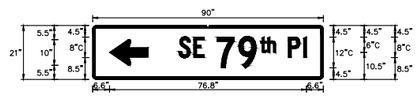
SNS 1



SNS 2



SNS 3



AL X

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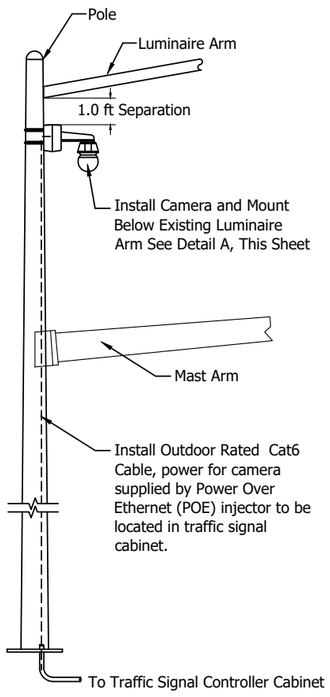
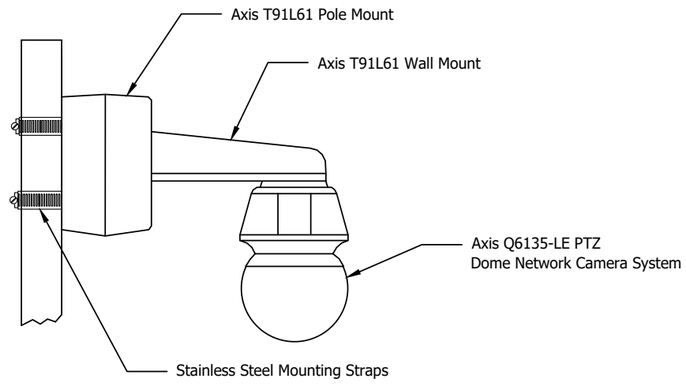


Camera Installation Elevation Detail



Detail A - Camera and Mount

SIGNAL DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
MC02

KITTELSON & ASSOCIATES
851 SW 6TH AVENUE, SUITE 600
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P 503.228.5230 F 503.273.8169

REGISTERED PROFESSIONAL ENGINEER
93121PE
Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

Plot Stamp: 1/28/2025 1:56:38 PM - Eric Germundson
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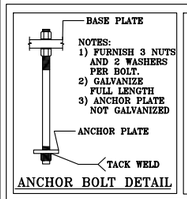
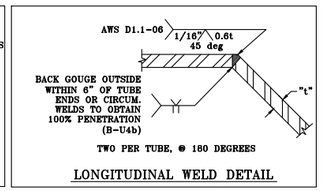
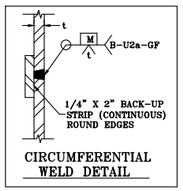


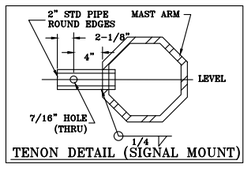
ANCHOR BOLT DETAIL



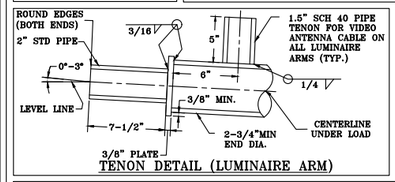
LONGITUDINAL WELD DETAIL



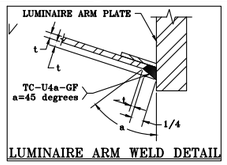
CIRCUMFERENTIAL WELD DETAIL



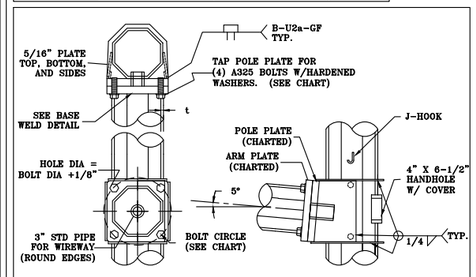
TENON DETAIL (SIGNAL MOUNT)



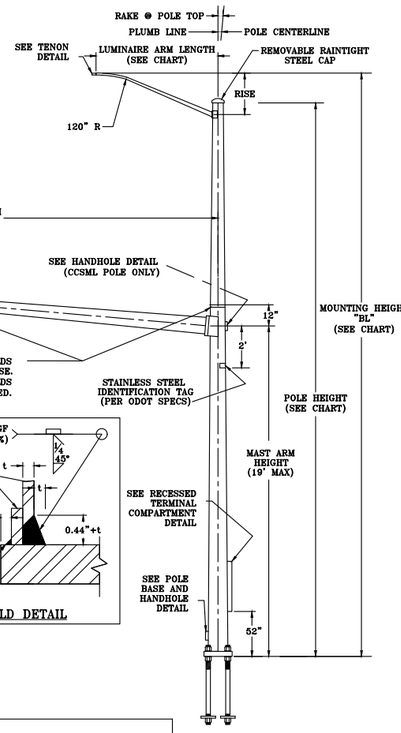
TENON DETAIL (LUMINAIRE ARM)

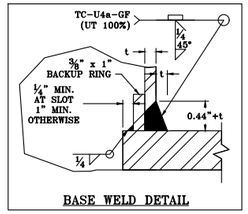


LUMINAIRE ARM WELD DETAIL

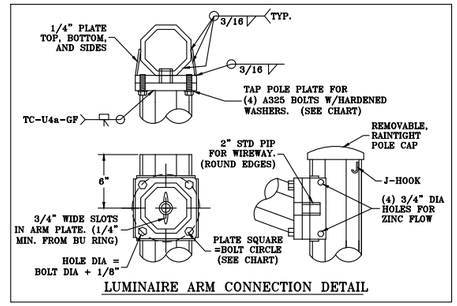


SIGNAL ARM CONNECTION DETAIL

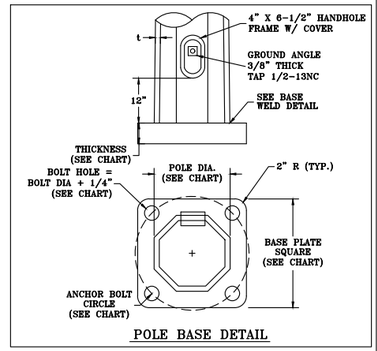




BASE WELD DETAIL



LUMINAIRE ARM CONNECTION DETAIL



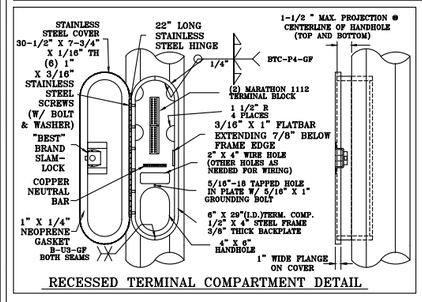
POLE BASE DETAIL

LUMINAIRE ARM DATA TABLE

ARM LENGTH (FT)	APPROX. RISE (IN)	THICK-NESS (IN)	BASE DIA. (IN)	SQUARE (IN)	BOLT CIRCLE (IN)	ARM PL THICK-NESS (IN)	POLE PL THICK-NESS (IN)	BOLT DIA x L (INxIN)
6.0	18.0	0.1875	4.5	9.0	9.0	1.0	1.0	3/4x2.5
8.0	30.0	0.1875	5.0	9.0	9.0	1.0	1.0	3/4x2.5
10.0	41.0	0.1875	6.0	9.0	9.0	1.0	1.0	3/4x2.5
12.0	53.0	0.1875	6.5	9.0	9.0	1.0	1.0	3/4x2.5
15.0	70.0	0.1875	6.5	9.0	9.0	1.0	1.0	3/4x2.5
20.0	72.0	0.25	6.5	9.0	9.0	1.0	1.0	3/4x2.5
25.0	76.0	0.25	6.5	9.0	9.0	1.0	1.0	3/4x2.5

POLE ENTRANCE CHART

POLE NUMBER														
LUMINAIRE ARM														
MAST ARM														
TERMINAL CABINET														

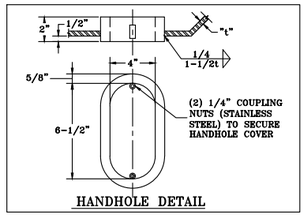


RECESSED TERMINAL COMPARTMENT DETAIL

POLE SCHEDULE

INTERSECTION:

POLE #	POLE DESIGNATION	MAST ARM LENGTH (FT)	POLE HEIGHT (FT)	MAST ARM HEIGHT (FT)	LUM. MOUNTING HEIGHT (FT)	LUM. ARM LENGTH (FT)	TENON LOCATIONS FROM END OF ARM (FT) #1	#2	#3	#4	#5	#6	#7	NOTES



HANDHOLE DETAIL

NOTES:

DESIGN CRITERIA
2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.
-100 MPH 3 SECOND GUST
-GUST FACTOR G=1.14
-Ir=1.0 (50 YR. RECURRENCE INTERVAL)
-FATIGUE CATEGORY II, NO GALLOPING, TRUCK SPEED = 55 MPH

GENERAL
-POLES, MAST ARMS, AND LUMINAIRE ARMS SHALL BE OCTAGONAL OR ROUND IN CROSS SECTION AND HAVE A TAPER OF 0.14 IN/FT.
-FABRICATION SHALL CONFORM TO 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.
-FASTENERS LESS THEN 1/2" SHALL BE STAINLESS STEEL OR BRASS.

MATERIALS
-ALL STEEL IN TUBES, BASE PLATES, FLANGE PLATES & GUSSET PLATES SHALL CONFORM TO ASTM A572 GR50.
-ANCHOR BOLTS SHALL CONFORM TO ASTM A307C. NUTS SHALL CONFORM TO ASTM A563 GR DH HEAVY HEX. WASHERS SHALL CONFORM TO ASTM F436 TYPE 1.
-CONNECTION BOLTS SHALL CONFORM TO ASTM A325. WASHERS SHALL CONFORM TO ASTM F436 TYPE 1.
-GALVANIZING SHALL CONFORM TO ASTM A123 & A153.
-PIPE TENONS AND WIRE GUIDES SHALL CONFORM TO ASTM A53 GR B.
-STAINLESS STEEL RECESSED TERMINAL COMPARTMENT DOOR CONFORM TO AISI SS304.

POLE DATA TABLE

POLE DESIGNATION	ARM LENGTH (FT)	BASE DIA. (IN)	THICK-NESS (IN)	SQUARE (IN)	BOLT CIRCLE (IN)	BASE PL THICK-NESS (IN)	ANCHOR BOLT DIA x L (INxIN)	ANCHOR PL SQ x THK (INxIN)
CCSM1	≤15	12	0.1875	18.5	18.0	2.0	2.0x48	5.75x1
CCSM2	16-25	13	0.1875	18.5	18.0	2.0	2.0x48	5.75x1
CCSM3	26-35	14	0.25	20.5	20.0	2.25	2.25x48	5.75x1
CCSM4	36-45	15	0.3125	20.5	20.0	2.25	2.25x48	5.75x1
CCSM5	46-60	17	0.375	24.0	23.0	2.5	2.75x48	7x1.13
CCSM1L	≤15	12	0.25	18.5	18.0	2.0	2.0x48	5.75x1
CCSM2L	16-25	13	0.25	19.0	18.0	2.0	2.25x48	5.75x1
CCSM3L	26-35	14	0.3125(1)	20.5	20.0	2.25	2.25x48	5.75x1
CCSM4L	36-45	15	0.3125(1)	22.5	22.0	2.25	2.5x48	6.38x1.13
CCSM5L	46-60	17	0.375(1)	24.0	23.0	2.5	2.75x48	7x1.13

(1) REDUCE SHAFT THICKNESS TO 0.25" 20' FROM BASE

ARM DATA TABLE

ARM LENGTH (FT)	OCTAGONAL CROSS SECTION BASE DIA. (IN)	OCTAGONAL CROSS SECTION THICK-NESS (IN)	ROUND CROSS SECTION BASE DIA. (IN)	ROUND CROSS SECTION THICK-NESS (IN)	SQUARE (IN)	BOLT CIRCLE (IN)	ARM PL THICK-NESS (IN)	POLE PL THICK-NESS (IN)	BOLT DIA x L (INxIN)
15.0	6.0	0.1875	6.0	0.1875	12	12	1.5	1.25	1.25x3
20.0	7.0	0.1875	8.0	0.1793	12	12	1.5	1.25	1.25x3
25.0	8.0	0.1875	9.0	0.2391	12	12	1.5	1.25	1.25x3
30.0	9.0	0.25	11.0	0.2391	14	14	1.75	1.5	1.25x3.5
35.0	10.0	0.25	11.0	0.3125	14	14	1.75	1.5	1.25x3.5
40.0	11.0	0.25	12.0	0.3125	17	17	2.0	1.5	1.5x3.5
45.0	13.0	0.375	13.0	0.375	17	17	2.0	1.5	1.5x3.5
50.0	14.0	0.375(1)	14.0	0.375(1)	20	19.5	2.25	1.75	1.75x4
55.0	15.0	0.375(1)	15.0	0.375(1)	20	19.5	2.25	1.75	1.75x4
60.0	16.0	0.375(1)	16.0	0.375(1)	21	21.0	2.25	1.75	1.75x4

(1) REDUCE ARM THICKNESS TO 0.25" 20' FROM BASE

NO.	REVISION	DATE
1	UPDATED DESIGN CALCS	11/14/07
2	ADDED FULL PEN. BASE WELD	5/16/08
3	ADDED ROUND CROSS SECTION	6/30/09
4	MOD. BC DIM & ADDED I.D. TAG	3/14/12

CLACKAMAS COUNTY
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD OREGON CITY, OREGON

CLACKAMAS COUNTY MAST ARM STANDARD TYPE CCSM AND TYPE CCSML

DESIGNED BY	DATE	DRAWN BY	DATE
D. EMSLIE	3/21/07	D. EMSLIE	3/21/07

DRAWING NUMBER: NWS4700
SHEET 1 OF 1

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REGISTERED PROFESSIONAL ENGINEER
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Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

SIGNAL DETAILS

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
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CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO. MC03

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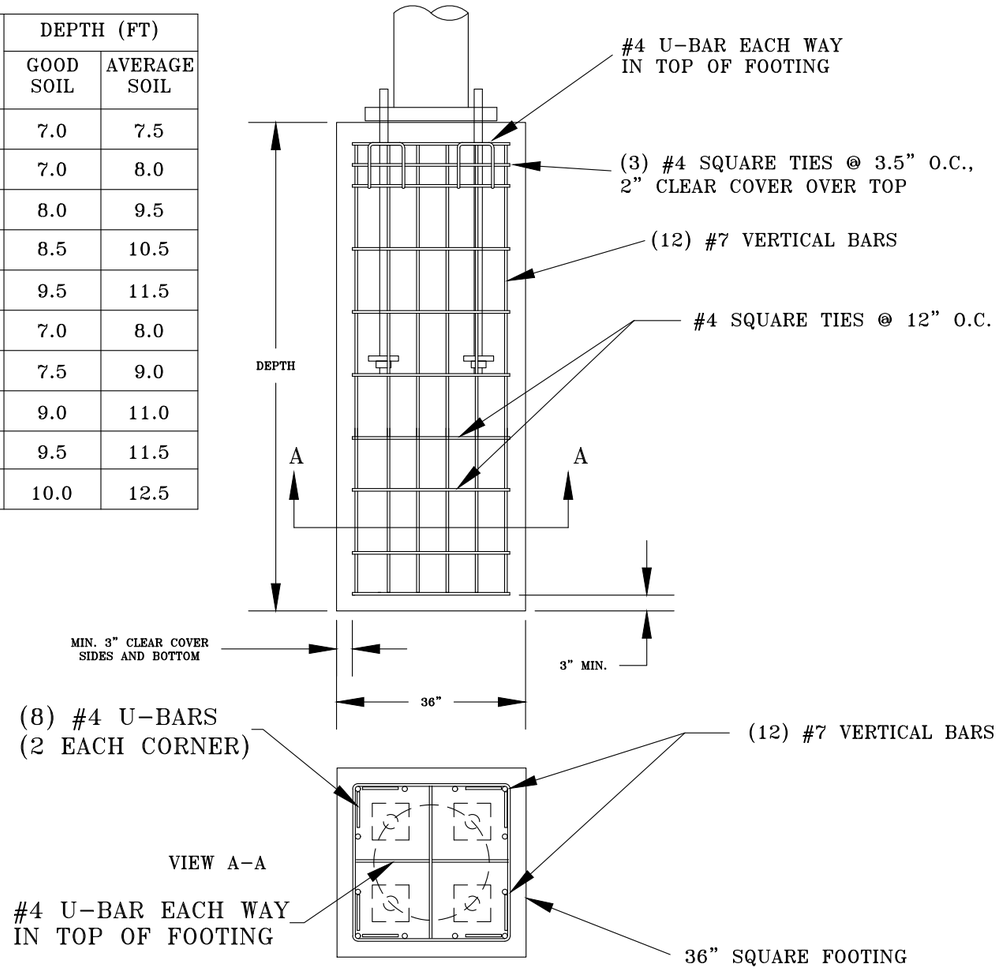
POLE DESIGATION	DEPTH (FT)	
	GOOD SOIL	AVERAGE SOIL
CCSM1	7.0	7.5
CCSM2	7.0	8.0
CCSM3	8.0	9.5
CCSM4	8.5	10.5
CCSM5	9.5	11.5
CCSM1L	7.0	8.0
CCSM2L	7.5	9.0
CCSM3L	9.0	11.0
CCSM4L	9.5	11.5
CCSM5L	10.0	12.5



NOTES:

1. Vertical steel bars should be equally spaced around the perimeter of the footing allowing for a minimum of 3" of concrete cover over the ties.
2. Vertical steel shall be ASTM A615 Gr 60 (rebar).
3. Minimum concrete strength, f'c = 3,000 psi
4. Concrete shall be poured against undisturbed soil. If the top layer of the soil is disturbed it shall be discounted and the footing depth shall be increased accordingly.
5. The top 4" shall be placed (using concrete or a non-shrinking grout) after installing the pole and appurtenances.

NO.	REVISION	DATE
1	FOUNDATION DEPTH UPDATED	11/19/07

CLACKAMAS COUNTY
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD OREGON CITY, OREGON

CLACKAMAS COUNTY MAST ARM FOUNDATION STANDARD

DESIGNED BY	DATE	DRAWN BY	DATE
D. EMSLIE	3/21/07	D. EMSLIE	3/21/07

DRAWING NUMBER: NWS4710
SHEET 1 OF 1

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SIGNAL DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

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REVISIONS

NO.	DATE:

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MC04

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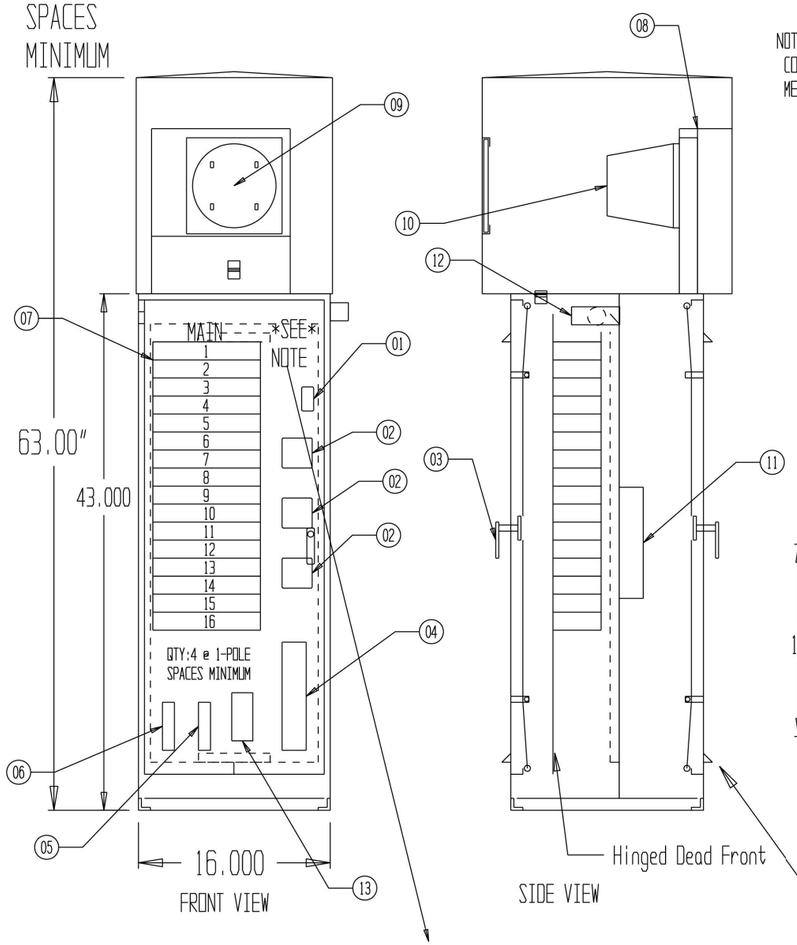
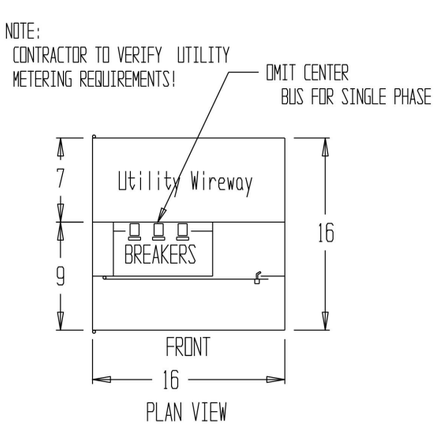
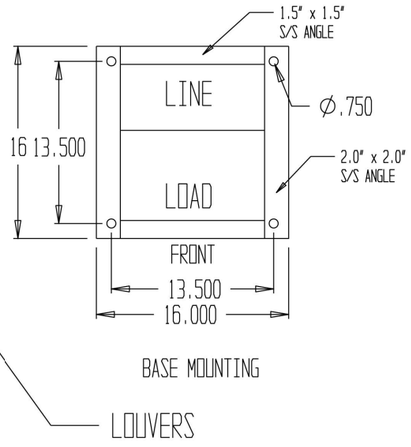
NEMA 3-R METERED BASE MOUNT SERVICE CABINET CLACKAMAS COUNTY







LOUVERS

NOTE: IF PE CELL IS REQUIRED, LOWER TEST SWITCH APP 6"
AND INSTALL A GLASTIC BARRIER BETWEEN PANEL AND PE CELL

4. UL 67 LABELED PANELBOARD
3. UL 50 LISTED AS SERVICE ENTRANCE EQUIPMENT LABLED CUTOUT BOX NEMA 3R
2. DEADFRONT CONSTRUCTED OF 14 GA TYPE 304 #4 SS BACKPAN 12GA TYPE 304 SS
1. CABINET CONSTRUCTED OF 14-GA TYPE-304 SS (GALVANIZED, PAINTED, MILD STEEL OPTIONAL)

NOTE: MARATHON 1206 TERMINAL BLOCKS PROVIDED. WIRE RANGE IS #18 - #4 CU. CUSTOMER MUST NOTIFY IF OTHER SIZES ARE REQUIRED.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	first drawing	07/02/2003	P.D.W.

POLE#	DESCRIPTION
1	1-100-2 "MAIN"
2	" " "
3	1-30-2 "SIGNAL ILLUMINATION"
4	" " "
5	
6	" " "
7	
8	" " "
9	1-60-1 "TRAFFIC SIGNAL CONTROLLER CAB"
10	1-20-1 "INTERNALLY MOUNTED GFCI RECPTACLE"
11	1-15-1 "PHOTOELECTRIC CONTROL"
12	1 - POLE SPACE
13	1 - POLE SPACE
14	1 - POLE SPACE
15	1 - POLE SPACE
16	1 - POLE SPACE

Item	Qty	U.M.	Description
14	1	EA	INFO
13	1	EA	INTERNALLY MOUNTED 20-AMP GFCI DUPLEX RECEPTACLE
12	1	EA	PE CELL BEHIND POLYCARBONITE WINDOW WITH LIGHT DEFLECTING COVER
11	1	EA	POWER COMPANY TERMINAL BLOCK
10	1	EA	METER: SUPPLIED BY OTHER
9	1	EA	WINDOW: POLY CARBONATE ONE SIDE SCRATCH RESISTANT
8	1	EA	METERBASE: CIRCLE AW, 20324L, 1-P, 4-JAW, 600-VOLT, 200-AMP.
7	6	EA	BREAKERS: G.E. TYPE T.E.D., 18K, AIC @ 240-VOLT.
6	1	EA	COPPER GROUND BAR
5	1	EA	100% RATED COPPER NEUTRAL.
4	1	EA	TERMINAL BLOCK
3	1	EA	HANDLE: PAD LOCKABLE SS 73-NS
2	3	EA	CONTACTOR: G.E. CR360L, 600V, 30A, 120V COIL
1	1	EA	TEST SWITCH: HUBBEL 1221 20A 1P 120\277V

BILL OF MATERIALS

FOUCH ELECTRIC MFG. CO. INC.

2138 N INTERSTATE AVE.
PORTLAND, OREGON. 97227

EMAIL: sales@fouch.com
WEB: www.Fouch.com

JOB NAME: CLACKAMAS COUNTY SERVICE CABINET DETAIL

CONTRACTOR: CLACKAMAS COUNTY

FOUCH JOB #: TBA

DWG#: 0600-0074-00 | REV: 01 | QTY: 1

SIGNAL DETAILS

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REVISIONS

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SHEET NO.
MC05

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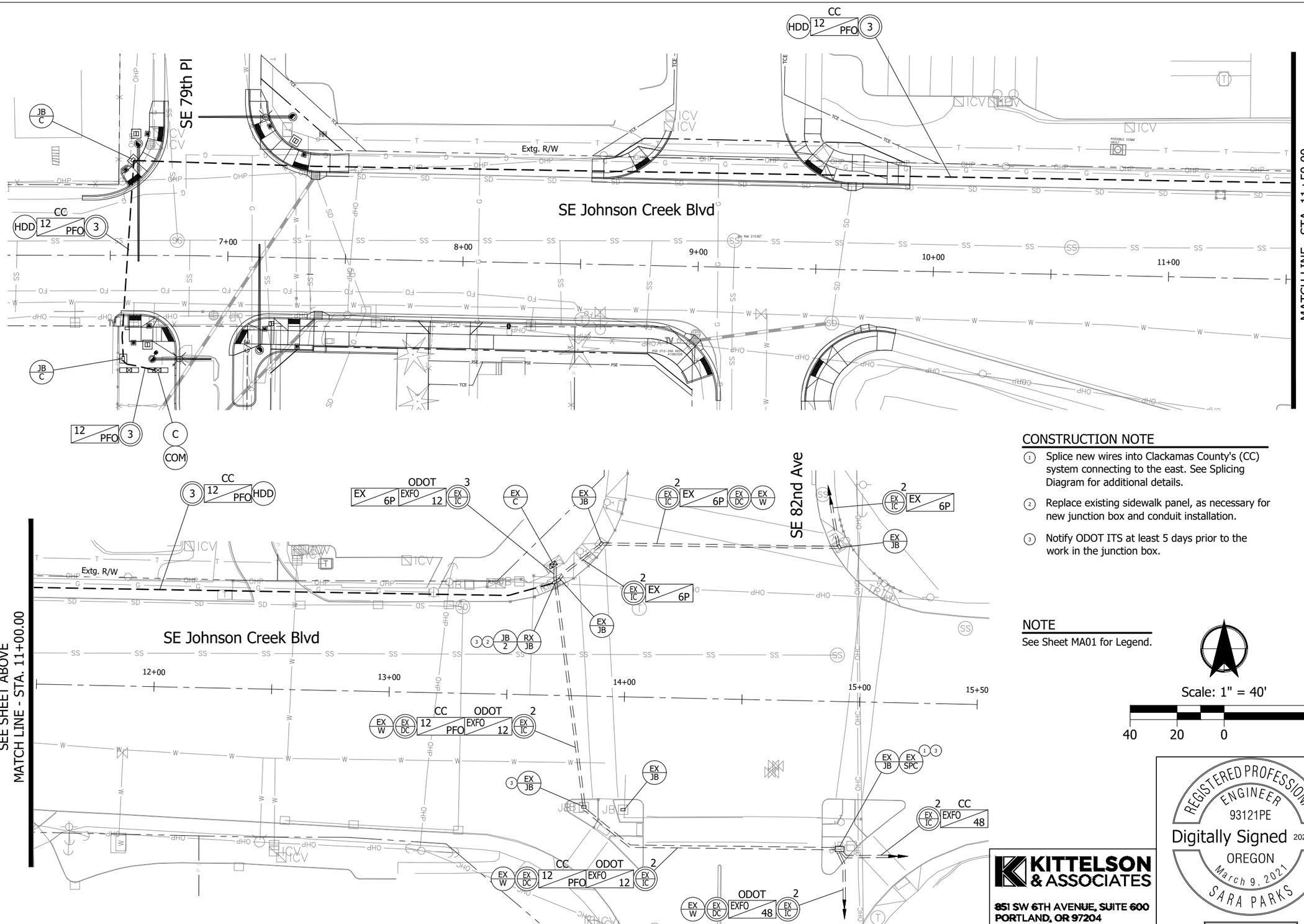

CONSTRUCTION NOTE

1. Splice new wires into Clackamas County's (CC) system connecting to the east. See Splicing Diagram for additional details.
2. Replace existing sidewalk panel, as necessary for new junction box and conduit installation.
3. Notify ODOT ITS at least 5 days prior to the work in the junction box.

NOTE

See Sheet MA01 for Legend.

Scale: 1" = 40'

40 20 0 40

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INTERCONNECT PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

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CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

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MD01

Plot Stamp: 2/3/2025 7:46:42 AM - Sara Parks
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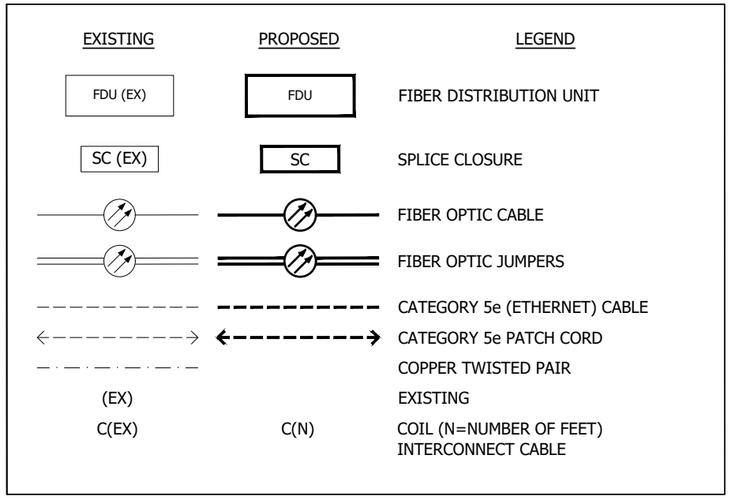
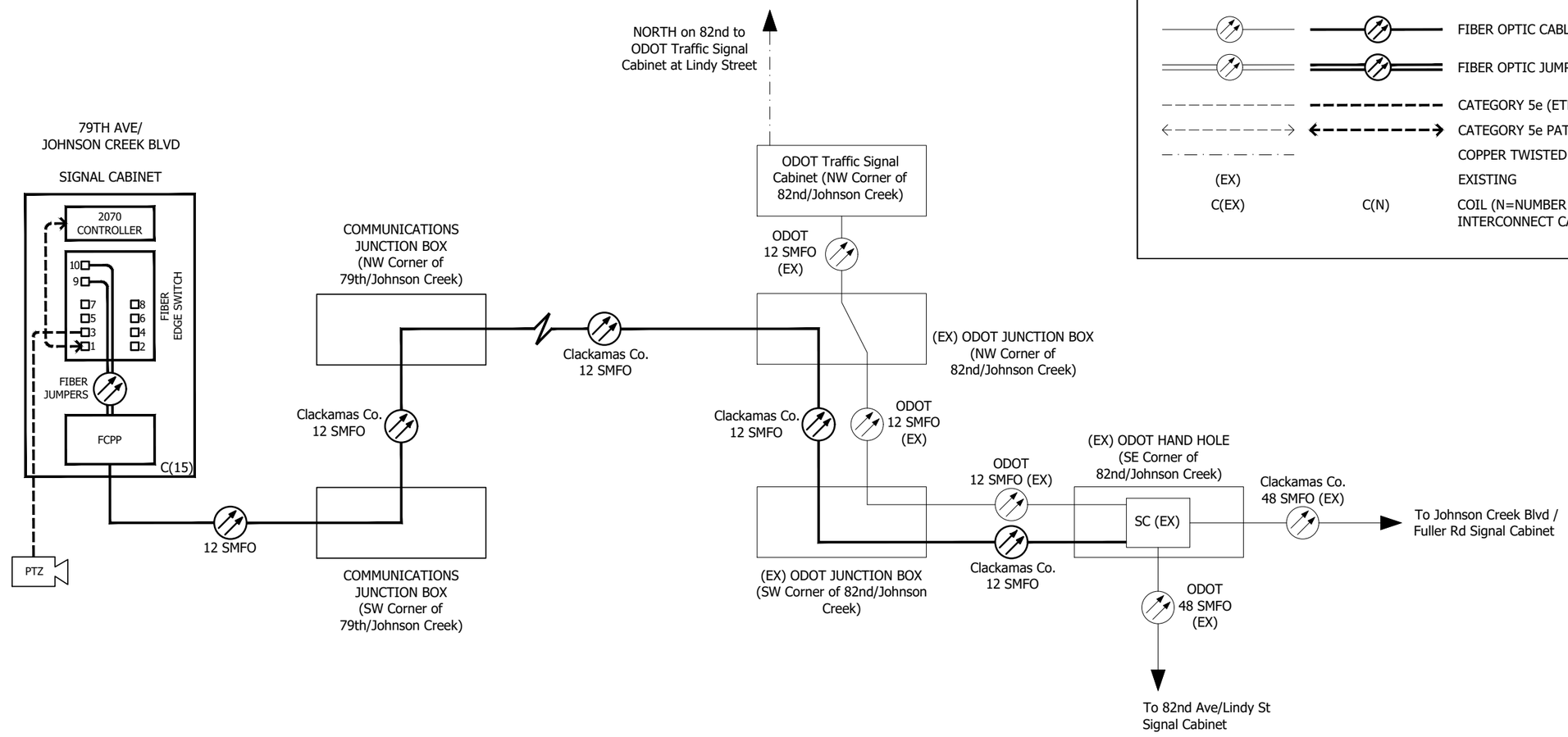
COMMUNICATIONS LOGICAL DIAGRAM





COMMUNICATIONS COMPONENT SCHEDULE

LOCATION	CABINET	JURISDICTION	COMMUNICATIONS COMPONENTS	COMPONENT OPTIONS	QUANTITY
79th Ave @ Johnson Creek Rd	New 332S Traffic Signal Cabinet	Clackamas County	Fiber Edge Switch (LC)	Ruggedcom Ethernet Edge Switch RS900G Siemens Part No. 6GK6090-0GS23-0BA0-Z A01	1
			SFP Modules for RS900G	6GK6000-8FG52-0AA0	2
			Six Foot Power Cable without Lugs (bare-wire) for RS900G	Siemens Part No. 6GK6000-8FG52-0AA0	1
			Industrial Ethernet Cable		4
			Fiber Optic Connection Patch Panel	Fiber Connection Inc - Gaterpatch LC, Model G620U012FRB200-Z	1
			Fiber Optic Patch Cord (LC-LC)		2
			PTZ Camera and Power Supply	AXIS Q6135-LE	1
			ODOT Style Hinged Communications Rack	McCain Part No. M46050-1	1

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REGISTERED PROFESSIONAL ENGINEER
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Digitally Signed 2025.02.05
OREGON
March 9, 2021
SARA PARKS
RENEWS: 12/31/26

INTERCONNECT DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: S. PARKS
DRAFTED BY: D. AMURAO
CHECKED BY: W. SCARBROUGH

REVISIONS

NO.	DATE:

SHEET NO.
MD02

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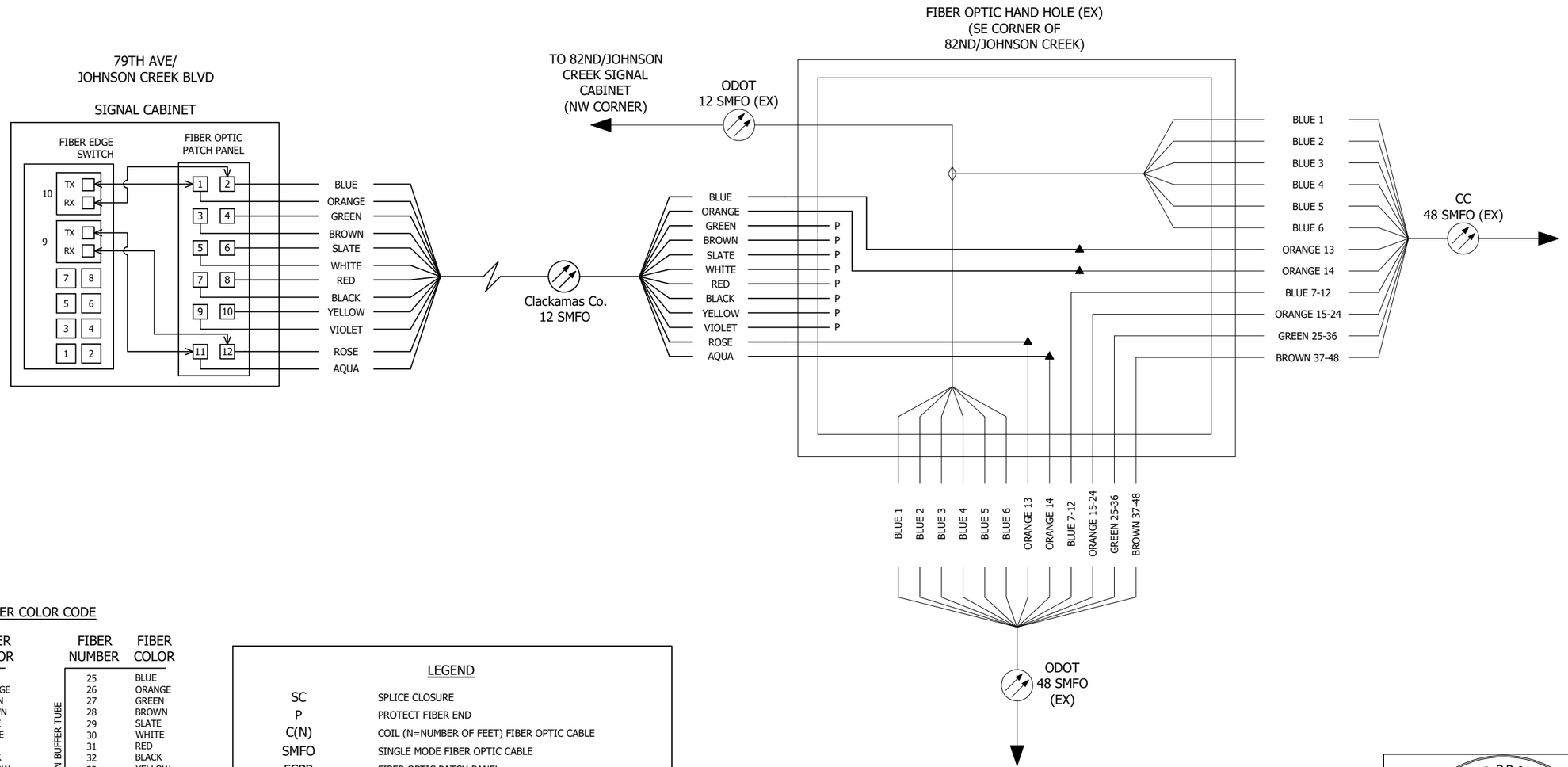
FIBER OPTIC SPLICING AND TERMINATION DIAGRAM



FIBER COLOR CODE

FIBER NUMBER	FIBER COLOR		FIBER NUMBER	FIBER COLOR
1	BLUE	BLUE BUFFER TUBE	25	BLUE
2	ORANGE		26	ORANGE
3	GREEN		27	GREEN
4	BROWN		28	BROWN
5	SLATE		29	SLATE
6	WHITE		30	WHITE
7	RED		31	RED
8	BLACK		32	BLACK
9	YELLOW	GREEN BUFFER TUBE	33	YELLOW
10	VIOLET		34	VIOLET
11	ROSE		35	ROSE
12	AQUA		36	AQUA
13	BLUE	ORANGE BUFFER TUBE	37	BLUE
14	ORANGE		38	ORANGE
15	GREEN		39	GREEN
16	BROWN		40	BROWN
17	SLATE		41	SLATE
18	WHITE		42	WHITE
19	RED		43	RED
20	BLACK		44	BLACK
21	YELLOW	BROWN BUFFER TUBE	45	YELLOW
22	VIOLET		46	VIOLET
23	ROSE		47	ROSE
24	AQUA		48	AQUA

LEGEND

SC	SPLICE CLOSURE
P	PROTECT FIBER END
C(N)	COIL (N=NUMBER OF FEET) FIBER OPTIC CABLE
SMFO	SINGLE MODE FIBER OPTIC CABLE
FCPP	FIBER OPTIC PATCH PANEL
BLUE 1	FIBER OPTIC CABLE
	EXISTING FIBER SPLICE
	FIBER SPLICE
	EXISTING FIBER SPLICE (MULTIPLE)
	FIBER OPTIC PATCH CORD OR JUMPER
(EX)	EXISTING
SM	SEQUENTIAL FIBER MARKING (FEET)

GENERAL NOTES:

1. Contractor shall show the fiber optic cable sequential markings on the as-built plans.
2. Fiber optic cable shall be continuous except where splicing is indicated on the fiber splice diagrams and in the Special Provisions.

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INTERCONNECT DETAILS

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DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

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REVISIONS

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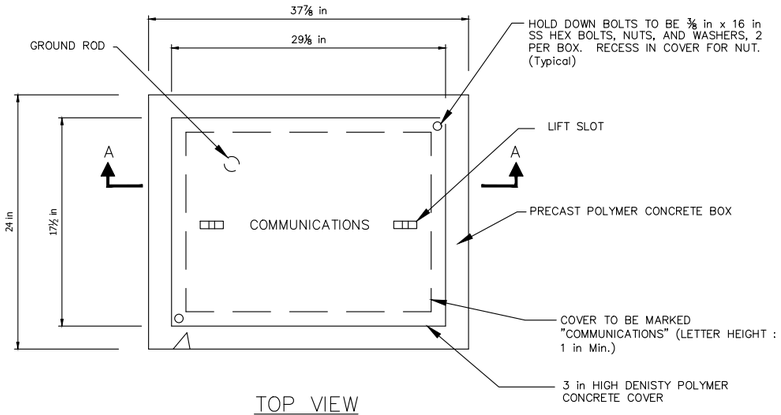
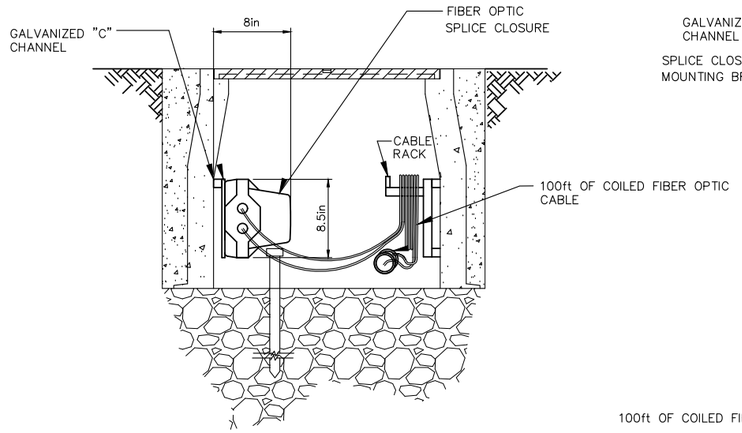
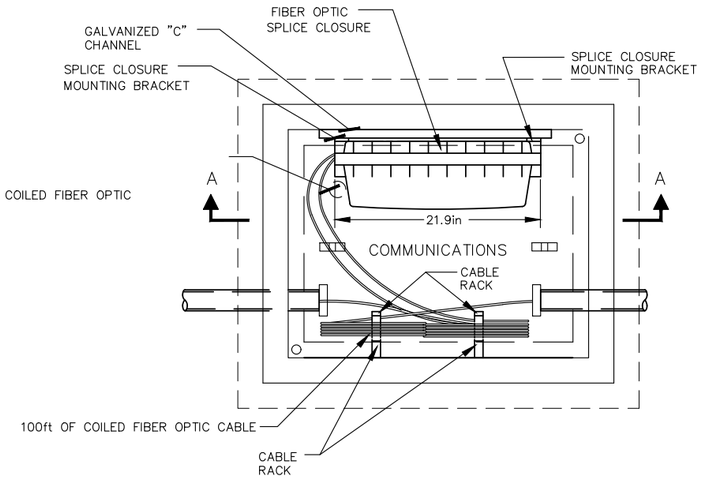


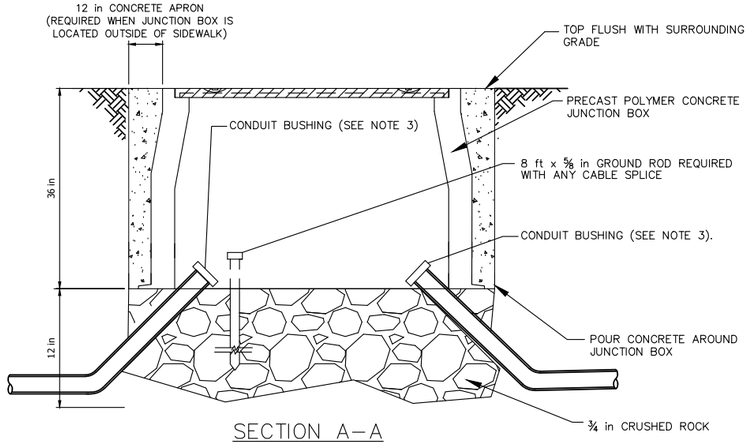
TOP VIEW
NOT TO SCALE



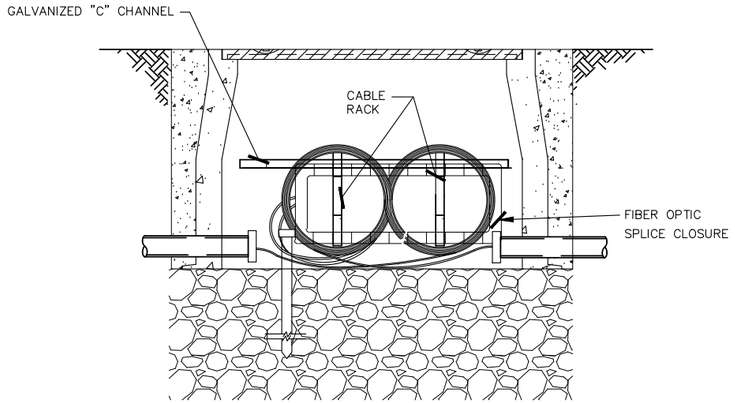
SIDE VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



SECTION A–A
NOT TO SCALE



SECTION A–A

FIBER OPTIC SPLICE CLOSURE AND CABLE MANAGEMENT
COMMUNICATIONS JUNCTION BOX DETAIL
NOT TO SCALE

COMMUNICATIONS JUNCTION BOX TYPE "C"

NOTES:

1. CONDUITS SHOWN ARE FOR EXAMPLE ONLY. ADDITIONAL CONDUITS MAY BE REQUIRED AS SHOWN ON THE PLAN SHEETS.

2. SEE SPECIAL PROVISIONS REGARDING HOLD–DOWN BOLTS FOR TRAFFIC COVERS AND ADDITIONAL REQUIREMENTS.

3. CONDUITS SHALL EXTEND INTO THE JUNCTION BOX A NOMINAL 2in [50mm] FROM THE INSIDE WALL.

4. FOR CONDUIT END TREATMENT REFER TO ODOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2008 (SEE SECTION 960.42) AND OREGON STANDARD DRAWINGS 2008 (TM472).

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INTERCONNECT DETAILS

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI–300320355 (K21636)

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
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DIRECTOR
CLACKAMAS COUNTY
DAN JOHNSON

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REVISIONS

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LEGEND

POLES, ARMS, AND FIXTURES

LP (N)	Install light pole number (N), see lighting notes and light pole and luminaire schedule.
LUM	Install luminaire with photocell. See light pole schedule.
EX LUM	Retain and protect existing luminaire.
RX LUM	Remove existing luminaire.
LUM TS	Install light on signal pole. See signal plans.
LA (X)	Install (X=feet) luminaire arm on existing utility pole.
EX LA	Retain and protect existing luminaire arm.
LED (W)	Install (W=number) watt LED street light fixture.
EX UT	Retain and protect existing utility pole.
RX UT	Remove existing utility pole by PGE. See PGE utility plans.
UT	New utility pole by PGE. See PGE utility plans.

JUNCTION BOXES

JB 1	Install 13" x 24" x 18" (Min. Dimensions) junction box.
JB 2	Install 17" x 30" x 18" (Min. Dimensions) junction box for service connection per PGE requirements.

CONDUITS

W	Install conduit and wire as required by power company.

GENERAL NOTES

1. Streetlights on PGE utility poles are Schedule 95 Option A. Streetlights on Traffic Signal Poles shall be connected to metered base mounted service cabinet. See Traffic Signal Plans for details.
2. All materials and workmanship shall conform to the Clackamas County Standards, PGE Requirements (when applicable), the project plans, the referenced Standard Drawings and Details, the 2024 Oregon Standard Specifications for Construction, and the Special Provisions.
3. All electrical equipment shall conform to the current standards of the National Electrical Manufacturers Association (NEMA) and the Underwriters Laboratories, Inc. (U.L.) wherever applicable. In addition to the requirements of the plans, standard specifications, and the special provisions, all materials and workmanship shall conform to the current requirements of the National Electrical Code (NEC) the National Electrical Safety Code, standards of the American National Standards Institute (ANSI), and any local ordinances which may apply.
4. Location of illumination conduits and junction boxes are approximate. Coordinate with other utilities to ensure proper installation.
5. Street lights installed on Portland General Electric (P.G.E.) utility poles shall be Schedule 95 Option A. Street lighting equipment installed on P.G.E. utility poles is provided and installed by P.G.E. The Contractor shall coordinate with P.G.E. to schedule the installation and energizing of street lights installed on P.G.E. utility poles.
6. Contractor shall coordinate with PGE for power service for the street lighting system(s). The contractor shall install conduit and wiring to the power source as required by PGE. The contractor shall cooridnate with PGE (Service Desk 503-323-6700) and RICO TORRES SOLIS (503-403-9084) a minimum of 4 weeks before starting PGE related infrastructure to schedule a coordination meeting for all power requirements. Reference PGE Work Order M3227753. Contractor shall contact PGE a minimum of 2 weeks prior to required PGE inspections.
7. Equipment submittals and pole drawings shall be provided to Clackamas County by the contractor after an initial review has been completed by the project engineer. Clackamas County approval of these submittals must be obtained prior to construction.
8. Existing street lights shall remain operational during construction unless approved otherwise in writing by Clackamas County.

PGE APPROVED STREET LIGHTING EQUIPMENT

1. Mast arm for wood poles shall be supplied and installed by PGE.
2. The luminaire shall be a PGE approved LED, supplied and installed by PGE. The PGE approved luminaire is:

Manufacturer:	Catalog Number:
Leotek, 45W LED	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE
Leotek, 88W LED	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE
Leotek, 160W LED	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE

3. The photoelectric control relay shall be extended life twist lock and PGE approved.
4. The pole type for the proposed pole shall be supplied and installed by PGE.
5. Anchor pole footing shall be PGE-approved precast concrete base, supplied by PGE and installed by the contractor. The PGE-approved footing shall be 14" square by 60" high.
6. The PGE approved junction boxes are:

Streetlight 1324 J-Box (Fused CU353, Unfused CU352):	Catalog Number:
Newbasis - 13"x24"x18" (90003478)	FCA132418T-00043
Quazite (Hubbell) - 13"x24"x18" (90003478)	A42132418A017
Oldcastle/Carson Industries - 13"x24"x18" (90003478)	13241712
Highline - 13"x24"x18" (90003478)	CHA132418HE1
Armorcast - 13"x24"x18" (90003478)	A6001946TAX18

Streetlight 1730 J-Box:	Catalog Number:
Newbasis - 17"x30"x18" (90003480)	FCA173018T-90026
Quazite (Hubbell) - 17"x30"x18" (90003480)	A42173018A017
Oldcastle/Carson Industries - 17"x30"x18" (90003480)	17301726
Highline - 17"x30"x18" (90003480)	CHA173018HE1
Armorcast - 17"x30"x18" (90003480)	A6001640TAX18

ROADWAY PHOTOMETRIC ANALYSIS SUMMARY (ILLUMINANCE METHOD)

LOCATION	JURSIDICTION	CLASSIFICATION	PEDESTRIAN CONFLICT AREA		AVERAGE LIGHT LEVEL (fc)	UNIFORMITY (AVE/MIN)
JOHNSON CREEK BOULEVARD 79th Place to 82nd Avenue	Clackamas County	MAJOR	MEDIUM	RECOMMENDED	>0.9	≤3.0:1
				DESIGN	1.3	2.6:1
JOHNSON CREEK BOULEVARD 78th Place to 79th Place	Clackamas County	MAJOR	MEDIUM	RECOMMENDED	>0.9	≤3.0:1
				DESIGN	1.1	2.6:1

INTERSECTION PHOTOMETRIC ANALYSIS SUMMARY (ILLUMINANCE METHOD)

LOCATION	JURSIDICTION	CLASSIFICATION	PEDESTRIAN CONFLICT AREA		AVERAGE LIGHT LEVEL (fc)	UNIFORMITY (AVE/MIN)
JOHNSON CREEK BOULEVARD @ 79th Place	Clackamas County	MAJOR/LOCAL	MEDIUM	RECOMMENDED	> 1.9	≤3.0:1
				DESIGN	1.9	2.4

LIGHT POLE TABLE

POLE NO.	ROADWAY	STATION (JC ALIGNTMENT)	OFFSET (JC ALIGNMENT)	TYPE AND POLE STYLE	APPROXIMATE MOUNTING HEIGHT (FEET)	ARM LENGTH (FEET)	LUMINAIRE				
							STYLE	DISTRIBUTION	INITIAL LUMENS	INITIAL WATTS	BUG RATING
PGE #4634	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #8307	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #4635	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #109	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	10	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	10230	88W	B3 U0 G3
PGE #4636	SE Johnson Creek Blvd	(Relocated*)	(Relocated*)	(Wood Utility)	(30)	(8)	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #88	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #110	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	10230	88W	B2 U0 G2
PGE #4637	SE Johnson Creek Blvd	(Relocated*)	(Relocated*)	(Wood Utility)	(30)	(10)	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	10230	88W	B2 U0 G2
New Pole 1	SE 80th Ave	9+49.27	60.14 Rt.	Aluminum Davit	30	6	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #4638	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	(30)	(14)	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #111	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	10230	88W	B2 U0 G2
PGE #3410	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	(30)	(14)	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE	Type 3 Medium	18700	160W	B3 U0 G3
PGE #112	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	6	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	10230	88W	B2 U0 G2
PGE #4640	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	(30)	(10)	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1
PGE #28	SE Johnson Creek Blvd	(Existing)	(Existing)	(Wood Utility)	30	10	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	Type 2 Medium	5020	45W	B1 U0 G1

*Relocated utility poles detailed in PGE utility plans
() = Existing

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ILLUMINATION LEGEND

SE JOHNSON CREEK BLVD:
79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
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REVISIONS

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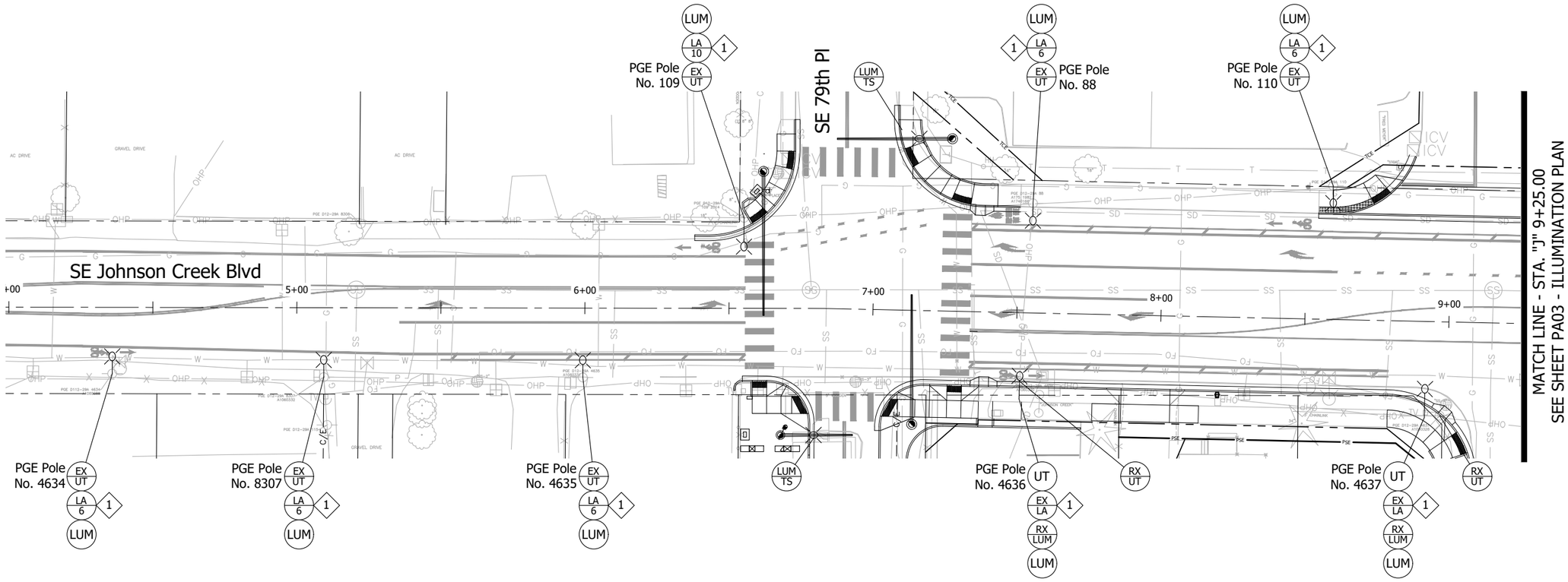

CONSTRUCTION NOTES

1. PGE Work Order for luminaire arm and fixture installations is M3227753.

Scale: 1" = 40'

40 20 0 40

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ILLUMINATION PLAN

SE JOHNSON CREEK BLVD: 79TH PL - 82ND AVE PROJECT

DATE: JAN. 25, 2025 | PROJECT NO.: CI-300320355 (K21636)

CLACKAMAS COUNTY
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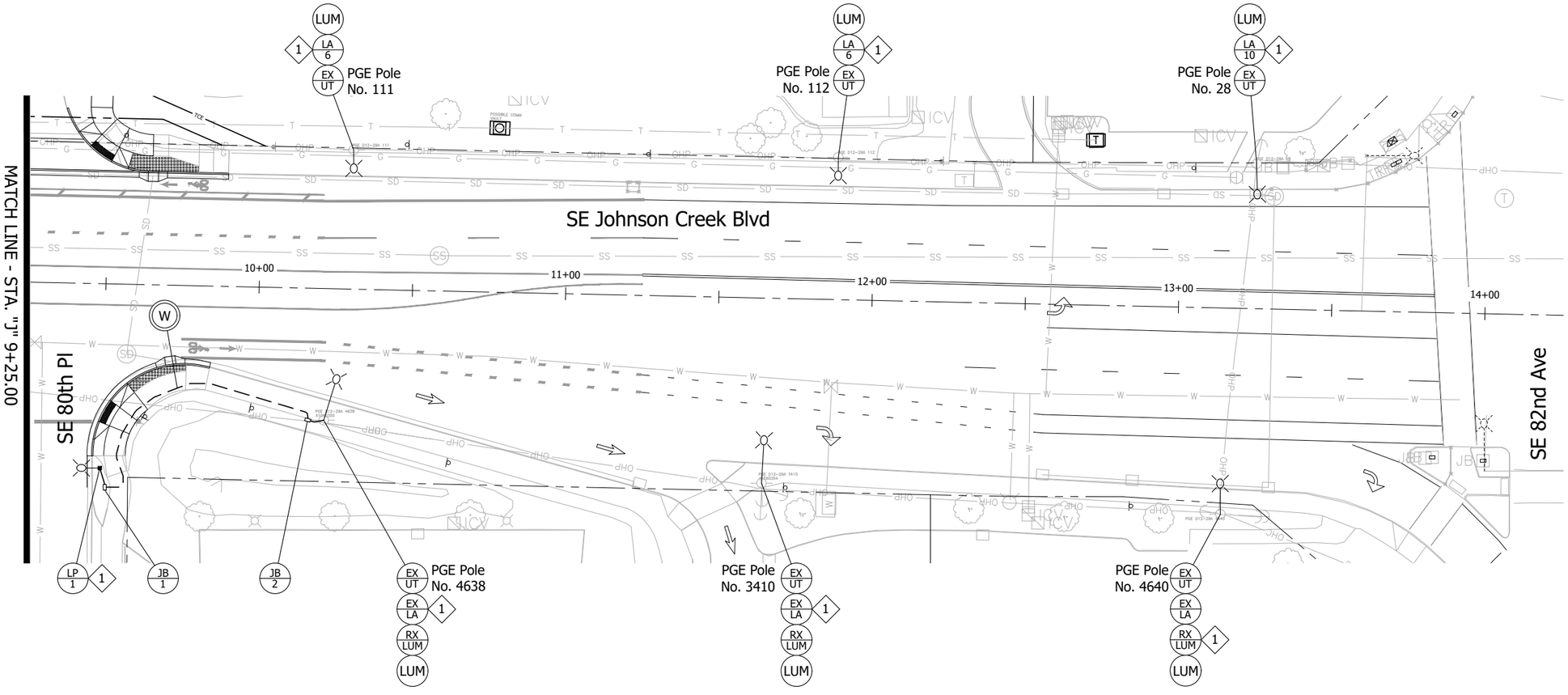

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ILLUMINATION PLAN

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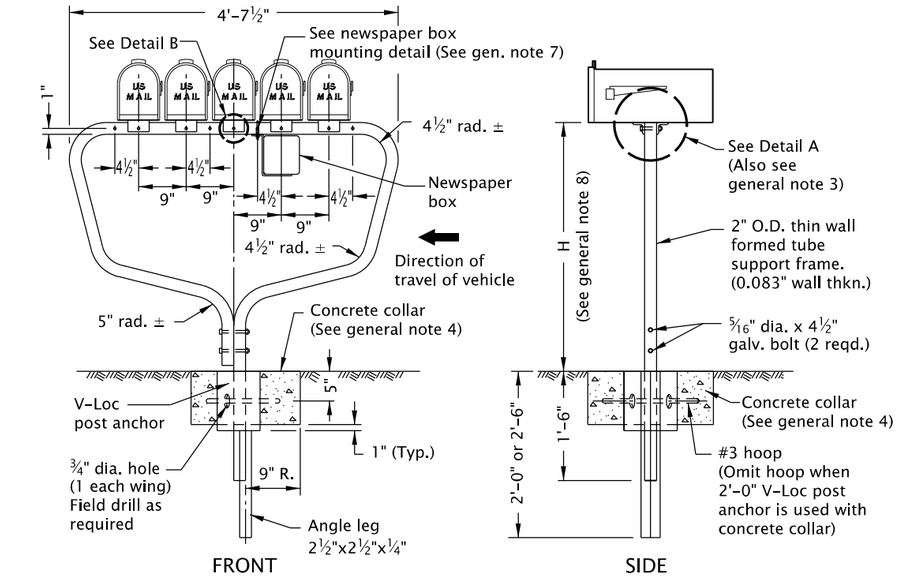
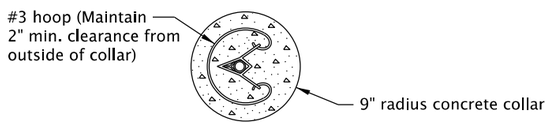
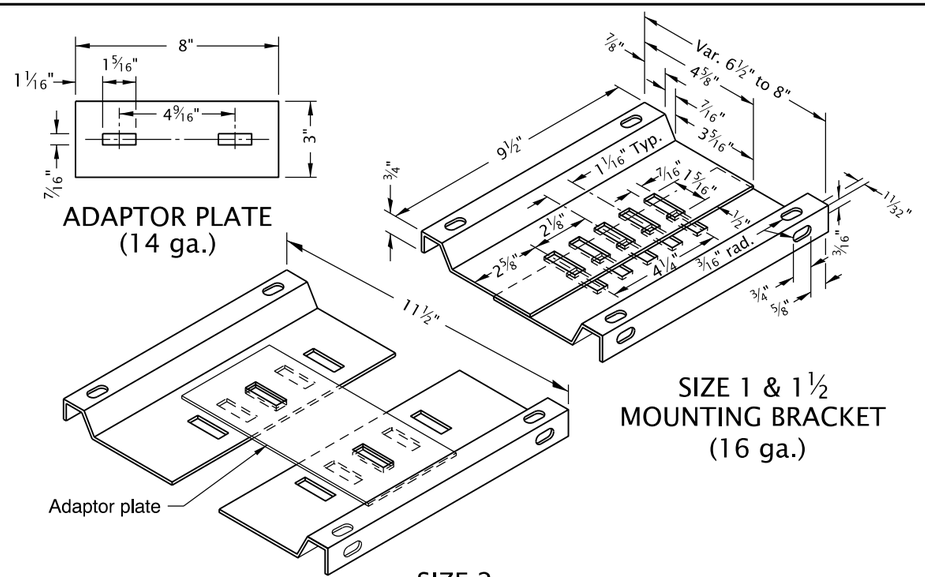




CONCRETE COLLAR
(See general note 4)

MULTIPLE SUPPORT

(Supports 5 standard (Sizes 1 & 1½) mailboxes or 4 large (Size 2) mailboxes)



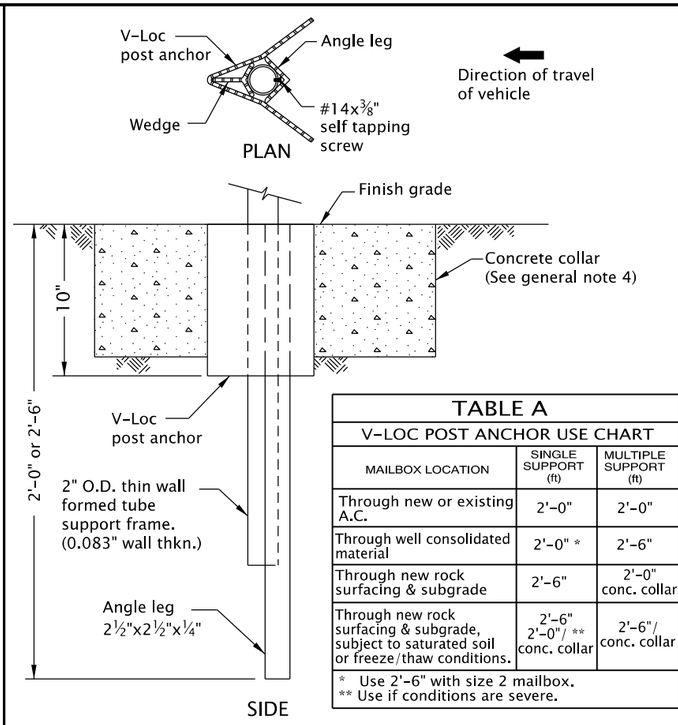
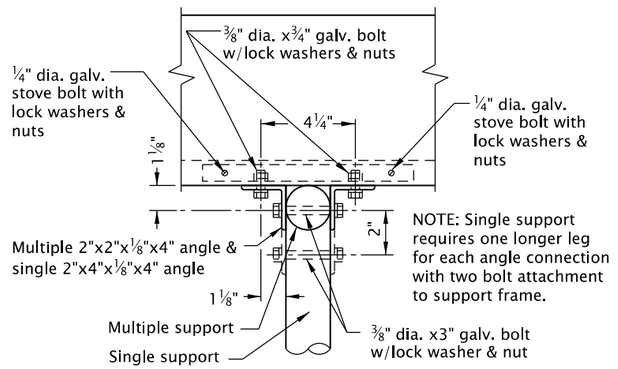


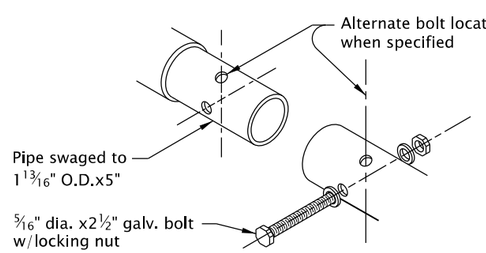
TABLE A V-LOC POST ANCHOR USE CHART		
MAILBOX LOCATION	SINGLE SUPPORT (ft)	MULTIPLE SUPPORT (ft)
Through new or existing A.C.	2'-0"	2'-0"
Through well consolidated material	2'-0" *	2'-6"
Through new rock surfacing & subgrade	2'-6"	2'-0" conc. collar
Through new rock surfacing & subgrade, subject to saturated soil or freeze/thaw conditions.	2'-6" 2'-0"/ ** conc. collar	2'-6"/ conc. collar

* Use 2'-6" with size 2 mailbox.
** Use if conditions are severe.

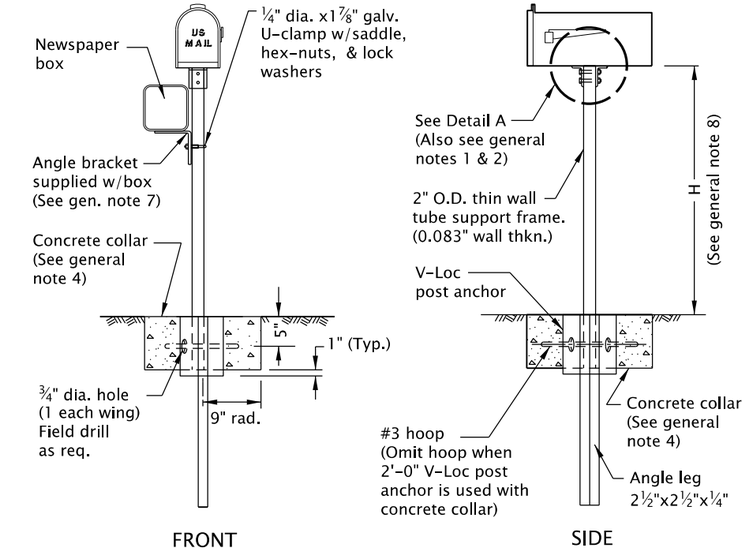
POST MOUNTING SOCKET



DETAIL A



DETAIL B



SINGLE SUPPORT

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Angle connections to be parallel to traffic flow for Size 2 mailbox mounted on single post.
2. All holes in the tube support frame are to be predrilled by the manufacturer.
3. Size 2 mailbox mounted on a multiple support requires 2 each ⅜" dia. x⅝" galv. bolts with lock washers and nuts to attach the adaptor plate to the mounting bracket. The unit will then require 4 angle connections to attach to the formed tube support frame. See Detail A.
4. Provide concrete collar when any of the following conditions exist:
   a) when required in Table A
   b) when required by project plans
   c) as directed by the Engineer
   Concrete collar, when required, to be poured in place after V-Loc post anchor has been installed, level and plumb. Do not excavate below bottom of V-Loc post anchor. Care shall be taken that no concrete is placed within anchor.
5. Other proprietary products available as listed in ODOT's QPL.
6. For mailbox installation locations, see Std. Dwg. RD101 and project plans.
7. For Newspaper Box Mounting Detail, see Std. Dwg. RD101.
8. Mounting height (H) shall be from 41″ Min. to 45″ Max. (42" nominal), measured from vehicle driving surface.
9. See project plans for detail not shown.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX SUPPORT

2024

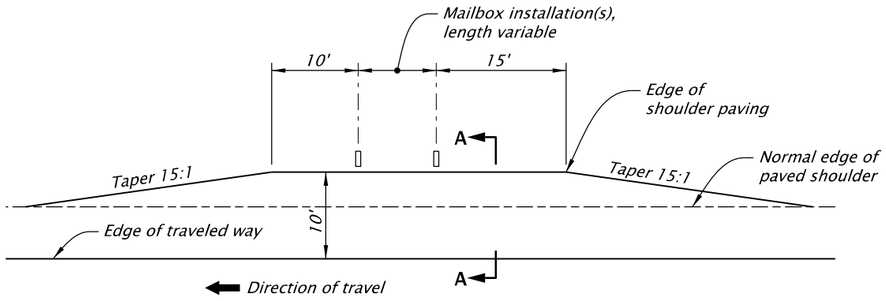
DATE	REVISION DESCRIPTION
12-2023	REVISED NOTES AND DETAILS

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **RD100**

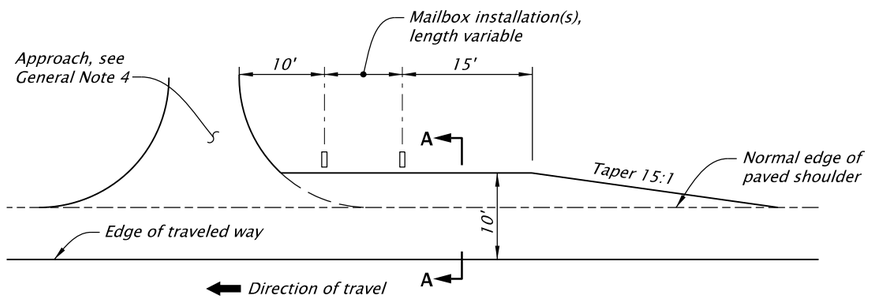
19-JAN-2024

RD100.dgn

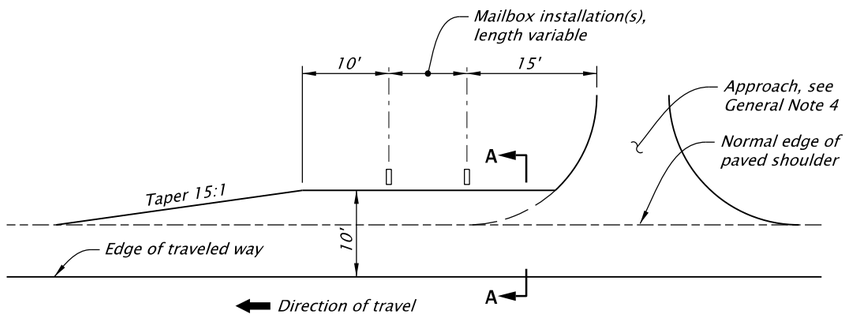
Effective Date: December 1, 2024 - May 31, 2025



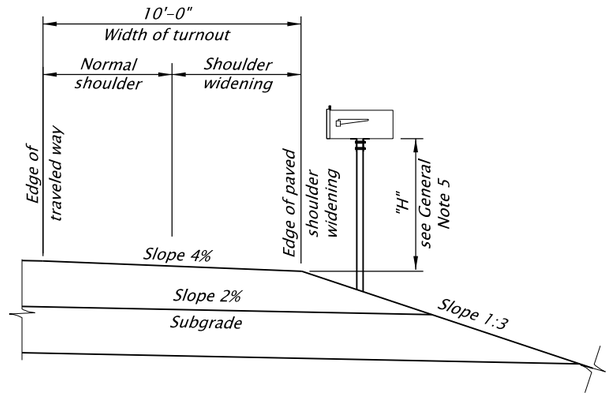
MAILBOX SERVICE TURNOUT



MAILBOX SERVICE TURNOUT BEFORE APPROACH

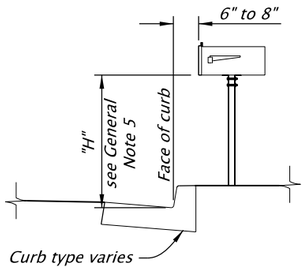


MAILBOX SERVICE TURNOUT AFTER APPROACH

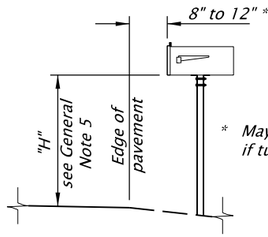


INSTALLATION AT MAILBOX TURNOUT

SECTION A-A

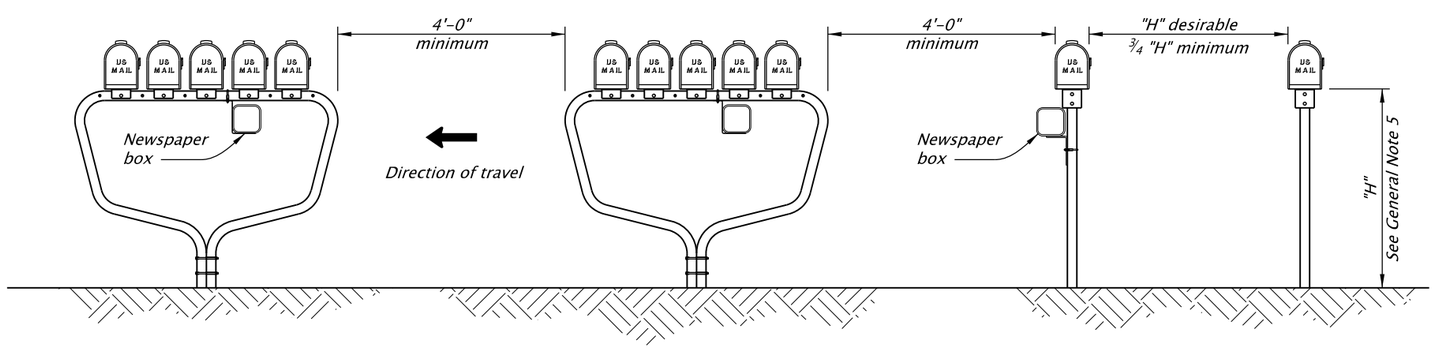


CURBED SECTION



NON-CURBED SECTION

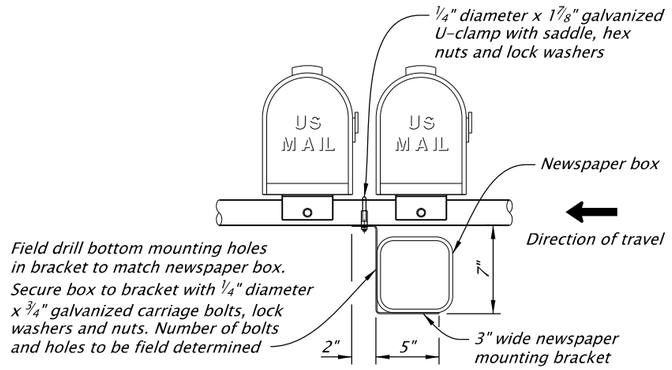
TYPICAL MAILBOX INSTALLATIONS



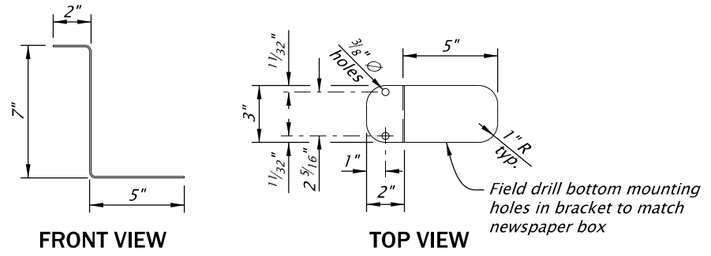
TYPICAL MAILBOX SUPPORT SPACING

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *All holes in the tube support frame are to be predrilled by the manufacturer.*
2. *Other proprietary products available as listed in ODOT's QPL.*
3. *For mailbox support details, see Std. Dwg. RD100.*
4. *For approach details, see Std. Dwg. RD715.*
5. *Mounting height ("H") shall be from 41 inches minimum to 45 inches maximum (42 inches nominal), measured from vehicle driving surface.*
6. *See project plans for details not shown.*



NEWSPAPER BOX MOUNTING DETAIL



FRONT VIEW

TOP VIEW

NEWSPAPER BOX MOUNTING BRACKET

(14 ga.)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

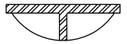
MAILBOX INSTALLATION

2024

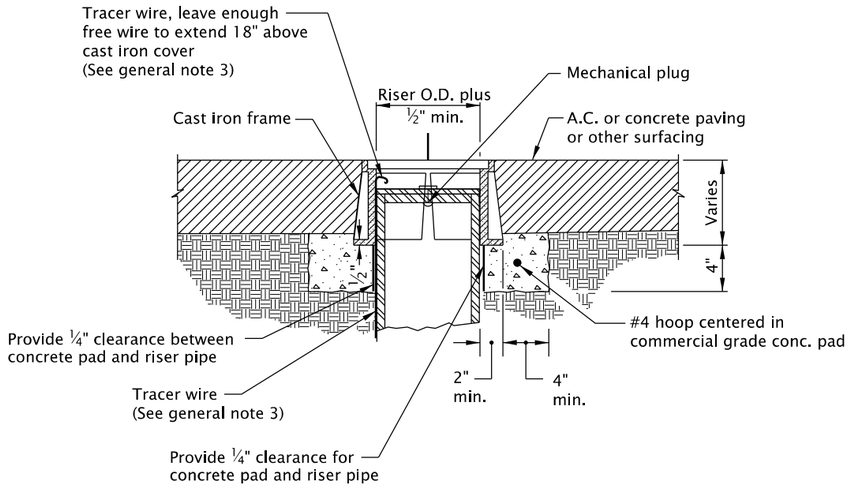
DATE	REVISION DESCRIPTION
01-2024	REVISED NOTES AND DETAILS, UPDATED DRAWING CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **RD101**

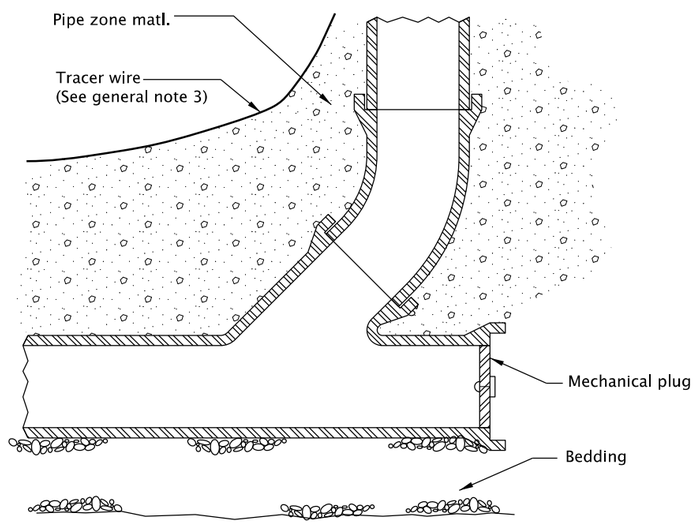
Effective Date: December 1, 2024 - May 31, 2025



CAST IRON COVER



CAST IRON FRAME



CLEANOUT

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SANITARY CLEANOUT

2024

DATE	REVISION DESCRIPTION

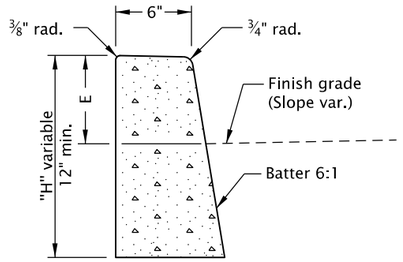
CALC. BOOK NO. N/A | SDR DATE 14-JUL-2014 | **RD362**

Effective Date: December 1, 2024 – May 31, 2025

RD362.dgn 20-JUL-2020

20-JUL-2020

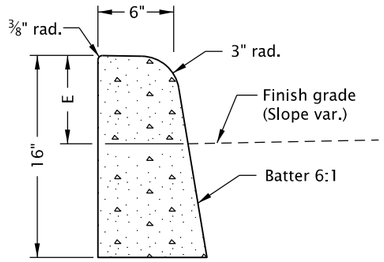
RD700.dgn



O.D.O.T. & City of Portland Standard "H"=16"

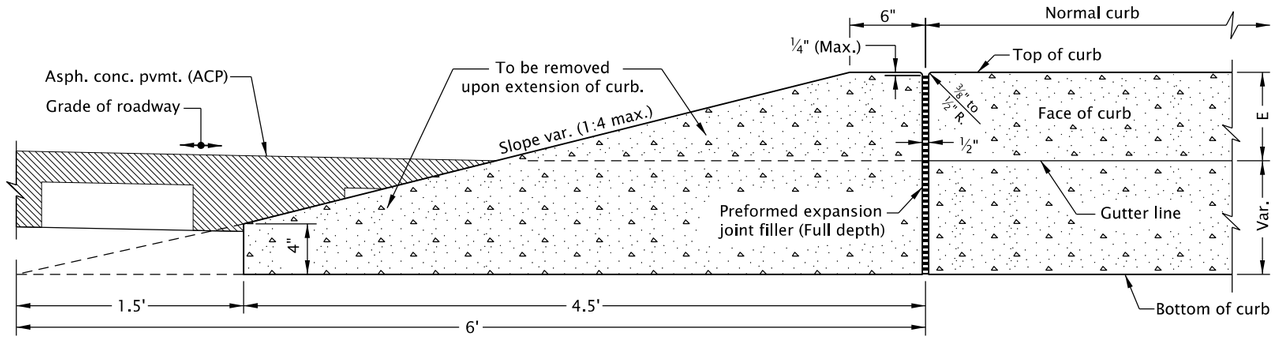
STANDARD CURB

(See general note 11)

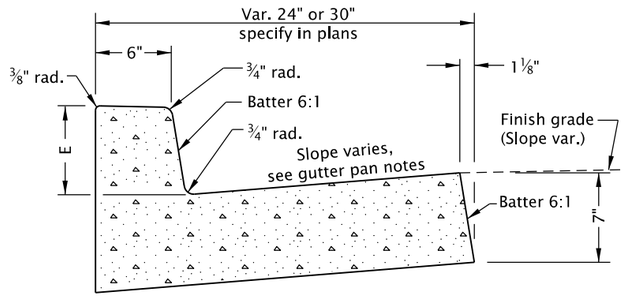


MOUNTABLE CURB

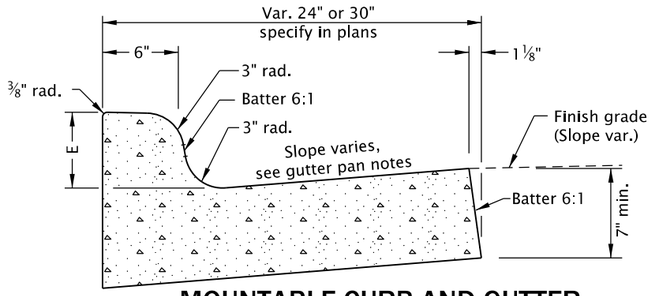
(See general note 11)



CURB ENDING DETAIL



CURB AND GUTTER



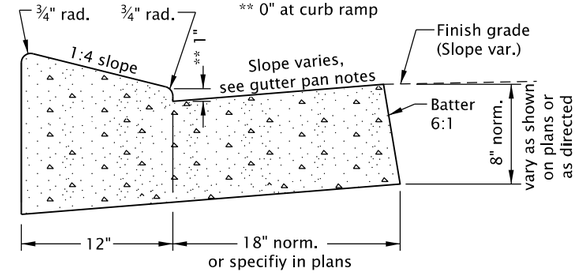
MOUNTABLE CURB AND GUTTER

GUTTER PAN NOTES:

Slope 5.0% normal.

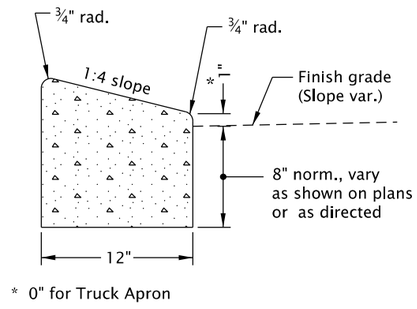
Slope 4.0% max. at curb ramps.

Vary slope as reqd. for drainage. Vary where shown on plans, and allowed by jurisdiction.



LOW PROFILE MOUNTABLE CURB AND GUTTER

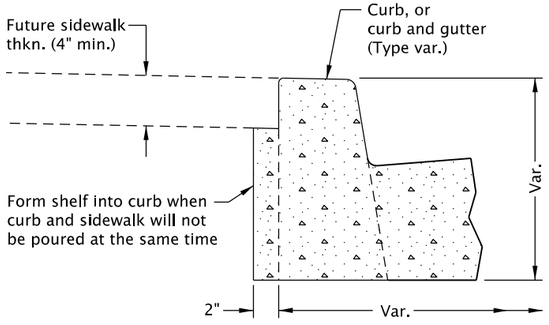
(Where shown on plans)



* 0" for Truck Apron

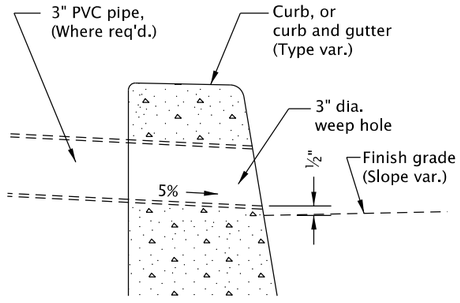
LOW PROFILE MOUNTABLE CURB

(See general note 11)



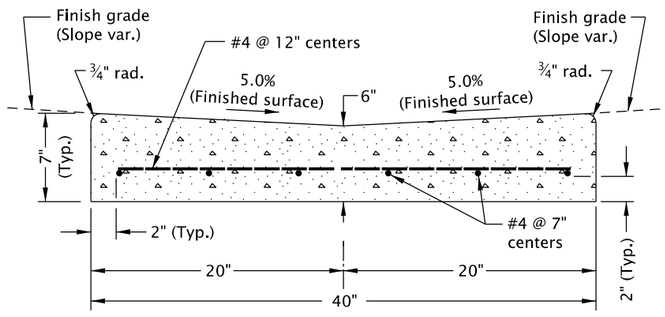
MODIFICATION FOR KEYWAY

(Where shown on plans)



WEEP HOLE DETAIL

(Where shown on plans, and allowed by jurisdiction)



VALLEY GUTTER

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb exposure "E" = 6" to 9", as measured vertically from flowline to highest point on curb. Vary as shown on plans or as directed. O.D.O.T standard "E"=7".
2. Const. curb expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. curb contraction joints at 15' maximum spacing, and at ends of each inlet and curb ramp.
4. Transitions shall be used to connect curbs of different exposures "E". ("E" Is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
5. Tops of all curbs shall slope toward the roadway at 1.5% max. (Max. 2.0% finished surface slope), unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
7. Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb & sidewalk, see Std. Dwgs. RD720 & RD721.
9. For drainage curbs, see Std. Dwg. RD701.
10. For curb ramp details, see Std. Dwgs. RD900 series.
11. On or along state highways, curb and gutter is required at curb ramp.

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

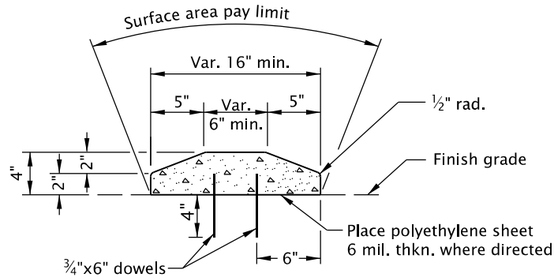
CURBS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD700**

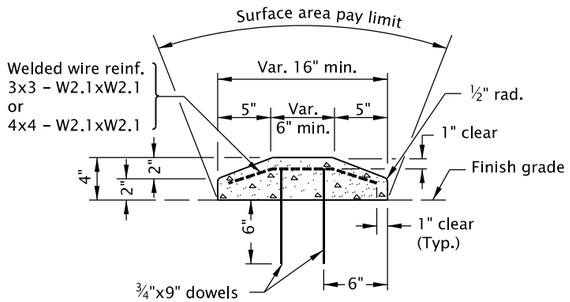
Effective Date: December 1, 2024 - May 31, 2025



SECTION B-B

TYPE A

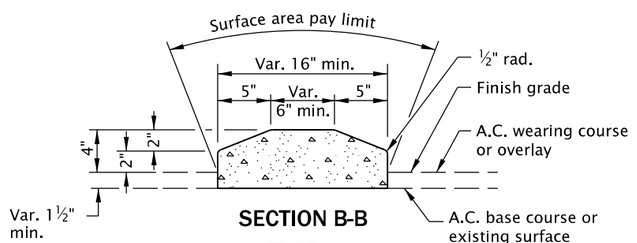
TRAFFIC SEPARATOR ON P.C. CONC. PVMT.



SECTION B-B

TYPE B

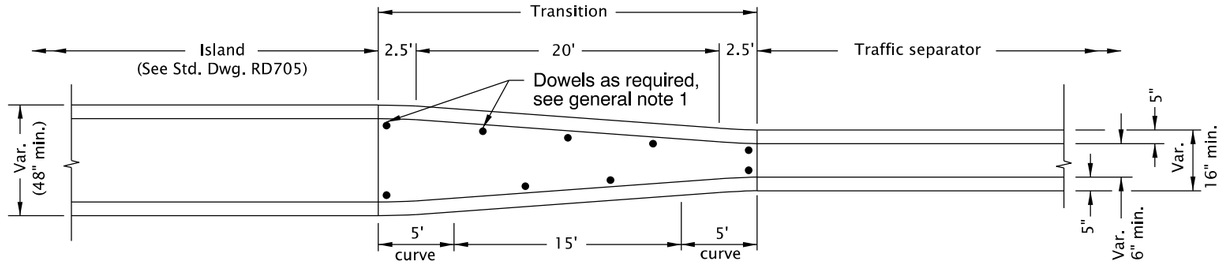
TRAFFIC SEPARATOR ON EXTG. A.C. PVMT.



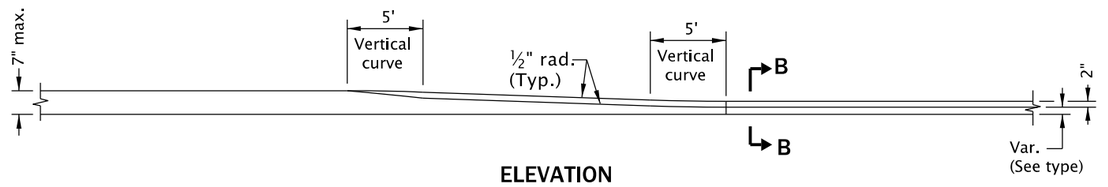
SECTION B-B

TYPE C

TRAFFIC SEPARATOR ON NEW A.C. PVMT. OR ON EXISTING A.C. PVMT. WITH OVERLAY

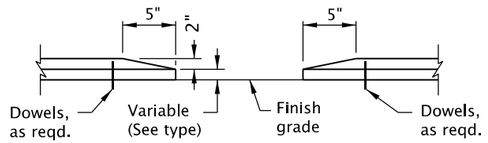


PLAN

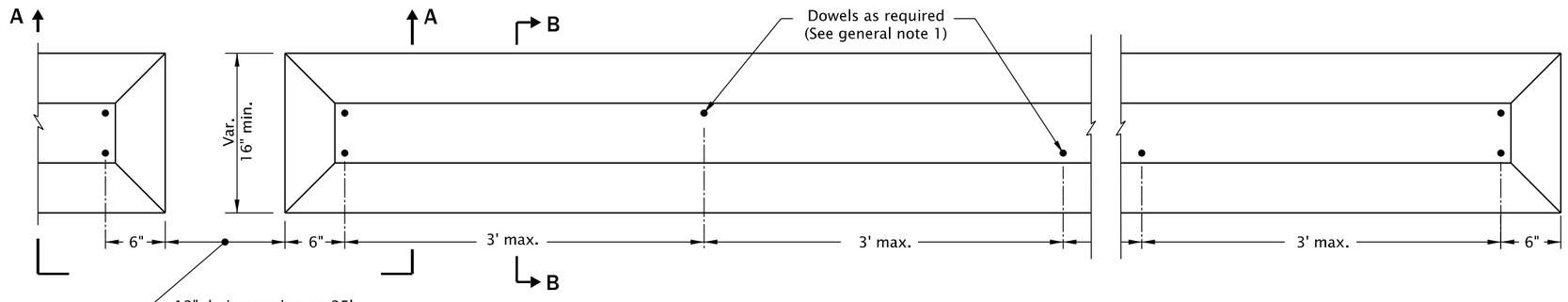


ELEVATION

TRANSITION FROM ISLAND TO TRAFFIC SEPARATOR



SECTION A-A



CONCRETE TRAFFIC SEPARATOR

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. In transitions conform to dowel plan per Std. Dwg. RD705.
2. Standard slope face is shown. Vary as shown on typical section or as directed.
3. Transverse joints in conc. traffic separators and transitions to match joints in conc. pvmt. and to be of same type (Omit dowels in expansion joints).
4. Set joint spacing 200' max. for expansion and 15' max. for contraction.
5. Place preformed filler along one side of conc. transitions in conc. pvmt. and around all curved ends.
6. Dowels shall be ¾" dia. with length as shown. In new conc. pvmt. set dowels before conc. hardens. In extg. conc. pvmt. drill holes 1½" dia. and grout dowels in. In A.C. pvmt. drive dowels.
7. Site conditions normally require a project specific drain opening spacing design, which considers roadway conditions (sheet flow limits, cross slope, superelevation, profile, pavement type, lane and shoulder widths, etc.).

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TRAFFIC SEPARATORS AND TRANSITIONS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 30-NOV-2009 | **RD706**

Effective Date: December 1, 2024 – May 31, 2025

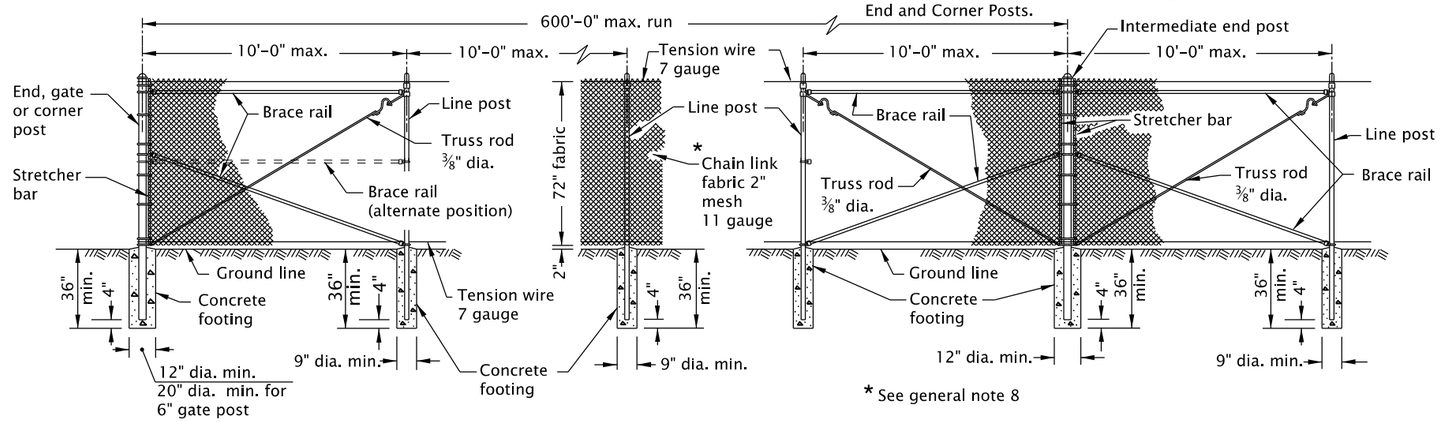
20-JUL-2020

RD706.dgn

20-JUL-2020

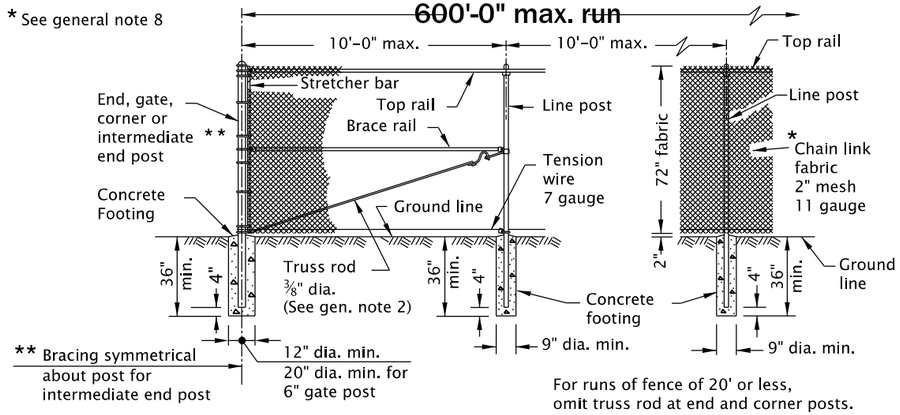
RD815.dgn

TYPE CL-6



* See general note 8

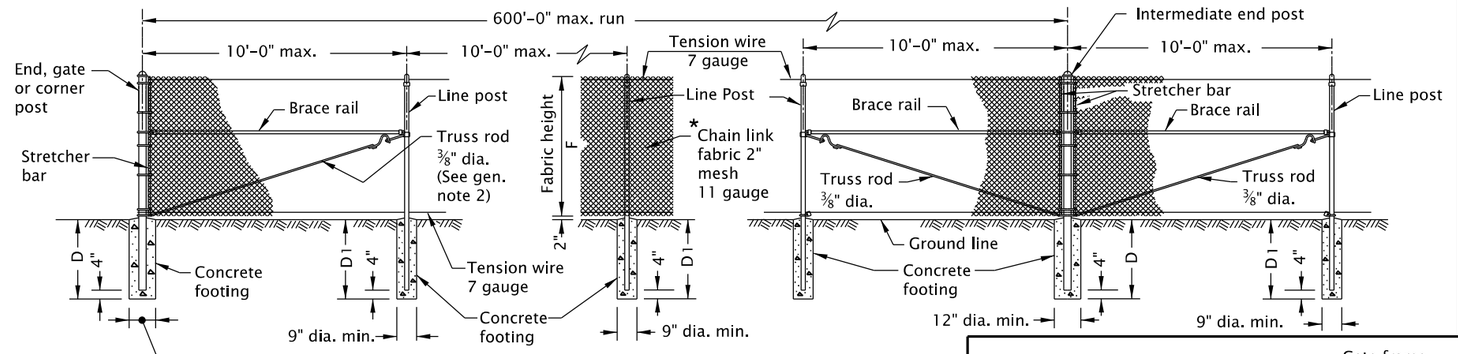
TYPE CL-6R
600'-0" max. run



** Bracing symmetrical about post for intermediate end post

For runs of fence of 20' or less, omit truss rod at end and corner posts.

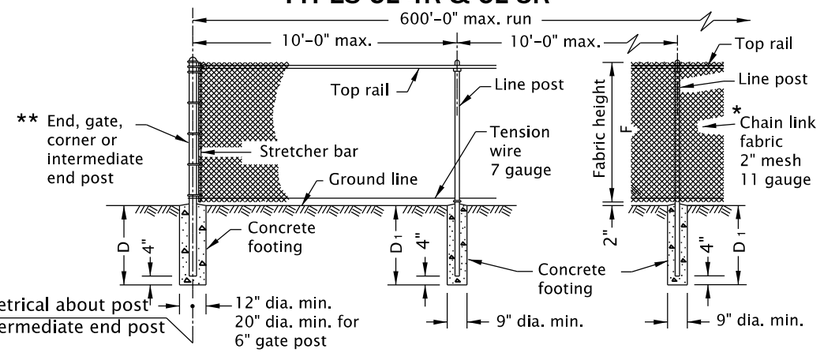
TYPES CL-4 & CL-5



* See general note 8

TYPE	D min. (in)	D1 min. (in)	F nom. (in)
CL-4	30	24	48
CL-5	36	36	60

TYPES CL-4R & CL-5R



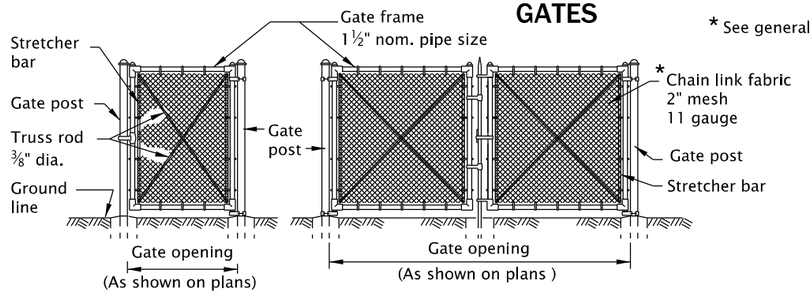
** Symmetrical about post for intermediate end post

* See general note 8

TYPE	D min. (in)	D1 min. (in)	F nom. (in)
CL-4R	30	24	48
CL-5R	36	36	60

For runs of fence of 20' or less, omit truss rod at end and corner posts.

GATES



* See general note 8

TABLE 1

TYPE	MEMBER: BRACE AND TOP RAILS TUBULAR Fence Industry (in)	BRACE AND TOP RAILS TUBULAR Nom. Dia. (in)	LINE POSTS TUBULAR Fence Industry (in)	LINE POSTS TUBULAR Nom. Dia. (in)	LINE POSTS H-SECTION Size (in)	LINE POSTS H-SECTION Wt. lb/ft	END, CORNER & INTERMEDIATE END POST TUBULAR Fence Industry (in)	END, CORNER & INTERMEDIATE END POST TUBULAR Nom. Dia. (in)	GATE OPENING (ft) SINGLE GATE	GATE OPENING (ft) DOUBLE GATE	GATE POSTS TUBULAR Fence Industry (in)	GATE POSTS TUBULAR Nom. Dia. (in)
STEEL CL-4 & CL-4R CL-5 & CL-5R	1⅝	1¼	1⅞	1½	1⅞ x 1⅝	2.72	2⅜	2	Up thru 6	Up thru 12	2⅞	2½
STEEL CL-6 & CL-6R	1⅝	1¼	2⅜	2	2¼ x 2	4.10	2⅞	2½	7 thru 13	13 thru 26	4	3½
									14 thru 18	27 thru 36	6⅝	6

NOTE: For CL-6, CL-6R, CL-8, CL-8R, CL-10 & CL-10R, the hardware is minimum and does not include slat wind loading.

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Do not use top rail where fence can be struck by an errant vehicle.
2. Fittings shown are illustrative of use and not specific as to design.
3. Gate posts on each side of a gate opening to be the same size. At a double gate installation with unequal width gates, size of both posts to be as indicated for a single gate installation of the wider gate width.
4. For cross sectional dimensions of members, see Table 1.
5. Posts and rails with sections not shown that meet the requirements of AASHTO M181 are acceptable alternates. See ODOT's QPL for acceptable alternates.
6. All concrete shall be commercial grade concrete.
7. All chain link fabric top and bottom selvage shall be knuckled finish.
8. Chain link fabric for the fence to be installed with pickets shall be 9 gauge wire woven in 3½" by 5½" diamond mesh.
9. See project plans for details not shown.
10. Add fence grounding as required.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

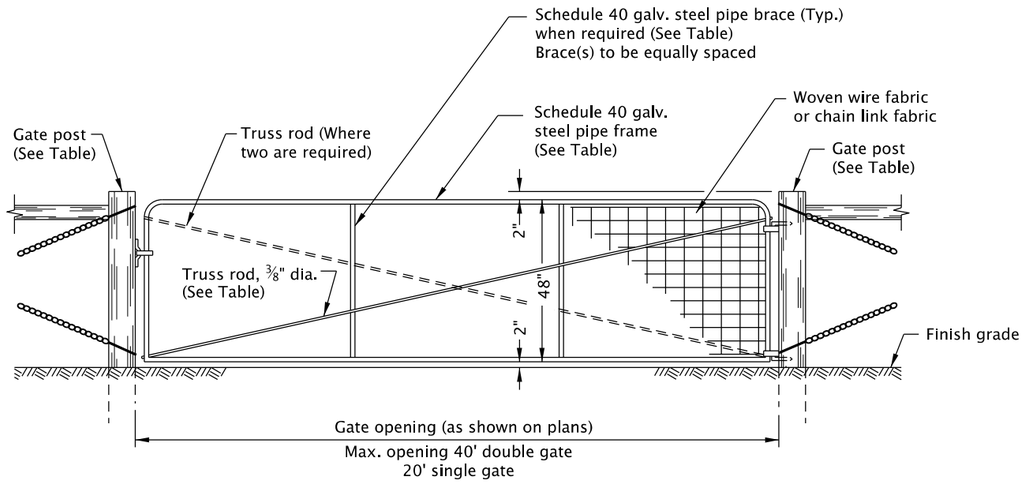
CHAIN LINK FENCE

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD815**

Effective Date: December 1, 2024 - May 31, 2025



GATE COMPONENTS								GATE POSTS ① ②					
								WOOD				STEEL	
GATE OPENING (ft)		SCHEDULE 40 GALV. STEEL PIPE FRAME		SCHEDULE 40 GALV. STEEL PIPE BRACE			TRUSS RODS	* ROUND			SQUARE	SCHEDULE 40 GALV. STEEL PIPE	
								DIA. OF SMALL END (in)			NOM. SIZE (in)	NOM. DIA. (in)	MIN. WT. (lb/ft)
SINGLE GATE	DOUBLE GATE	NOM. DIA. (in)	MIN. WT. (lb/ft)	NUMBER	NOM. DIA. (in)	MIN. WT. (lb/ft)		Min.	Max.	Min. Avg.			
UP thru 6	UP thru 12	1	1.68	–	–	–	–	5	7	6	6x6	2½	5.79
7 thru 11	13 thru 22	1¼	2.27	1	1	1.68	1	5	7	6	6x6	3½	9.11
12 thru 16	23 thru 32	1½	2.72	2	1¼	2.27	2	7	9	8	8x8	6	18.97
17 thru 20	33 thru 40	2	3.65	2	1¼	2.27	2	9	11	10	10x10	6	18.97

① Gate posts on each side of a gate opening to be the same size.
At a double gate installation with unequal width gates, size of both posts to be as indicated for single gate installation of the wider gate width.

② For length, setting and bracing details see end posts, Std. Dwg. RD810.

* Max. taper 1" in 4'

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Gates shown are for use with Fence Types 1, 1-5W and 2.
2. See Std. Dwg. RD810 for details not shown.
3. See project plans for details not shown.
4. Add fence grounding as required.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

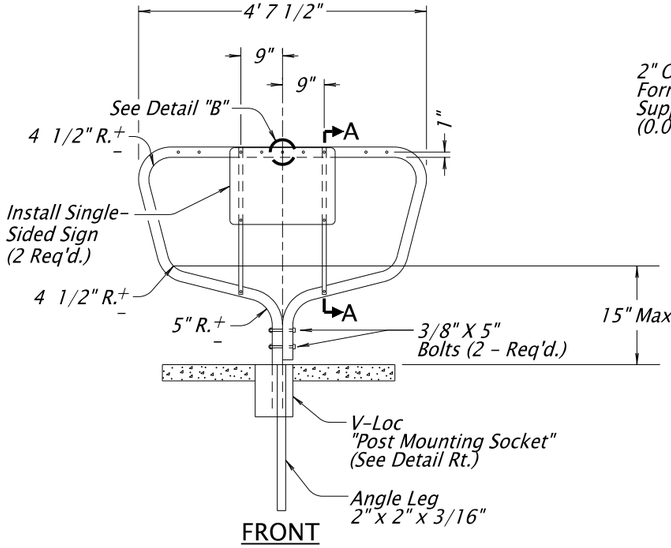
FENCE GATES

2024

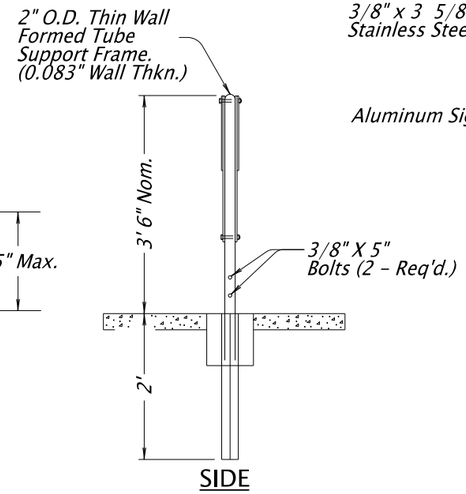
DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD820**

Effective Date: December 1, 2024 - May 31, 2025

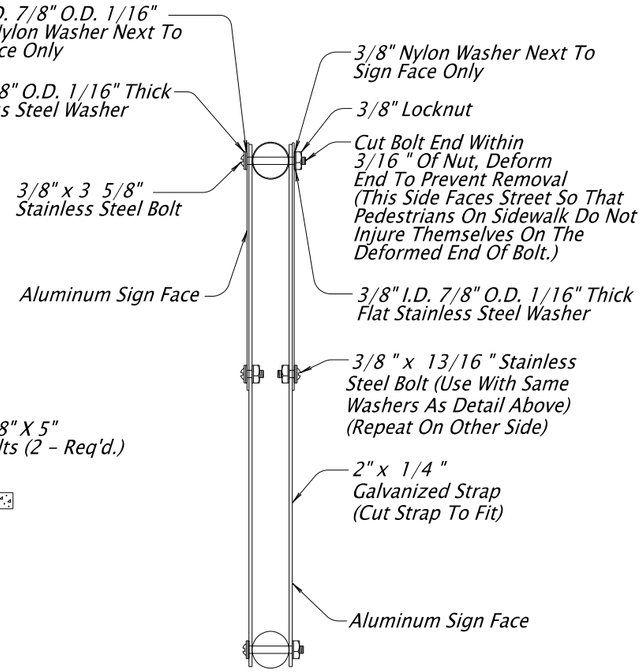


FRONT

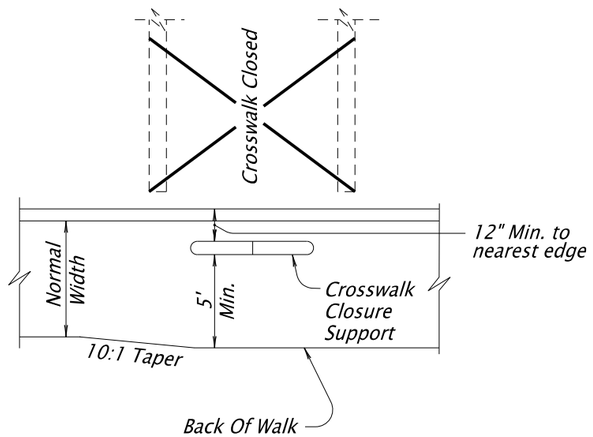


SIDE

CROSSWALK CLOSURE SUPPORT DETAIL



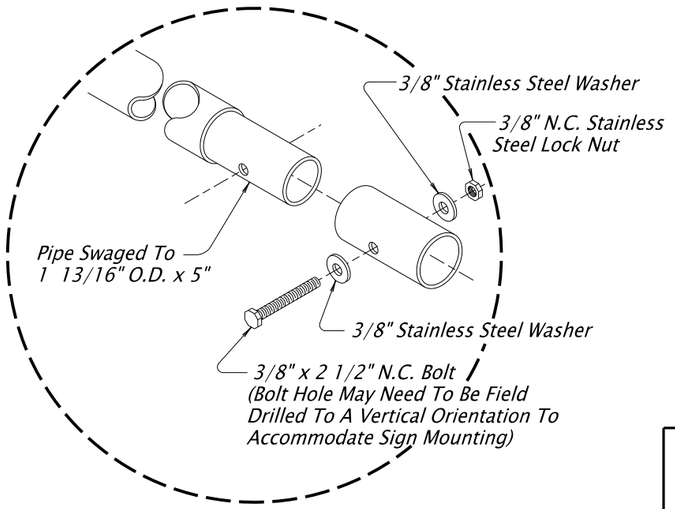
SECTION A-A



Align support perpendicular to the closed unmarked crosswalk or as shown in plan.

See RD913, RD920 and RD932 for additional closure support placement details.

PLAN VIEW



DETAIL "B"

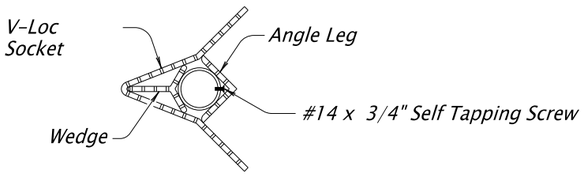
GENERAL NOTES:

1. All Holes In The Tube Support Frame To Be Predrilled By The Manufacturer. (1/32" Larger Than Mounting Bolt)
2. Pipe Swaged By The Manufacturer.

SIGN DETAIL

OR22-7
24" x 18"

Drill 3/8" Dia. Bolt Hole At Each Corner Where Needed.



POST MOUNTING SOCKET

For Additional Details See Standard Drg. No. RD100

NOTE:

Care Shall Be Taken That No Concrete Is Placed Within Mounting Socket.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CROSSWALK CLOSURE DETAIL

2024

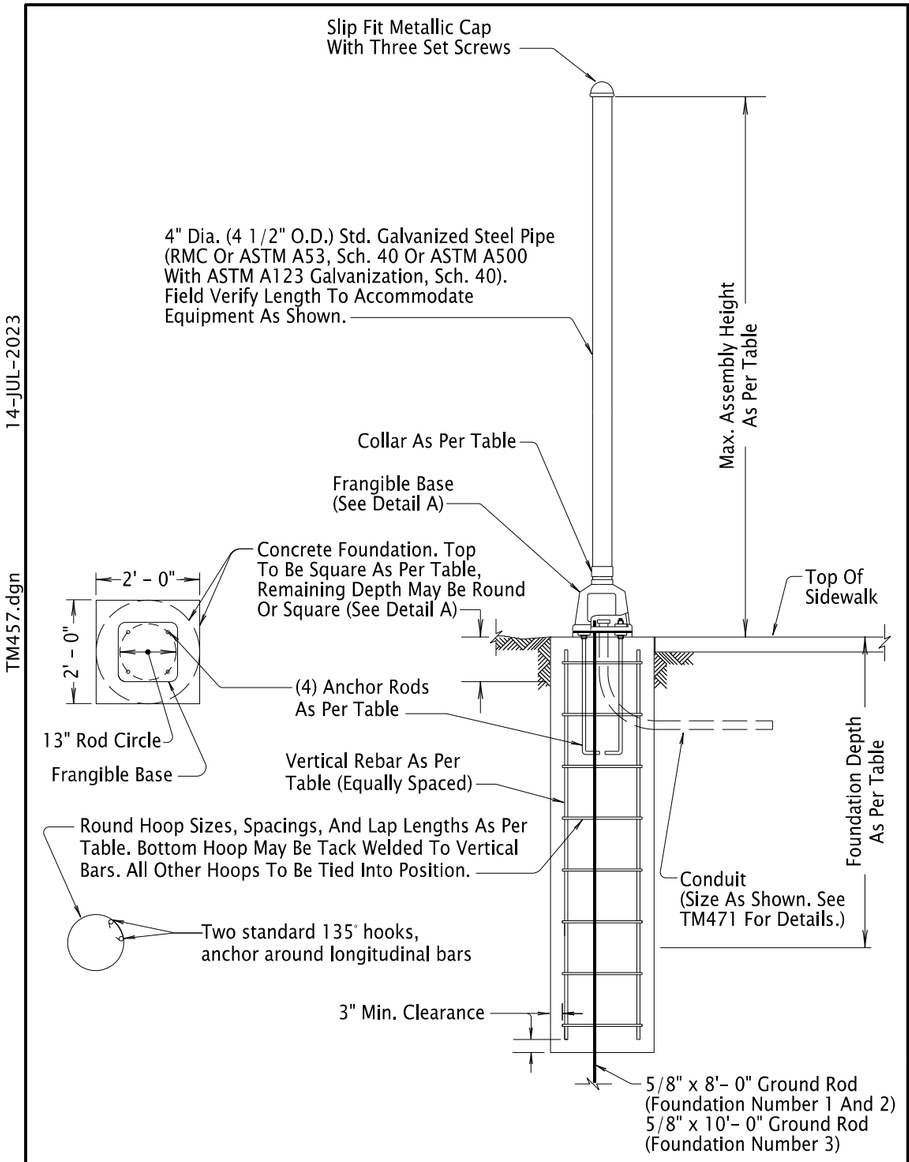
DATE	REVISION DESCRIPTION
07/2024	Amended Plan View and Crosswalk Closure Support Detail

CALC. BOOK NO. N/A | SDR DATE 9-JUL-2024 | **TM240**

Effective Date: December 1, 2024 - May 31, 2025

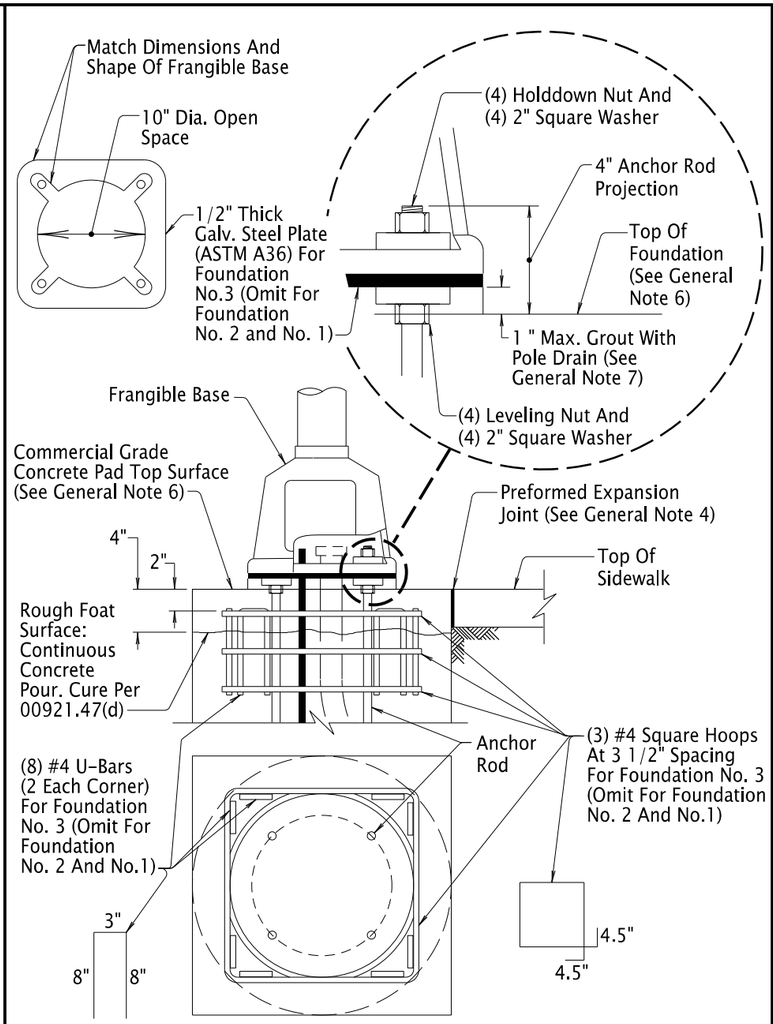
14-JUL-2023

TM457.dgn



Pedestal Foundation Number	Max. Assembly Height	Foundation Depth	Depth of Square Foundation	Anchor Rods (ASTM F 1554 Grade 36)	Reinforcing Steel			Collar
					Vertical Rebar	Hoop Size & Spacing	Hoop Lap Length	
1	6' - 0"	2' - 0"	4"	3/4" x 18" x 4" (6" Thread)	N/A	N/A	N/A	N/A
2	10' - 0"	3' - 0"	4"					
3	20' - 6"	8' - 0"	12"	1" x 36" x 4" (6" Thread)	8-#6	#4-12"	6" with 2 hooks	Req'd

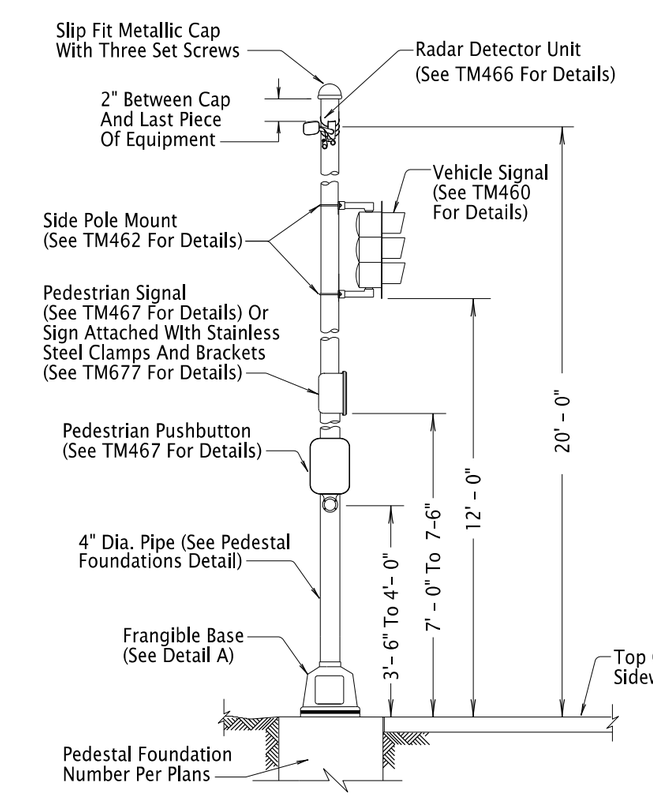
PEDESTAL FOUNDATIONS



DETAIL A - FRANGIBLE BASE

General Notes:

1. All Bolts, Nuts And Washers To Conform To 02560.20 And Be Galvanized Steel According To 02560.40 Unless Noted Otherwise.
2. All Anchor Rods To Be Galvanized Steel Conforming To 02560.30.
3. All Pole Entrances Containing Wiring To Be Smooth.
4. Install 1/4" Thick Preformed Expansion Joint Filler Around Footing In Sidewalk Areas.
5. The Entire Foundation To Be Located On A Single Plane With Less Than 2% Slope. The Flat Edge(s) Of The Foundation May Be Adjacent To The Turn Space, Back Of Walk, Or A Curb Ramp Grade Break Line.
6. Install Commercial Grade Concrete Pad Above Rough Float Surface With Top Surface Matching Sidewalk Grade And Less Than 1/4 " Vertical Exposure From Adjacent Grade. Clean Rough Float Surface Prior To Placing Fresh Concrete By Removing All Scum, Laitance, Loose Gravel, And Sediment. Pour During Sidewalk Installation After Installing Pipe And Appurtenances.
7. Non-Shrink High Early Strength Grout (Non-Ferrous) with 3/4" Diameter Pole Drain And A Minimum Strength of 5000 psi. Do Not Use Footing Concrete.



Notes:

1. Equipment Shown In the Assembly Detail Is An Example Of The Equipment That May Be Mounted. Install Equipment As Shown.
2. See TM492 For Ramp Meter Pedestal Mounting Details.
3. See TM493 For RRFB Pedestal Mounting Details.

TRAFFIC SIGNAL PEDESTAL ASSEMBLY

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PEDESTAL FOUNDATION AND TRAFFIC SIGNAL ASSEMBLY

2024

DATE	REVISION DESCRIPTION
01-2021	UPDATED ALL ANCHOR ROD DETAILS, CORRECTED STD. DWG. REFERENCE
07-2022	COMPLETE REDESIGN OF FOUNDATION AND INSTALLATION PROCEDURE
07-2023	NOTE 5 - CHANGED TO 2% SLOPE. ADDED RMC AS PIPE OPTION. MINOR TEXT CHANGES FOR CLARITY.

CALC BOOK NO. N/A | SDR DATE 14-JUL-2023 | **TM457**

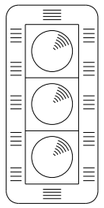
Effective Date: December 1, 2024 - May 31, 2025

12-JUL-2024

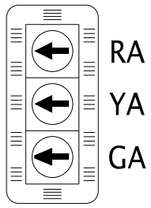
TM460.dgn

TYPE 1R
Red Flashing Beacon

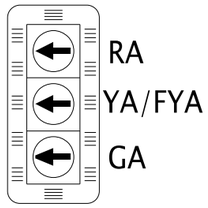
TYPE 1Y
Yellow Flashing Beacon



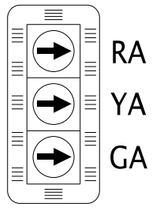
TYPE 2
Standard



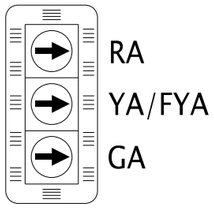
TYPE 3L
Protected Left Turn



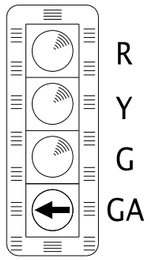
TYPE 3LCF
Protected / Permitted Left Turn



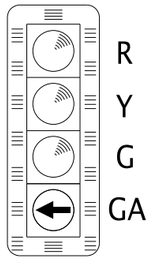
TYPE 3R
Protected Right Turn



TYPE 3RCF
Protected/Permitted Right Turn

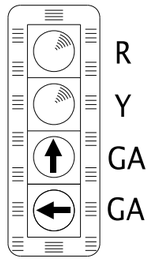


TYPE 4
Spilt Phase Only

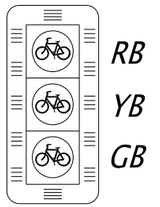


TYPE 7
Rail Preemption Only

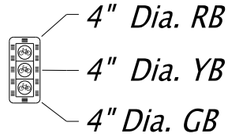
TYPE 8
Ramp Meter Only



TYPE 9
Split Phase Only



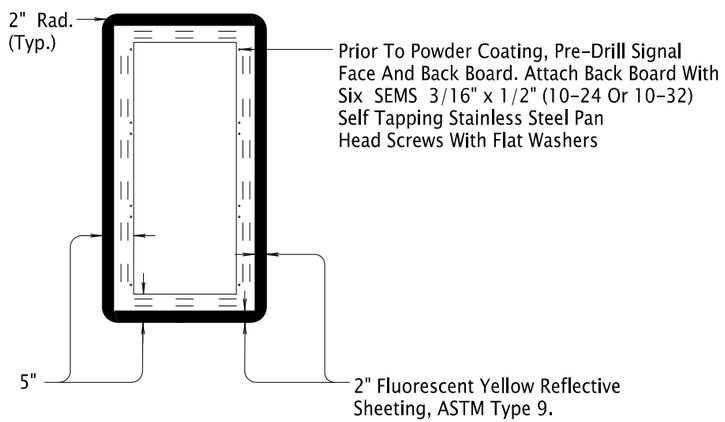
TYPE 12
Bike



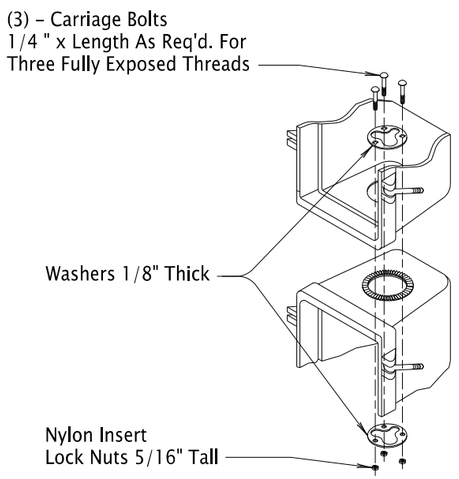
TYPE 12M
Mini Nearside Bike

Color Indications All Indications Are 12" Diameter Unless Otherwise Shown	
R	Red Circular Ball
Y	Yellow Circular Ball
G	Green Circular Ball
RA	Red Arrow
YA	Yellow Arrow
GA	Green Arrow
FYA	Flashing Yellow Arrow
FR	Flashing Red Circular Ball
FY	Flashing Yellow Circular Ball
RB	Red Bike Symbol
YB	Yellow Bike Symbol
GB	Green Bike Symbol

VEHICLE SIGNAL HEAD DESIGNATIONS AND LENS ARRANGEMENT



BACKBOARD



VEHICLE HEAD ASSEMBLY

General Notes:

1. All Screws, Bolts, Nuts And Washers Shall Be Type 304 Or 316 Stainless Steel Unless Noted Otherwise.
2. Bolts And Screws Shall Have Square Or Hex Heads Unless Otherwise Noted. Allen Head Fasteners Not Allowed.
3. Assemble The Heavy Duty Polycarbonate Vehicle Signal, Visor, And Backboard With Bolted Connections, Stainless Steel Reinforcing Strips And Stainless Steel Plates.
4. Apply Anti-Seize Compound On All Hardware.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

VEHICLE SIGNAL DETAILS

2024

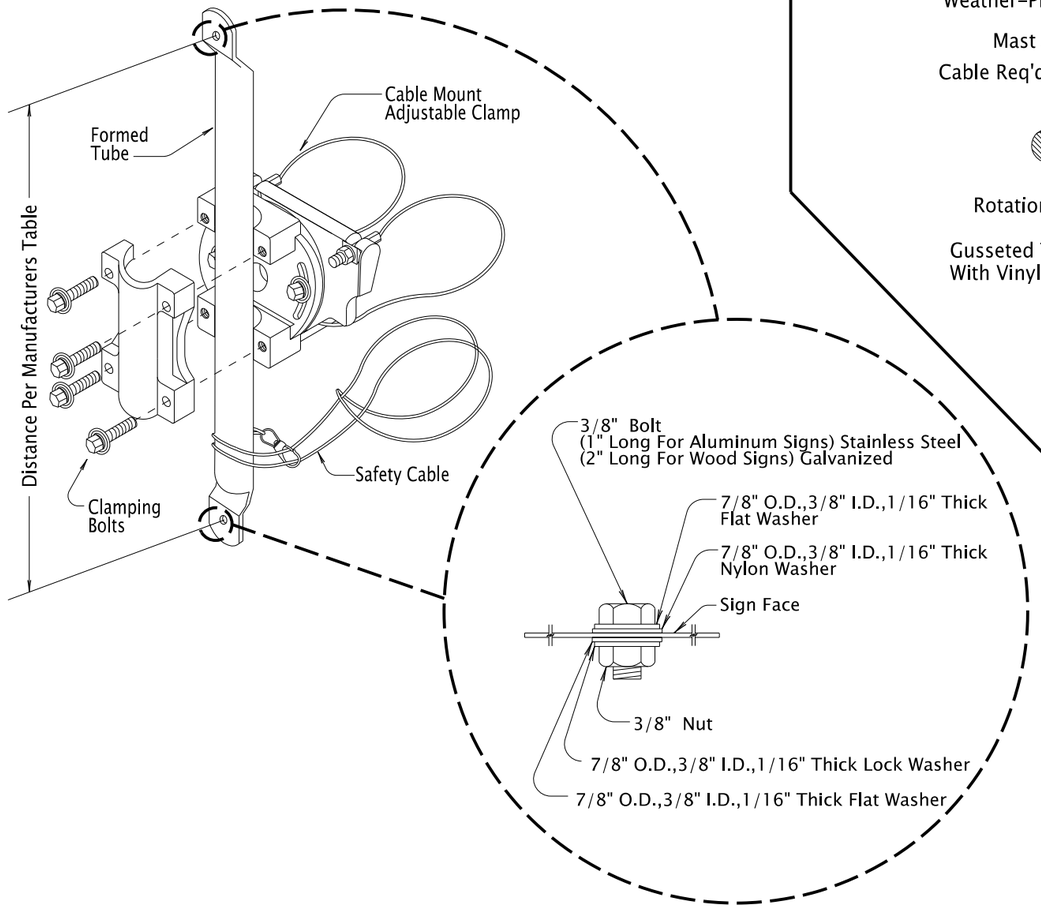
DATE	REVISION DESCRIPTION
01-2024	ADDED TYPE 12 AND 12M. REMOVED TYPE 3LBF, 5, 6L, AND 10.
07-2024	ADDED GENERAL NOTE 4

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM460**

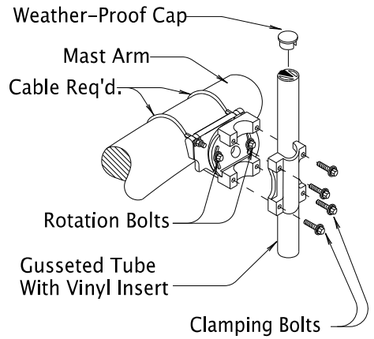
Effective Date: December 1, 2024 - May 31, 2025

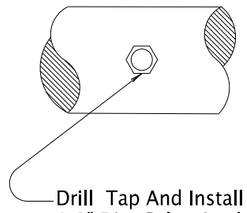
19-JAN-2024

TM462.dgn

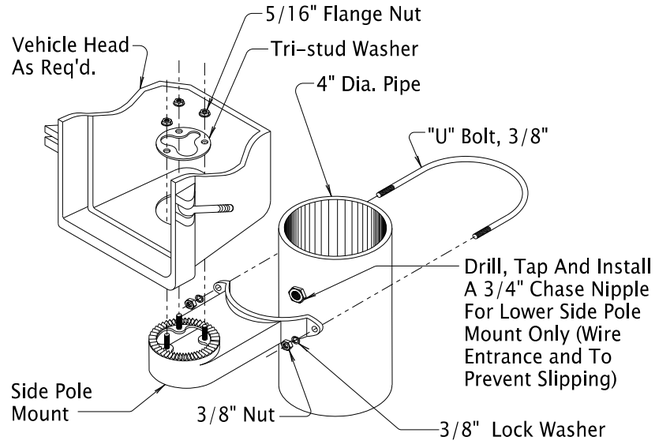


SIGN BRACKET (TYPE "B",MAST ARM/POLE INSTALLATION)



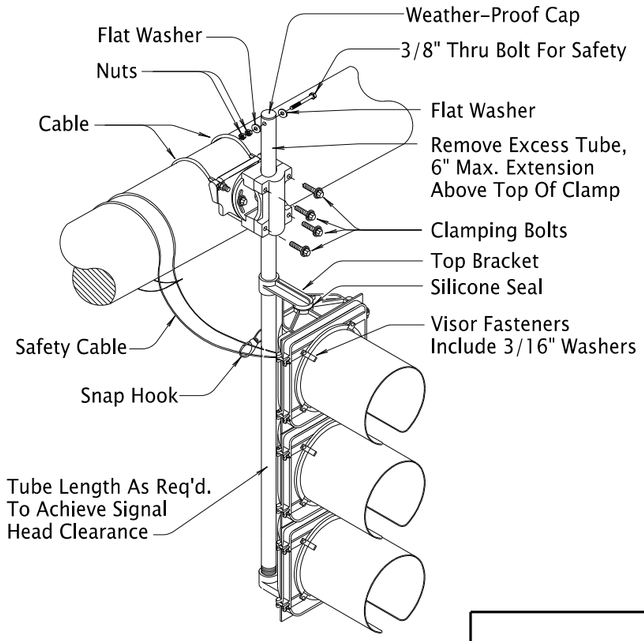


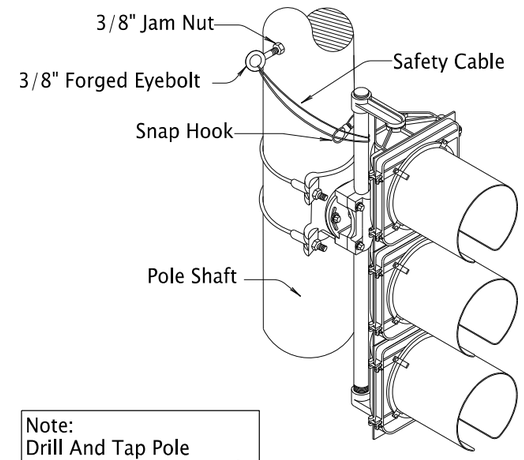
VEHICLE SIGNAL MAST ARM INSTALLATION



4" SIDE POLE MOUNT INSTALLATION

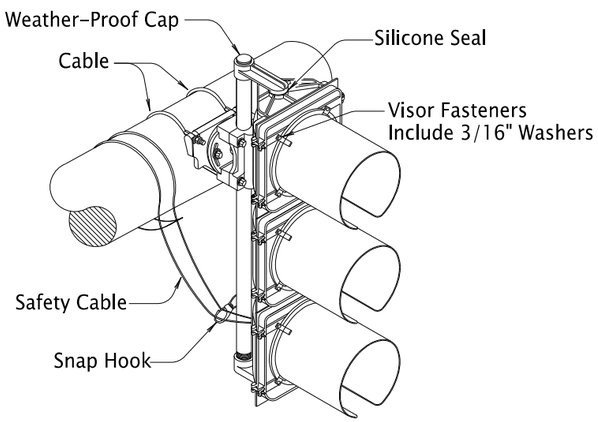
(For Mounting Signal Heads to Pedestal Pipe)





Note:
Drill And Tap Pole For 3/8" Forged Eye Bolt

POLE SHAFT INSTALLATION



MOUNTING VEHICLE SIGNAL BETWEEN BRACKET ARMS

NOTE:

This Detail Can Be Applied To Any Signal Head Configuration. If The Extension Between The Center Line Of The Mast Arm And The Top Bracket Exceeds 18" Consult Engineer For Guidance.

MOUNTING VEHICLE SIGNAL ABOVE BRACKET ARMS

General Notes:

1. All Screws, Bolts, Nuts And Washers Shall BeType 304 Or 316 Stainless Steel Unless Noted Otherwise.
2. Bolts And Screws Shall Have Square Or Hex Heads. Allen Head Fasteners Not Allowed.
3. Follow Manufacturers Recommendations For Installation.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

VEHICLE SIGNAL BRACKET & SIGN BRACKET (TYPE B) DETAILS

2024

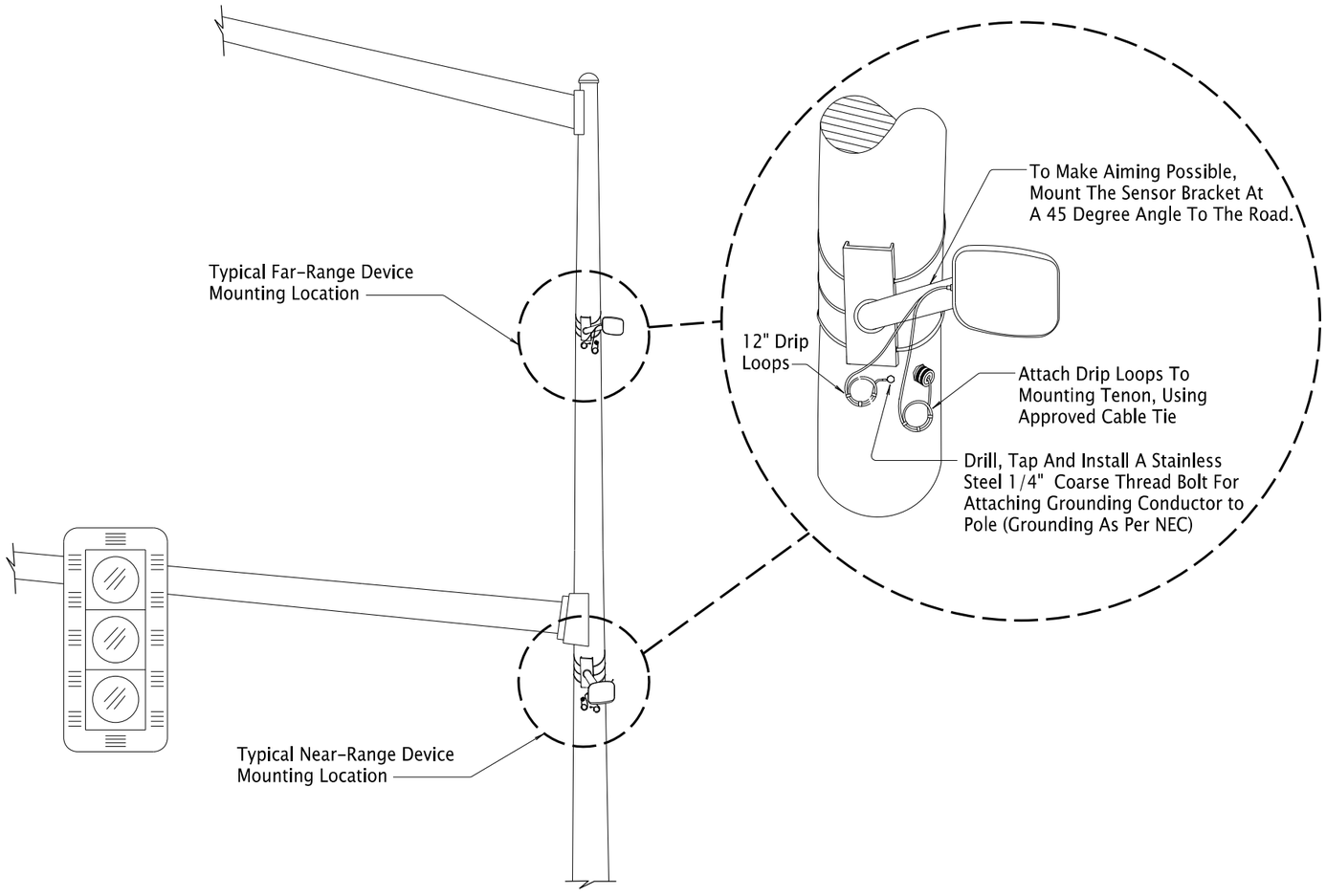
DATE	REVISION DESCRIPTION
01-2024	MINOR TEXT REVISION FOR CONSISTENCY

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **TM462**

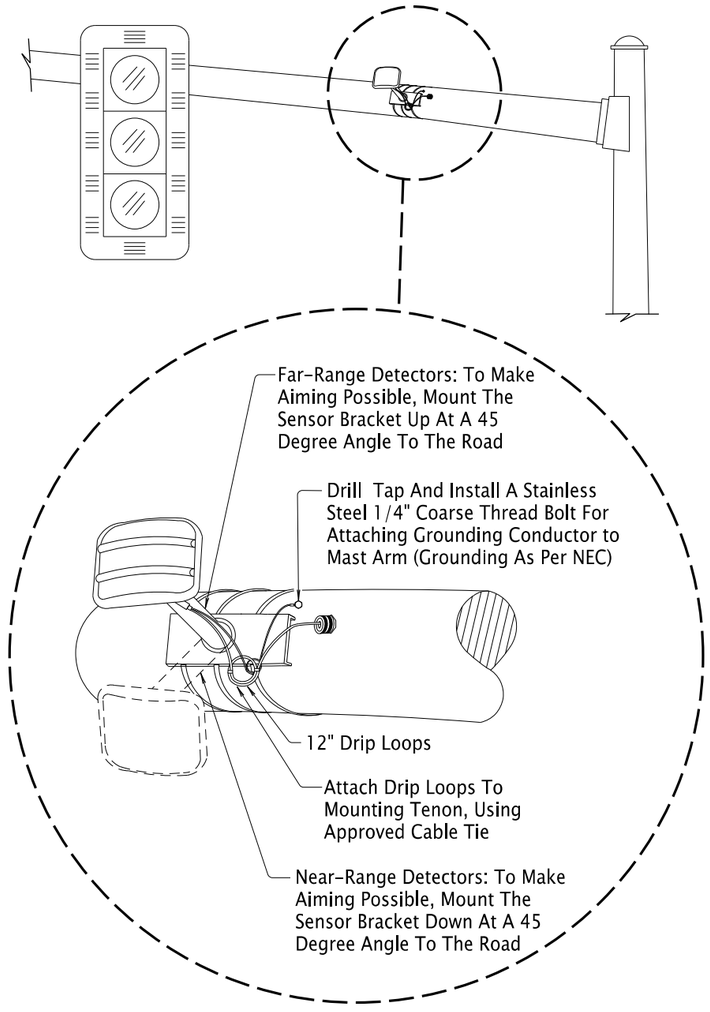
Effective Date: December 1, 2024 - May 31, 2025

12-JUL-2024

TM466.dgn



VERTICAL SIGNAL POLE MOUNT



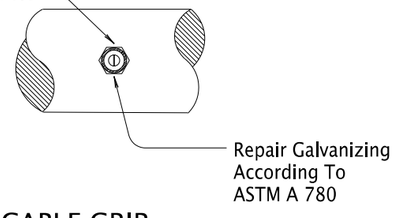
HORIZONTAL MAST ARM MOUNT

GENERAL NOTES:

1. All Bolts, Nuts And Washers Shall Be 304, Or 316 Stainless Steel Unless Noted Otherwise.

2. Mount Radar Detector Assembly As Per Manufacturers Recommendations.

Drill, Tap And Install A Galvanized Metallic Watertight Compression Entrance Fitting For Wiring Entrance From Radar Detector Into Mast Arm Or Pole



CABLE GRIP

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

RADAR MOUNTING DETAILS

2024

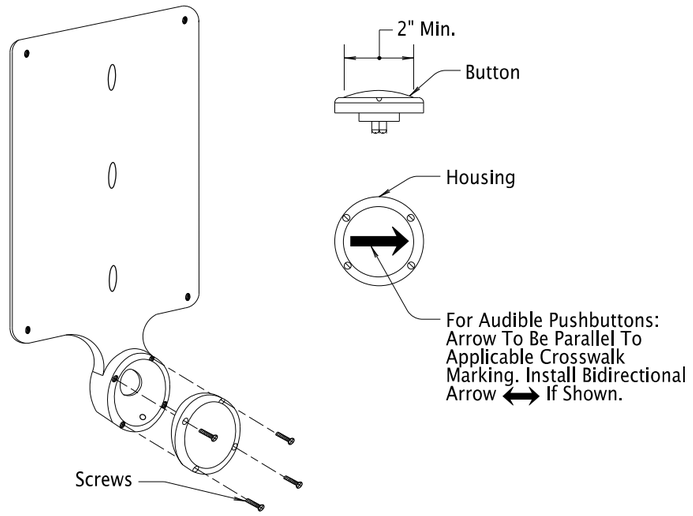
DATE	REVISION DESCRIPTION
01-2023	ADDED NEAR RANGE DETECTOR INFORMATION
07-2024	REVISED NAME OF EQUIPMENT PART FOR CONSISTENCY

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM466**

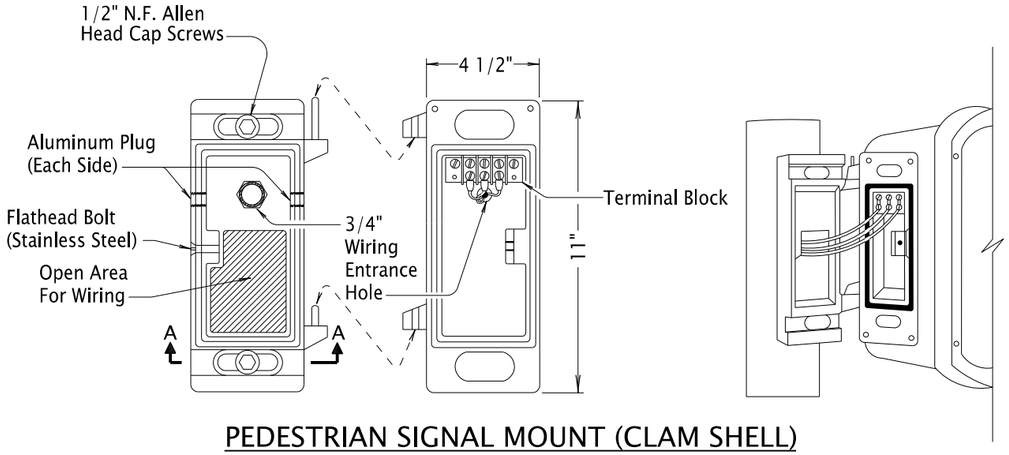
Effective Date: December 1, 2024 - May 31, 2025

12-JUL-2024

TM467.dgn



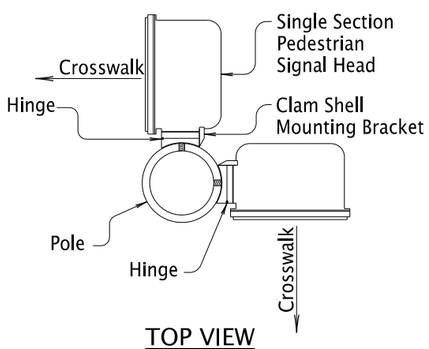
STANDARD PUSHBUTTON



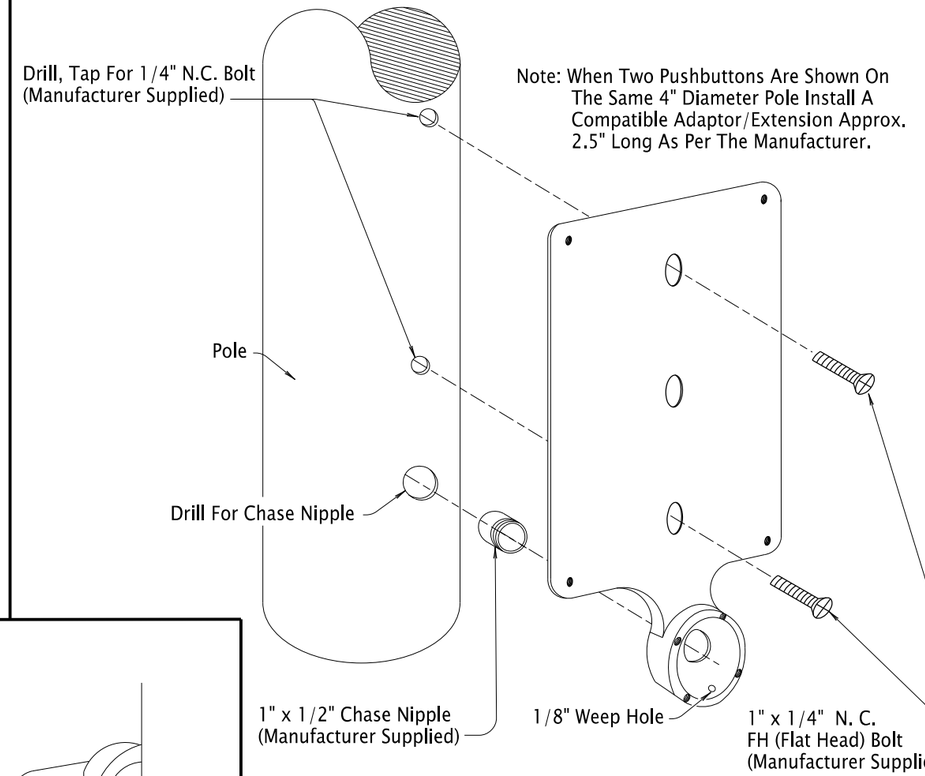
PEDESTRIAN SIGNAL MOUNT (CLAM SHELL)

NOTES:

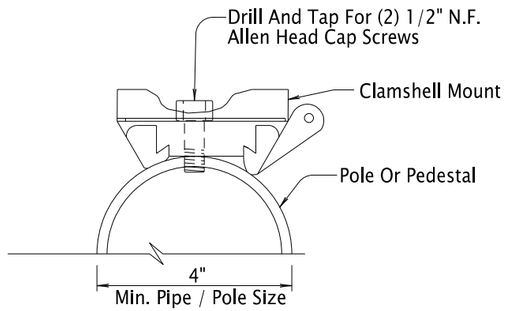
1. Where Two Heads Are Side Mounted On 4" Conduit, Proper Clearance To Be Maintained To Allow Legend To Be Fully Visible.
2. Clam Shells To Be Orientated So That The Heads Can Be Opened For Maintenance. (Verify Hinge Placement Of Clamshell).



TOP VIEW

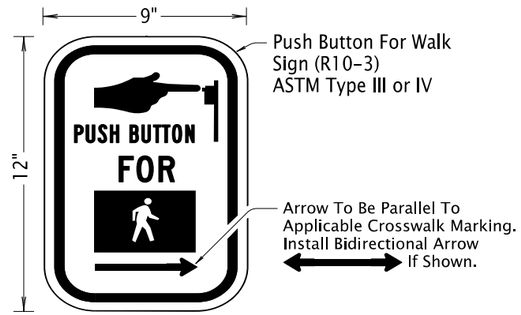


STANDARD PUSHBUTTON STATION AND INSTRUCTION SIGN

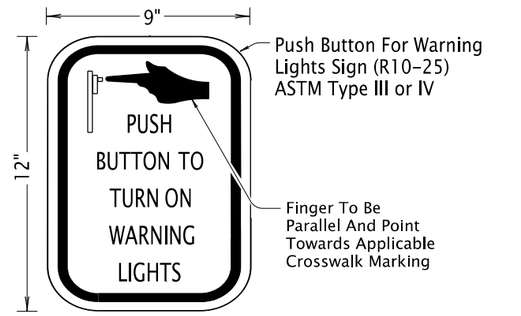


SECTION A–A

CLAM SHELL ORIENTATION



SIGN FOR PEDESTRIAN SIGNALS



SIGN FOR WARNING BEACON ASSEMBLY

General Notes:

1. All Screws, Bolts, Nuts And Washers To Be Type 304 Or 316 Stainless Steel Unless Noted Otherwise.
2. Bolts And Screws To Have Square Or Hex Heads. Allen Head Fasteners Not Allowed.
3. Drill And Tap Pole As Per Orientation Shown On Plans.
4. Horizontal Reach To The Pushbutton To Be 10 Inches Maximum. See Plans Or Consult Engineer To Ensure Compliance.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

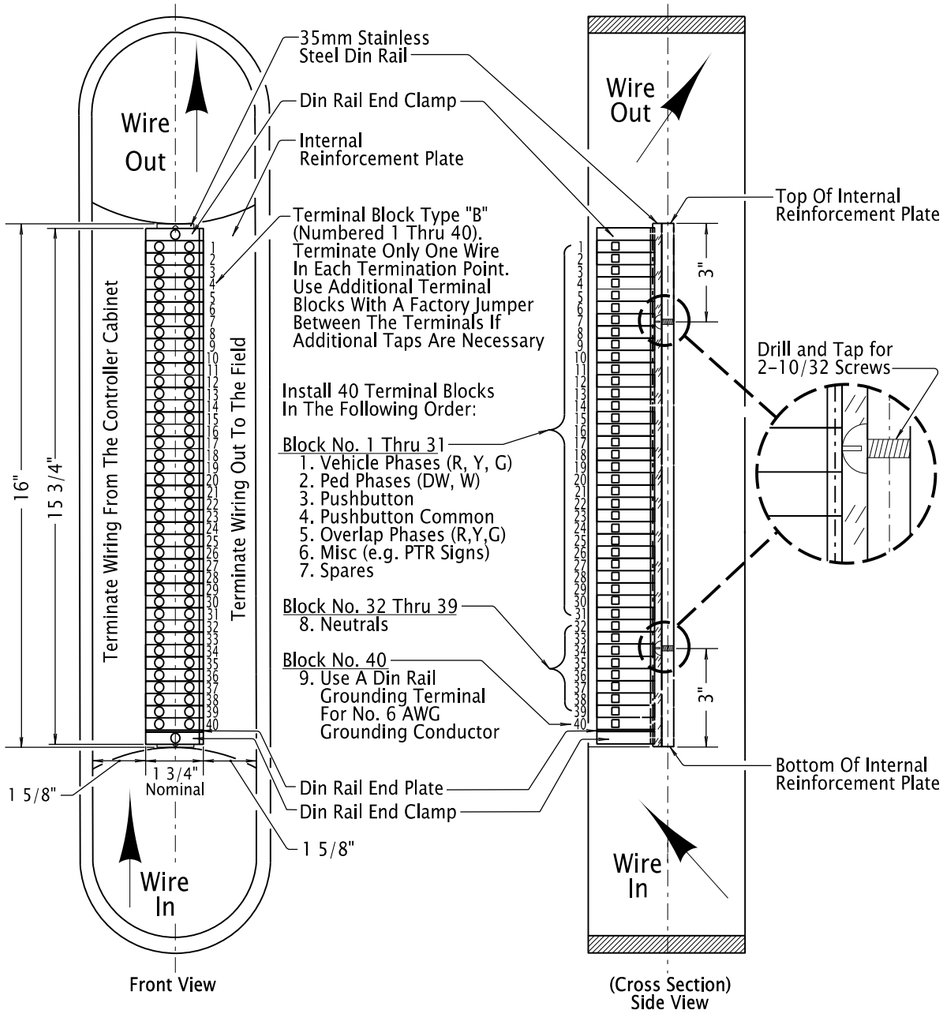
PEDESTRIAN SIGNAL MOUNT AND PEDESTRIAN PUSHBUTTON DETAILS

2024

DATE	REVISION DESCRIPTION
07-2022	ADDED R10-25 SIGN. ADDED EXTENSION MOUNTING NOTE FOR
	2 PUSHBUTTONS ON SAME 4" DIA. POLE.
07-2024	ADDED ARROW TO PUSHBUTTON. ADDED BI-DIRECTIONAL ARROW.

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM467**

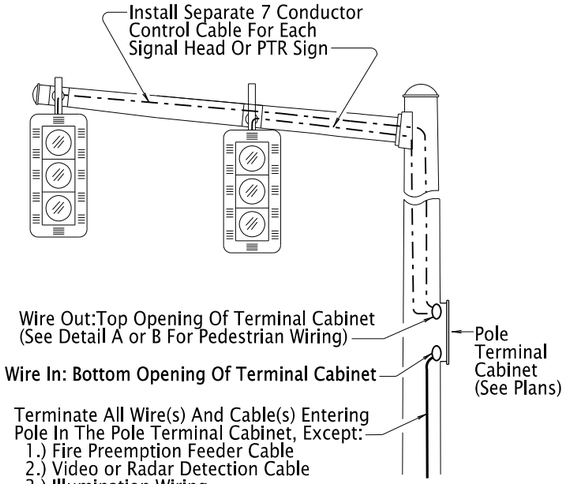
Effective Date: December 1, 2024 - May 31, 2025



DIN RAIL, TERMINAL BLOCKS, & WIRING IN POLE RECESSED TERMINAL CABINET

7 Conductor Control Cable			Pedestrian Phases	Vehicle Phases	Signal Head Types			
Conductor Number	Base Color	First Tracer	1 Pedestrian Phase	1 Vehicle Phase	6L or 3LBF	4L, 5, or 7	1R, 1Y, 2, 3L, 3LCF, 3U,3R, 4, 9, 12, or 12M	10
1	White	—	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
2	Black	—	Walk	Yellow	Yellow	Yellow	Yellow	Yellow
3	Red	—	Dont Walk	Red	Red	Red	Red	Red 1
4	Orange	—	P.B. Common	Spare	Flashing Yellow	Turn Yellow	Spare	Red 2
5	Green	—	Pushbutton	Green	Green	Green	Green	Spare
6	Blue	—	Spare	Spare	Spare	Turn Green	Spare	Spare
7	White	Black	Spare	Spare	Spare	Spare	Spare	Spare

COLOR CODE CHART CONTROL CABLE

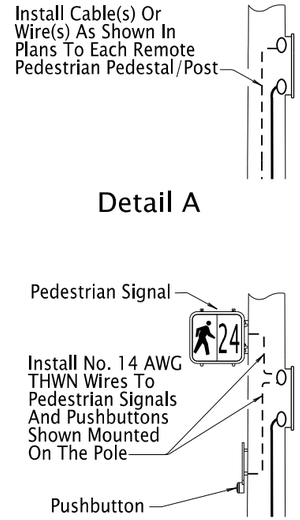


Ped Phase	Function	Base Color	First Tracer	Second Tracer
2	Walk	Black	White	—
2	Dont Walk	Blue	Black	—
6	Walk	Black	—	—
6	Dont Walk	Blue	—	—
4	Walk	Tan	—	—
4	Dont Walk	Purple	—	—
8	Walk	Tan	Blue	—
8	Dont Walk	Purple	Blue	—
2	Pushbutton	Tan	White	—
6	Pushbutton	Purple	White	—
4	Pushbutton	Brown	—	—
8	Pushbutton	Brown	Blue	—
All	Pushbutton Common	Brown	White	—
All	Signal Head Neutral	White	—	—

For Odd Pedestrian Phases 1, 3, 5, & 7 Use The Following:

Ph. 1 Ped	Ph. 2 Ped	Color Code With The Addition Of A Yellow Second Tracer
Ph. 3 Ped	Ph. 4 Ped	
Ph. 5 Ped	Ph. 6 Ped	
Ph. 7 Ped	Ph. 8 Ped	

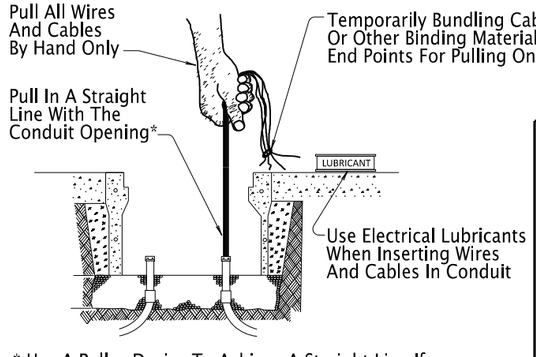
Color Code Chart Pedestrian Single Conductors (See Detail B)



WIRE & CABLE IN POLES

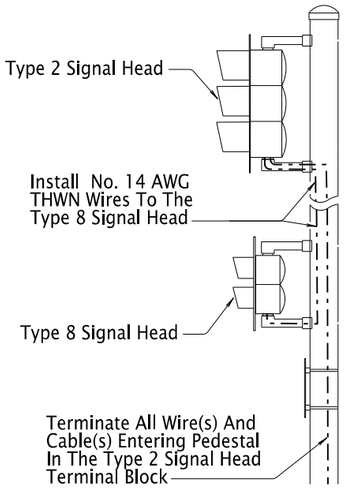
General Notes:

1. Install All Wire And Cable Between Terminal Blocks Without Splicing.
2. Mark Phase Number Or Identification On All Cable In Junction Boxes, Terminal Cabinets, Service Cabinets, And Controller Cabinets With Permanent Tags. Use Handheld Labeler (Brady M210 Label Maker With Vinyl B-595 Tape). Overlaps Shall Be Labeled (OLA,OLB,OLC,OLD).
3. Mark Phase Number & Function Or Indentification On All Wires Terminated In Controller Cabinet And Terminal Cabinet With Permanent Tags. Use Handheld Labeler (Brady M210 Label Maker With Vinyl B-595 Tape). Overlaps Shall Be Labeled (OLA,OLB,OLC,OLD).
4. Install No. 16 AWG TFFN Orange Base With Blue Tracertone Wire In All Conduits As A Locate Wire. Leave Slack As Required In General Note 5 And Install A Wire Nut. Do Not Join Multiple Locate Wires Under A Common Wire Nut Unless Otherwise Shown.
5. Tape The Ends Of Unsued Conductors With Insulated Vinyl Plastic Tape.
6. Leave Slack In Each Wire And Cable As Follows:
   A.) 2 Feet In Junction Boxes And Poles
   B.) 6 Feet In The First Junction Box Nearest The Controller Cabinet
   C.) 6 Feet In Controller Cabinet And Service Cabinet
7. Install Polyethylene Pull Line In All Conduits Noted On The Plans For Future Use (No Wires/Cables In Conduit). Leave 6 Feet Of Slack Pull Line.
8. At Existing Installations Re-wire And Re-label New And Existing Control Cables And Wires, In All Junction Boxes, Terminal Cabinets, Service Cabinets, And Controller Cabinets.



* Use A Pulley Device To Achieve A Straight Line If Pulls Are Made With Poles Or Controller Cabinets In Place

WIRE & CABLE IN CONDUITS



WIRE & CABLE IN RAMP METER PEDESTALS

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

WIRE & CABLE INSTALLATION

2024

DATE	REVISION DESCRIPTION
01-2024	REVISED SIGNAL HEAD TYPES IN COLOR CODE CHART CONTROL CABLE DETAIL
07-2024	ADDED GEN. NOTE 3, ADDED PED COLOR CODE, ADDED FACTORY JUMPERS

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM470**

12-JUL-2024

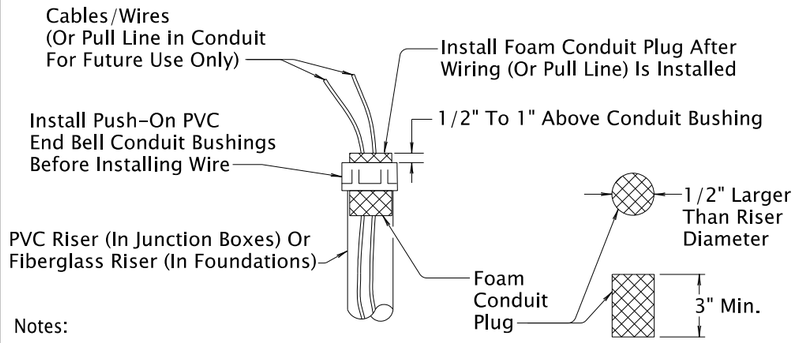
TM470.dgn

Effective Date: December 1, 2024 - May 31, 2025

	Minimum Cover From Top of Finished Surface (Use Permit Depth If Greater Than These)	
Type Of Conduit	Roadway & Shoulders	Other Areas
Metallic	24"	18"
Non-Metallic	30"(See Note 2)	18"

Notes:
1.) Additional Cover Depth May Be Necessary Near Foundations And Junction Boxes To Accommodate The Minimum Radius ("R") Of The Conduit Elbow. See "Conduit Elbow", "Conduit Installation In Foundations" And "Conduit Installation In Junction Boxes" Details For More Information.
2.) For Non-Metallic Conduit Under Roadway & Shoulders Installed Horizontally Into Fiber Optic Hand Hole As Per TM472, The Minimum Cover Depth Is 24 Inches.

MINIMUM COVER FROM FINISHED SURFACE



Notes:

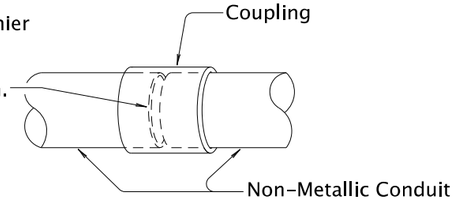
1.) Ream Conduit Ends To Remove Rough Edges And Burrs
2.) Temporarily Plug Or Cap Conduit Ends At All Times To Keep Debris Out

CONDUIT ENDS AND BUSHINGS

Conduit Diameter	R (min.)
1 1/2"	10"
2"	12"
2 1/2"	15"
3"	18"

CONDUIT ELBOWS

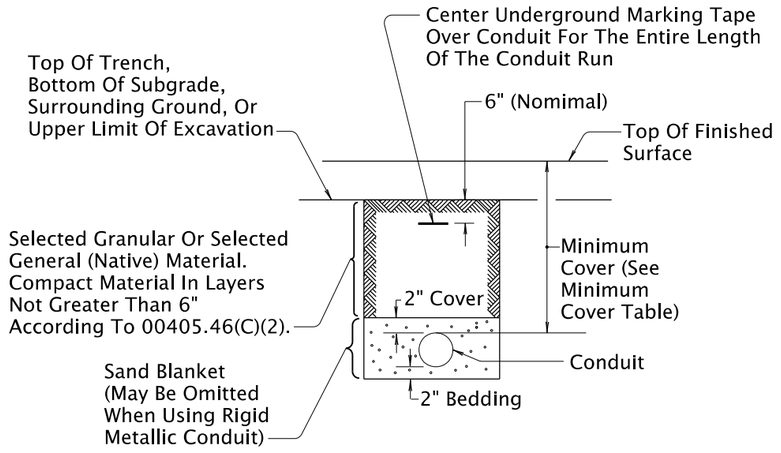
Make Cuts Square And True So Conduit Ends Fit Together For Thier Full Circumference. Use Solvent Weld To Connect Conduit As Per Manufacturer's Recommendation.



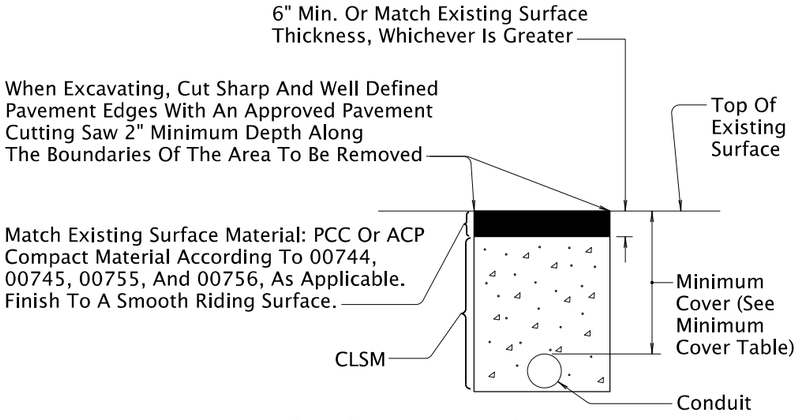
Notes:

1.) Slip Joints, Running Threads Or Reducing Couplings Not Allowed. Use The Same Size Conduit For The Entire Length, Outlet To Outlet.

CONDUIT COUPLINGS



UNSURFACED AREAS
(new roadway prior to paving, shoulders, under sidewalk, landscaped areas, etc.)

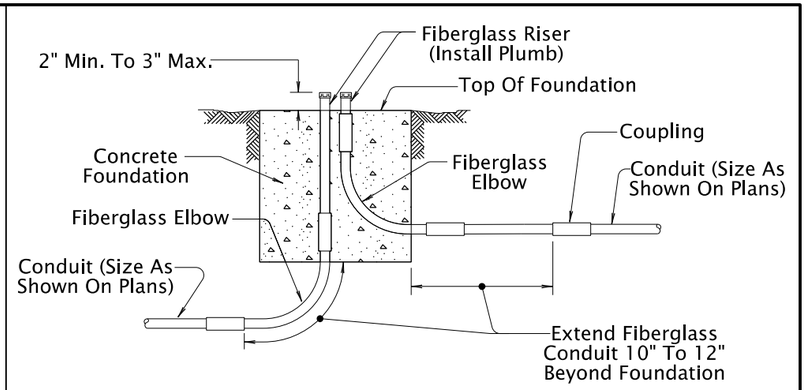


EXISTING PAVED AREAS

Trenching & Backfill Notes:

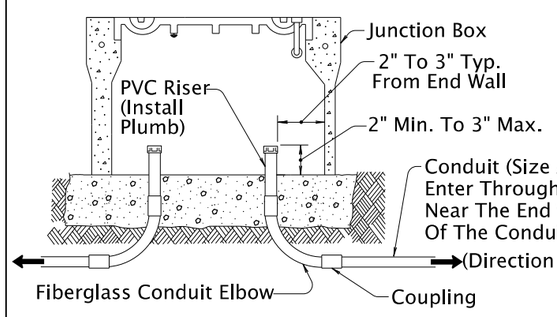
1. Excavate According To 00960.40. In Areas To Be Paved Or Landscaped, Place All Conduit Before Paving Or Landscaping.
2. Hold Trench Width To A Practical Minimum
3. Do Not Backfill Trenches Until Inspected By The Engineer
4. Furnish Backfill Materials According To 00960.10

CONDUIT OPEN TRENCH EXCAVATION & BACKFILL



CONDUIT INSTALLATIONS IN FOUNDATIONS

(Applicable for Pole, Pedestal, Post, Service Cabinet and Controller Cabinet Foundations)



Junction Box Type	Max. Sum Of Conduit Diameters
JB1	12"
JB2	18"
JB3	34"

CONDUIT INSTALLATION IN JUNCTION BOXES

General Notes:

1. Install Non-Metallic Conduit Unless Otherwise Shown. Conduit Runs Shall Be Continous Between Any Pole, Junction Box, Or Cabinet.
2. Install Conduit By Open Trench Method, Horizontal Directional Drilling, Or As Shown
3. Conduit Runs Shown On Plans Are For Bidding Purposes Only. Locations May Be Changed To Avoid Obstructions.
4. Larger Conduit Than Specified May Be Used At The Option And Cost Of The Contractor If Max. Sum Of Conduit Diameters In Junction Box Is Not Exceeded.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TRENCHING & CONDUIT INSTALLATION

2024

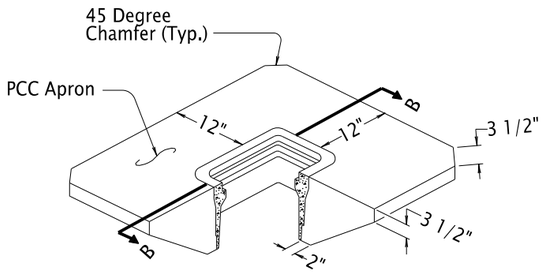
DATE	REVISION DESCRIPTION
01-2021	ADDED NOTE 1 TO "MINIMUM COVER FROM FINISHED SURFACE" DETAIL
07-2024	ADDED NOTE 2 TO "MINIMUM COVER FROM FINISHED SURFACE" DETAIL

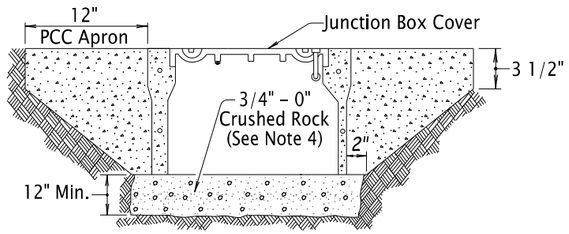
CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM471**

12-JUL-2024

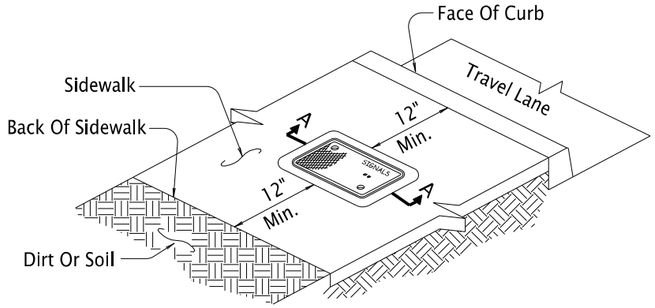
TM471.dgn

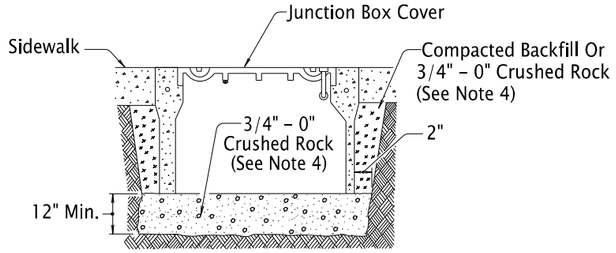
Effective Date: December 1, 2024 - May 31, 2025





SECTION B–B

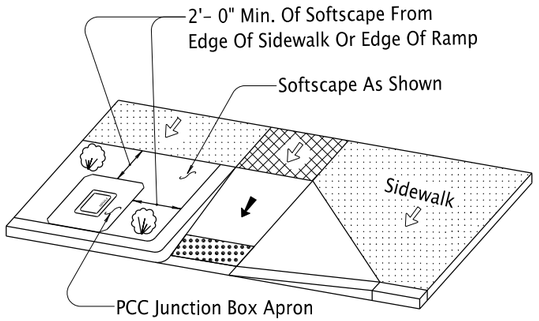




SECTION A–A

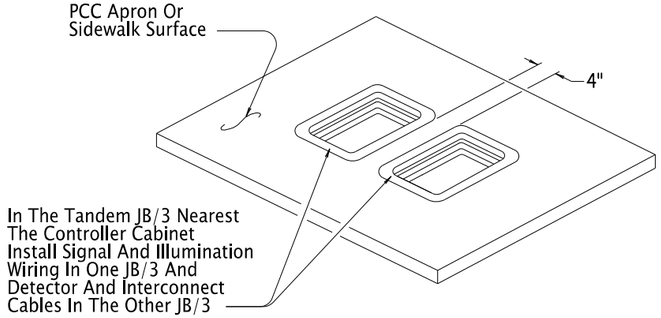
JUNCTION BOX INSTALLATION IN PCC SIDEWALK

(This Detail Only Applicable for Junction Boxes Located In Flat Areas Of Sidewalks. Do Not Install In Slopes Of Ramps Or Driveways)

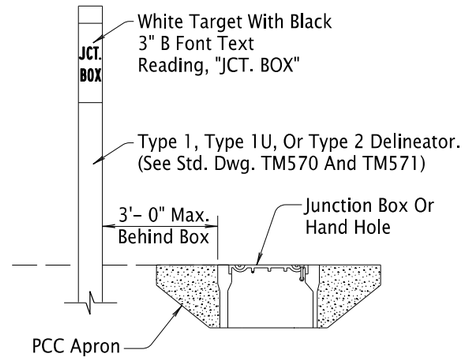


JUNCTION BOX INSTALLATION IN UNSURFACED AREA

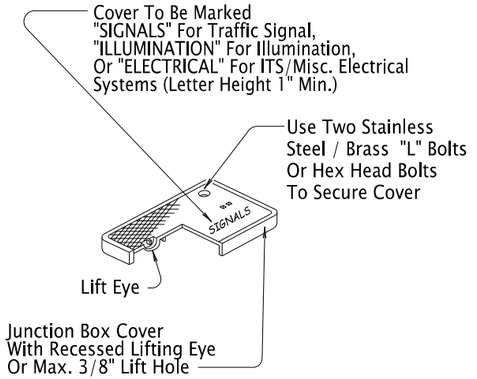
(This Detail Only Applicable for Junction Boxes Located In Incidental Travel Areas; Gravel Shoulders, Behind Guardrail, Etc. Do Not Install In Travel Lanes, Paved Shoulders, Or Other Areas Exposed To Traffic.)



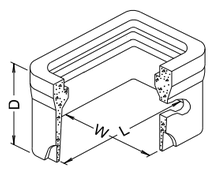
TANDEM JB/3A JUNCTION BOX DETAILS



DELINEATION OF JUNCTION BOX & HAND HOLE IN UNSURFACED AREA



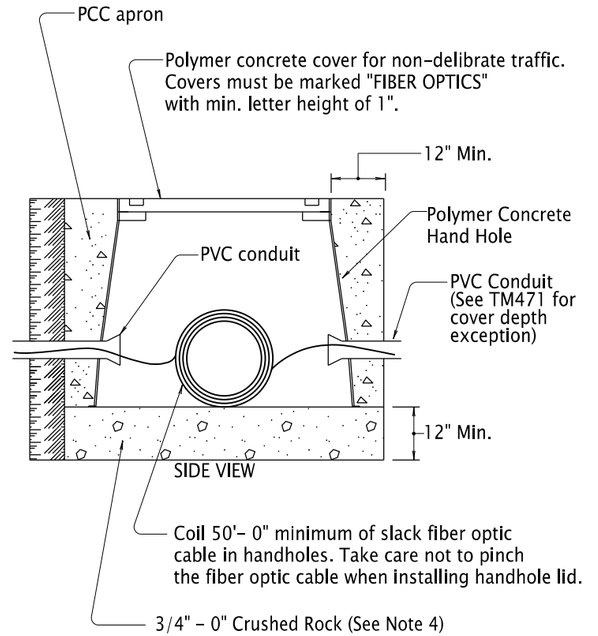
JUNCTION BOX COVER DETAILS

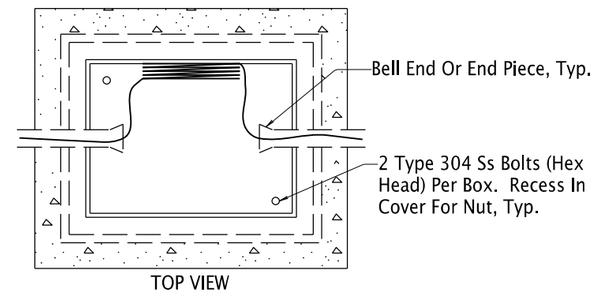


Type*	L	W	D
JB1	17"	10"	12"
JB2	22"	12"	12"
JB3	30"	17"	12"
HH–1	24"	30"	24"
HH–2	30"	48"	24"
HH–3	30"	48"	36"

*Junction Box Or Handhole
Type As Shown On Plans

DIMENSION TABLE





FIBER OPTIC CABLE HAND HOLE INSTALLATION

GENERAL NOTES:

1. Install Top of Junction Box And Hand Hole Flush With The Sidewalk, Surrounding Grade, Or Top Of Curb. For Hand Holes Installed In The Roadway Or Shoulder, Leave The Top Of The Hand Hole 1/2" Below The Pavement Surface.
2. Install Junction Boxes And Hand Holes At The Approximate Locations Shown, Or If Not Shown, No More Than 300 Feet Apart For Junction Boxes And No More Than 1000 Feet Apart For Hand Holes.
3. More Junction Boxes And Hand Holes Than Specified May Be Installed To Facilitate The Work At The Option And Cost Of The Contractor
4. Use Materials According To 00640.10 and 00640.16. Use Compaction Equipment Suitable For Area And Compact Each Six Inch Layer With Sufficient Coverages To Produce A Firm Unyielding Surface. Do Not Install Conductors Until Surface Has Been Constructed.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

JUNCTION BOXES/HAND HOLES

2024

DATE	REVISION DESCRIPTION
07–2022	ADDED NEW MARKING (ILLUMINATION & ELECTRICAL) FOR JB COVER
01–2024	CHANGED DIMENSION FOR JB DELINEATION
07–2024	CHANGED SOFTSCAPE MIN. FROM 3' TO 2'. ADDED HAND HOLE CONDUIT NOTE

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM472**

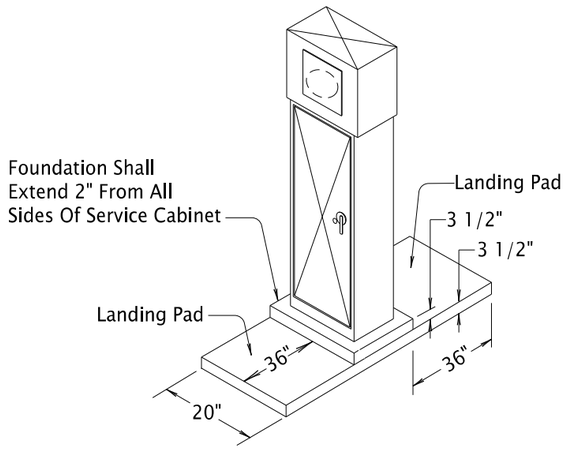
12-JUL-2024

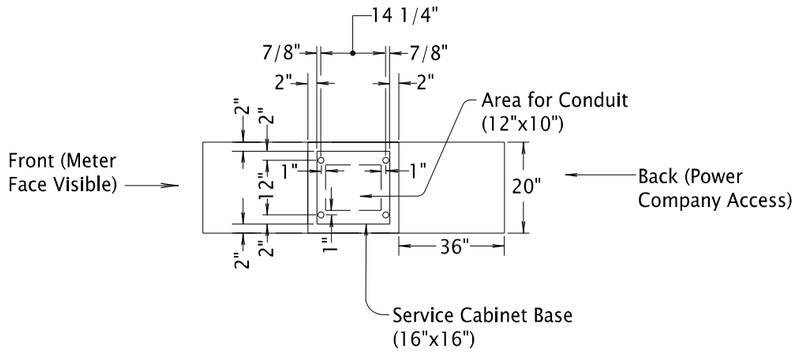
TM472.dgn

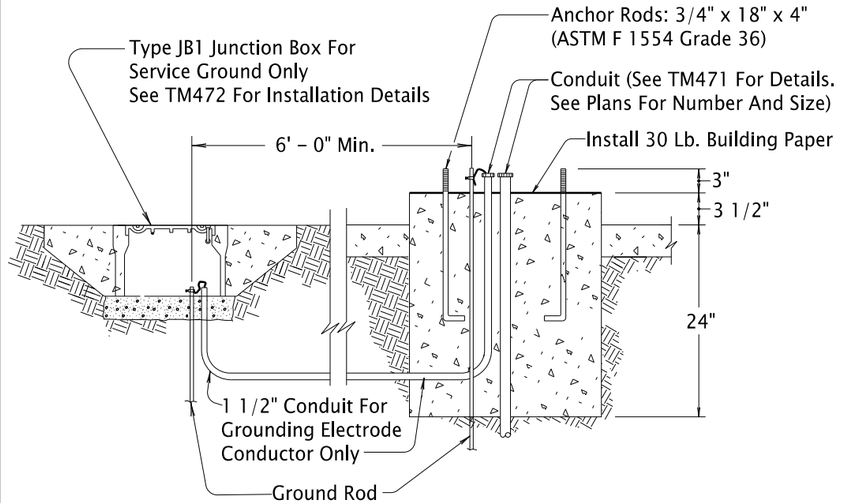
Effective Date: December 1, 2024 – May 31, 2025

04-JAN-2021

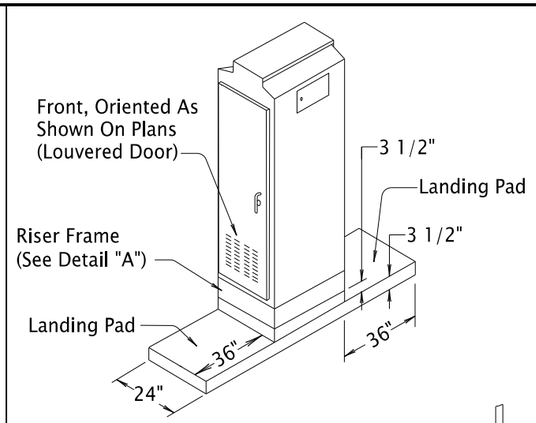
TM482.dgn

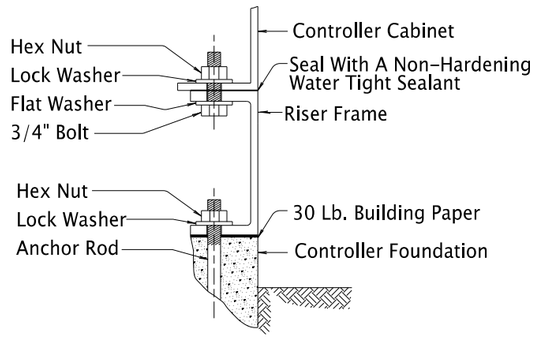




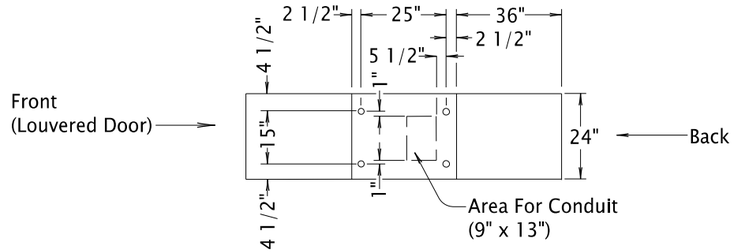


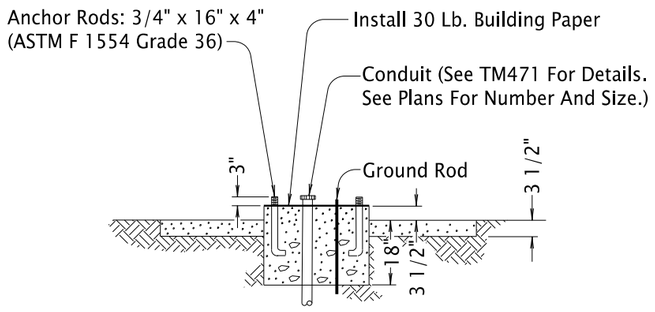
BASE MOUNTED SERVICE CABINET FOUNDATION





DETAIL "A"
RISER FRAME CONNECTION

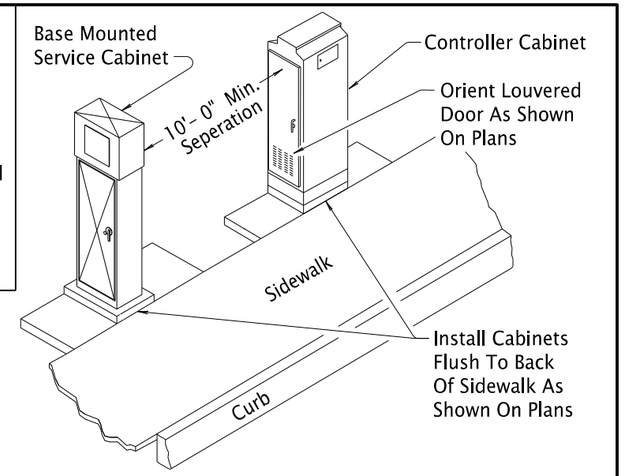




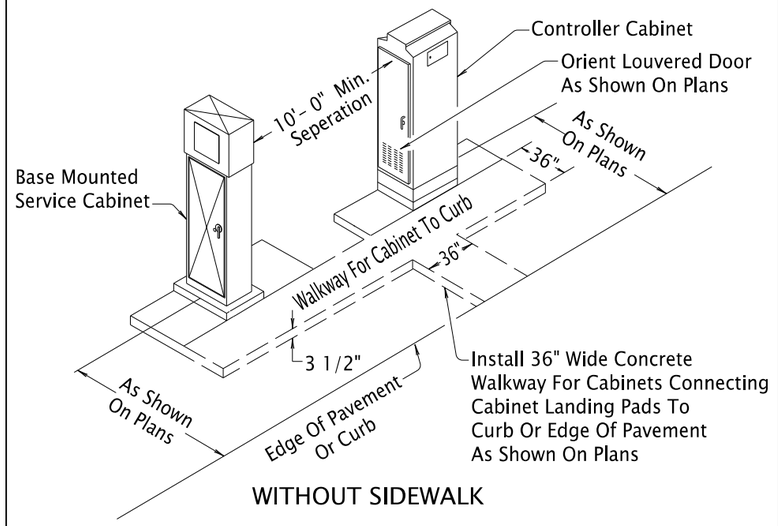
CONTROLLER CABINET FOUNDATION DETAILS
(Model 332S, 332, 334, And 340 Cabinets)

General Notes:

1. All Screws, Bolts, Nuts And Washers Shall Be Galvanized Steel Unless Noted Otherwise.
2. Bolts And Screws Shall Have Square Or Hex Heads. Allen Fasteners Not Allowed.
3. Type 304 Or 316 Stainless Steel Or Galvanized Steel May Be Used For Mounting Cabinet To Riser Frame.
4. Provide A 3/4" Chamfer On All Exposed Concrete Edges.



WITH SIDEWALK



WITHOUT SIDEWALK

CABINET FOUNDATION LOCATIONS

Note: Verify Base Mounted Service Cabinet Location And Meter Placement Is Acceptable To Local Power Company

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CONTROLLER CABINET & SERVICE CABINET FOUNDATION DETAILS

2024

DATE	REVISION DESCRIPTION
01-2021	UPDATED ALL ANCHOR ROD DETAILS

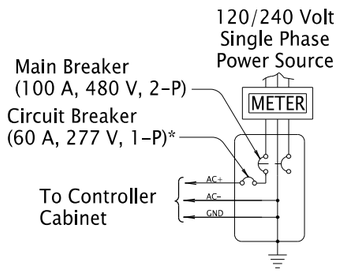
CALC. BOOK NO. N/A | SDR DATE 04-JAN-2021 | **TM482**

Effective Date: December 1, 2024 - May 31, 2025

12-JUL-2024

TM485.dgn

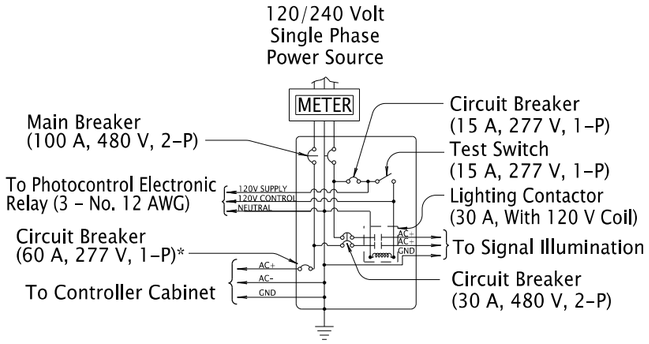
* When installing the service cabinet for an RRFB use a 20 A, 277 V, 1-P circuit breaker



SERVICE CABINET WIRING: (BMC) (SC)

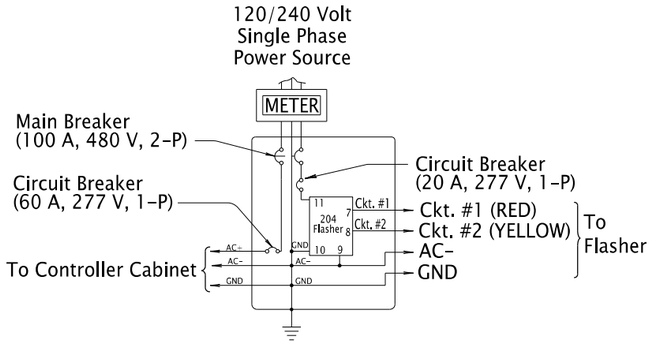
(Signal System)

* When installing the service cabinet for an RRFB use a 20 A, 277 V, 1-P circuit breaker



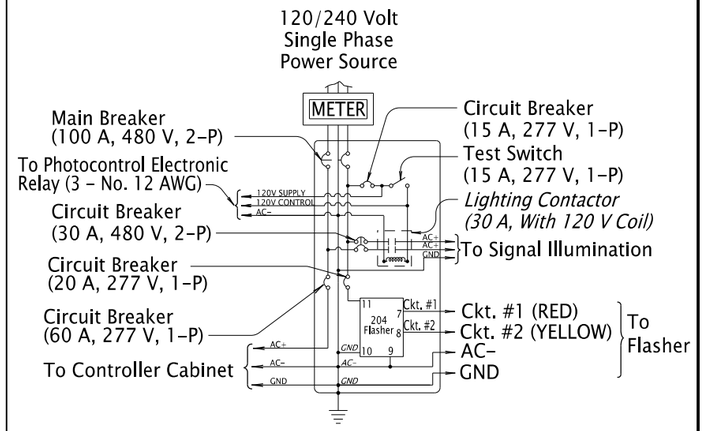
SERVICE CABINET WIRING: (BMCL) (SCL)

(Signal + Illumination System)



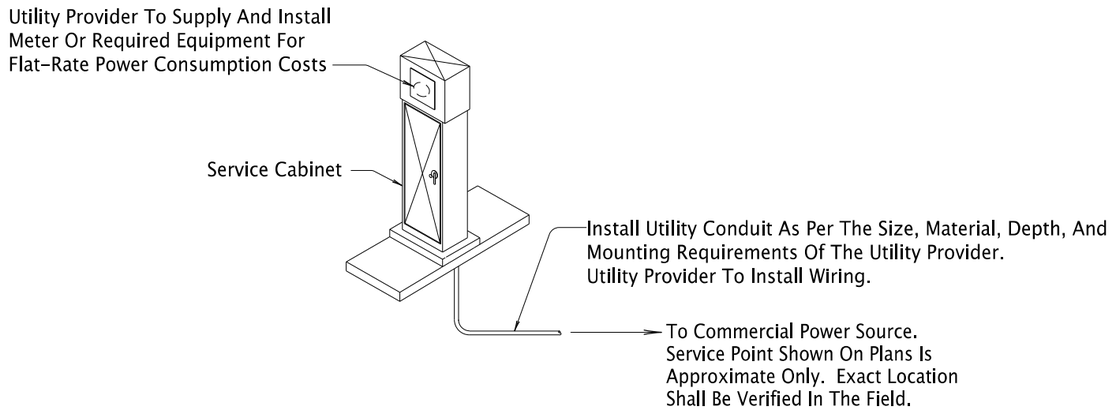
SERVICE CABINET WIRING: (BMCF)

(Signal + Flashing Beacon System)



SERVICE CABINET WIRING: (BMC/FL)

(Signal + Flashing Beacon + Illumination System)



UTILITY PROVIDER DETAILS

General Notes:

1. Notify Utility Before Making Any Connections To Utility Poles.
2. Service Cabinet Shall Have A Solid Copper Neutral Bus And The Number And Size Of Switches Or Circuit Breakers As Shown. Service Cabinet Can Accommodate A Maximum Of 10 Circuit Breakers.
3. Wiring Connections To The Terminal Screws On The Circuit Breakers And Contactors Shall Make Full Contact Under The Screw Head.
4. Circuit Breakers Shall Be UL489 Listed, Unenclosed, Molded Case Bolt-On Type With End Conductor Terminals Suitable For Surface Mounting In The Cabinet On A False Back Or Bracket.
5. Label Circuit Breakers And Equipment With An Engraved Permanent Label On The Dead Front Panel To Indicate The Circuit Controlled.
6. Fill Out Manufacturer Provided Arc Flash Stickers Using A Permanent Handheld Labeler (Brady IDXPERT with XC-1500-580-WT-BK Tags Or Approved Equal).

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All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SERVICE CABINET WIRING DETAILS

2024

DATE	REVISION DESCRIPTION
07-2023	REVISED SERVICE CABINET WIRING TITLES, ADDED NOTE 6.
01-2024	ADDED NOTE FOR RRFB 20 AMP BREAKER IN BMC & BMCL DETAILS
07-2024	MINOR TEXT REVISIONS FOR UNIFORMITY

CALC. BOOK NO. N/A | SDR DATE 12-JUL-2024 | **TM485**

Effective Date: December 1, 2024 - May 31, 2025

07-01-2020

TM500.dgn

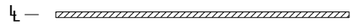
W

4" WHITE LINE

W-2

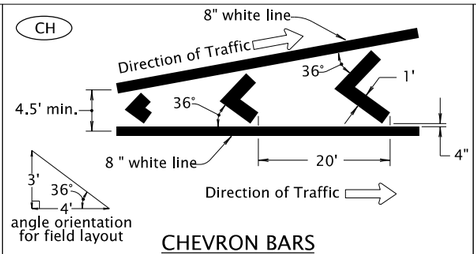
8" WHITE LINE

Y



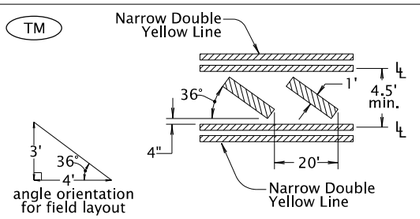
4" YELLOW LINE

CH



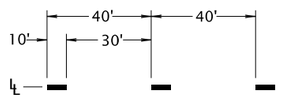
CHEVRON BARS
1' WHITE BARS AT 20' SPACING

TM



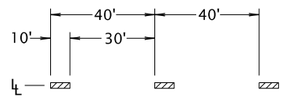
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 20' SPACING

WB



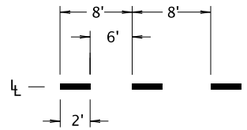
4" WHITE BROKEN LINE

YB



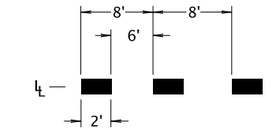
4" YELLOW BROKEN LINE

WD



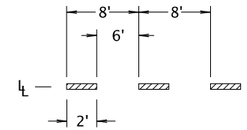
4" WHITE DOTTED LINE
For lane extensions

WD-2



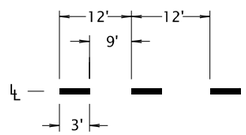
8" WHITE DOTTED LINE
For lane extensions and bike lane extensions

YD



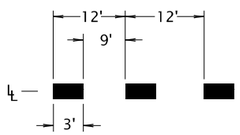
4" YELLOW DOTTED LINE
For lane extensions

DLL



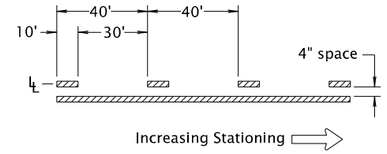
4" WHITE DOTTED LANE LINE
For lane lines in acceleration/deceleration lanes

DLL-2



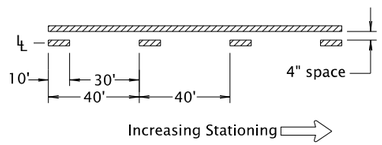
8" WHITE DOTTED LANE LINE
For lane lines in drop lanes

NPR



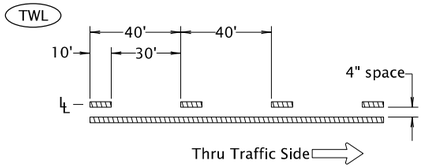
NO-PASS RIGHT
4" YELLOW LINES

NPL



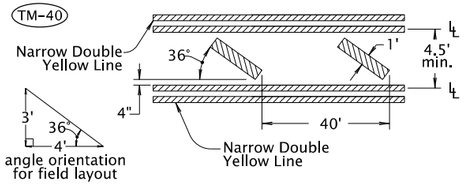
NO-PASS LEFT
4" YELLOW LINES

TWL



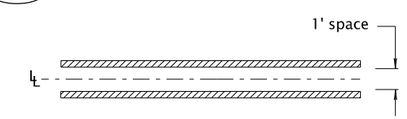
TWO-WAY LEFT TURN
4" YELLOW LINES

TM-40



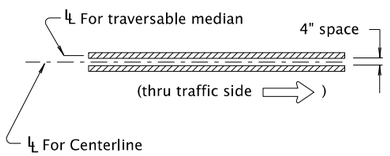
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 40' SPACING
For use at painted medians where
distance between left turn refuges exceeds 200'

D



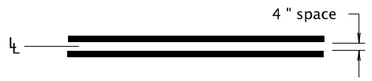
DOUBLE NO-PASS
TWO 4" YELLOW LINES

ND



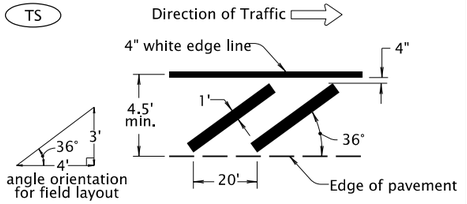
NARROW DOUBLE NO-PASS
TWO 4" YELLOW LINES

NDW



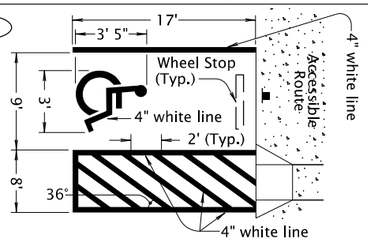
NARROW DOUBLE NO-LANE CHANGE
TWO 4" WHITE LINES

TS



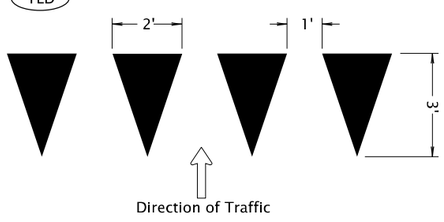
TRANSVERSE SHOULDER BARS
1' WHITE BARS AT 20' SPACING

HC



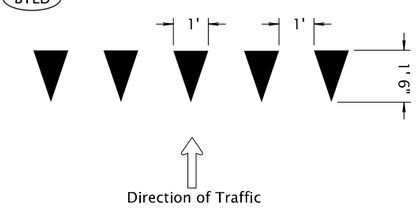
DISABLED PARKING DETAIL (white)

YLD



YIELD LINE (white)

BYLD



BICYCLE YIELD LINE (white)

LEGEND

Direction Of Traffic, Increasing Stationing
Or Thru Traffic Side

℄ — Lane line dimensions are shown on the striping plans

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with
the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Changed Min. widths for CH, TM, TM-40, and TS

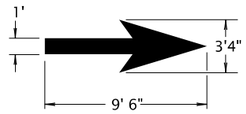
CALC. BOOK NO. N/A | SDR DATE 07-01-2020 | **TM500**

Effective Date: December 1, 2024 - May 31, 2025

01-03-2022

TM501.dgn

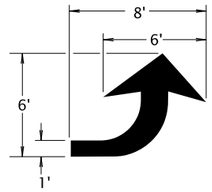
SA



STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

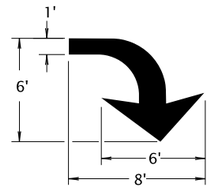
LA



LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

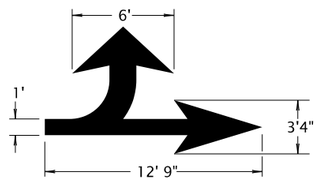
RA



RIGHT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

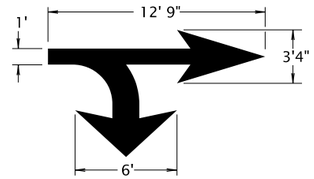
LSA



LEFT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

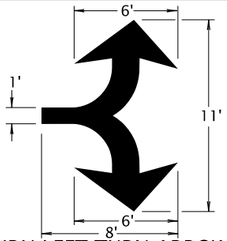
RSA



RIGHT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

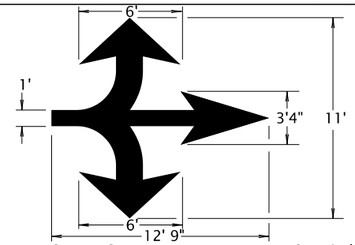
RALA



RIGHT TURN LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

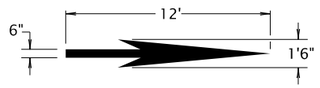
RSLA



RIGHT TURN STRAIGHT LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

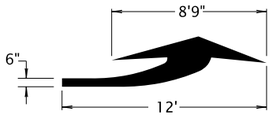
E-SA



ELONGATED STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

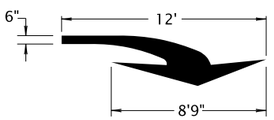
E-LA



ELONGATED LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

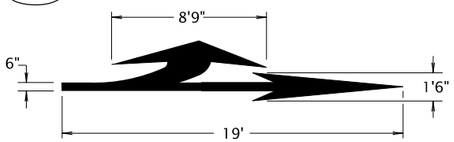
E-RA



ELONGATED RIGHT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

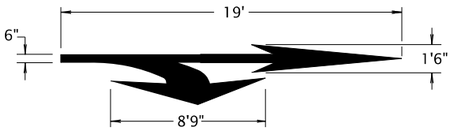
E-LSA



ELONGATED LEFT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

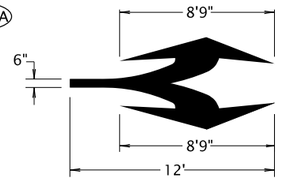
E-RSA



ELONGATED RIGHT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

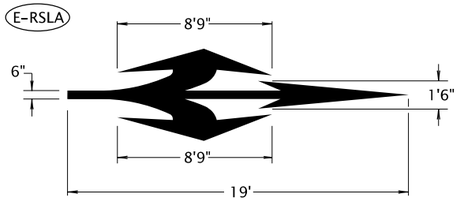
E-RALA



ELONGATED RIGHT TURN LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

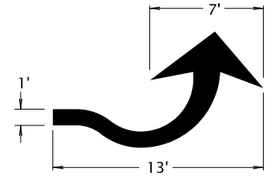
E-RSLA



ELONGATED RIGHT TURN STRAIGHT LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

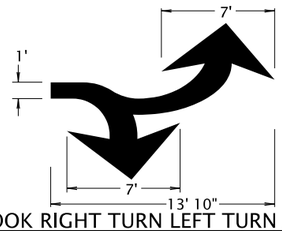
F-LA



FISH-HOOK LEFT TURN ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

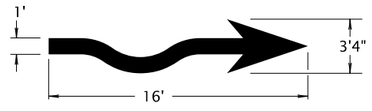
F-RALA



FISH-HOOK RIGHT TURN LEFT TURN ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

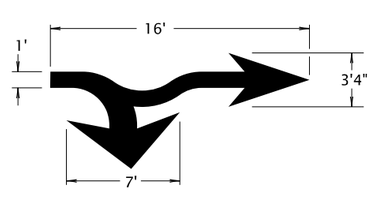
F-SA



FISH-HOOK STRAIGHT ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

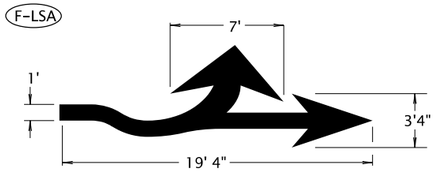
F-RSA



FISH-HOOK RIGHT TURN SRAIGHT ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

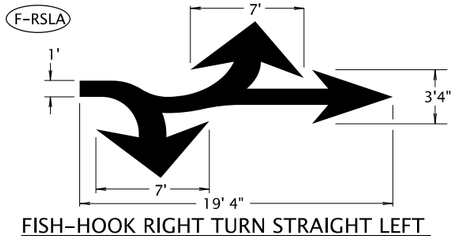
F-LSA



FISH-HOOK LEFT TURN STRAIGHT ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

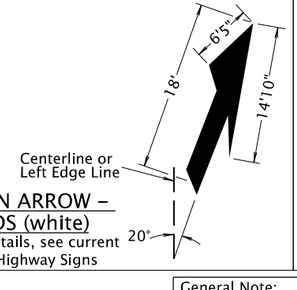
F-RSLA



FISH-HOOK RIGHT TURN STRAIGHT LEFT TURN ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

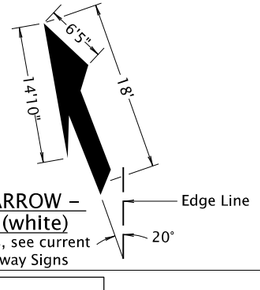
LRA-L



LANE REDUCTION ARROW - LEFT LANE ENDS (white)

For arrow proportion details, see current version of Standard Highway Signs

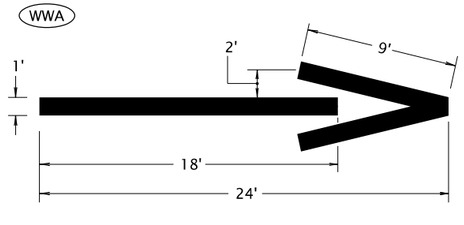
LRA-R



LANE REDUCTION ARROW - RIGHT LANE ENDS (white)

For arrow proportion details, see current version of Standard Highway Signs

WWA



WRONG-WAY ARROW (white)

General Note:

1. Center pavement markings within the lane width.
2. Arrow and letter dimensions nominal, excluding WWA.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Some Detail Blocks moved to new Std. Drawing TM504
	Fish-hook Arrows added, LRA split into LRA-L and LRA-R
01-2022	Corrected bubble callout of LRA-L and typo in LRA-R

CALC. BOOK NO. N/A

SDR DATE 01-03-2022

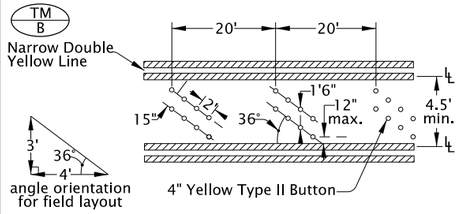
TM501

Effective Date: December 1, 2024 - May 31, 2025

01-03-2022

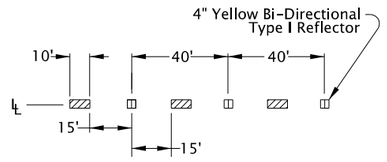
TM502.dgn

TM B



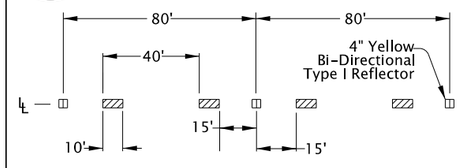
TRANSVERSE MEDIAN BAR SUBSTITUTION BUTTON

YB R-40



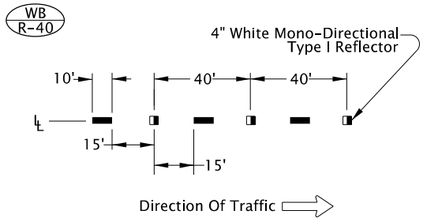
YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE

YB R-80



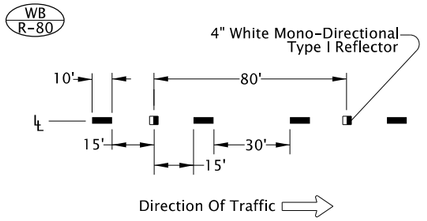
YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE

WB R-40



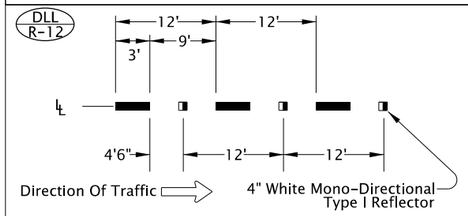
WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE

WB R-80



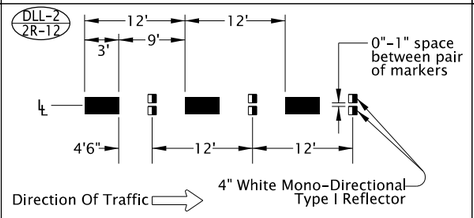
WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE

DLL R-12



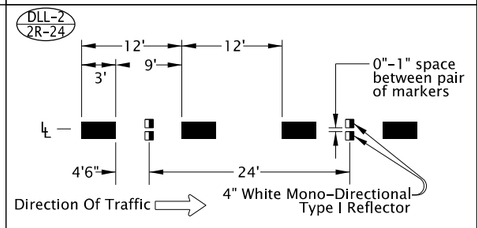
WHITE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE DOTTED LANE LINE

DLL-2 2R-12



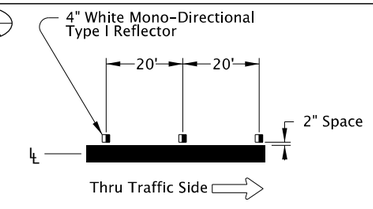
WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE

DLL-2 2R-24



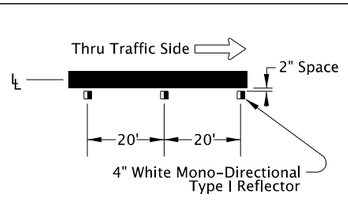
WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE

W-2 R-20L



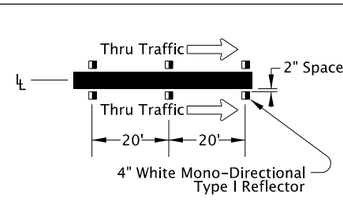
CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE

W-2 R-20R



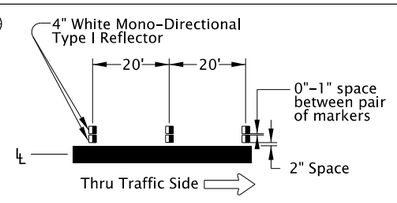
CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE

W-2 2R-20



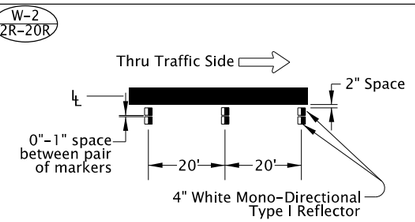
CHANNELIZING LANE LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE

W-2 2R-20L



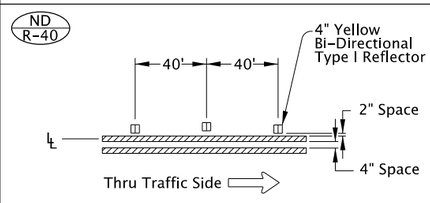
CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE

W-2 2R-20R



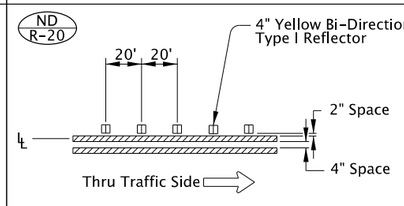
CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE

ND R-40



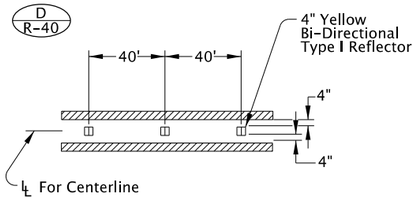
NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

ND R-20



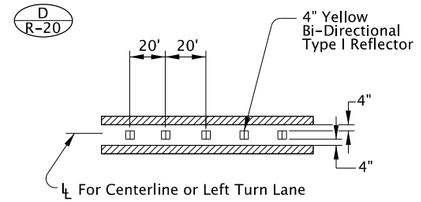
NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

D R-40



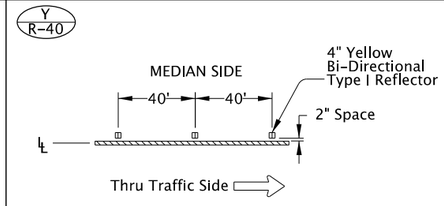
DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

D R-20



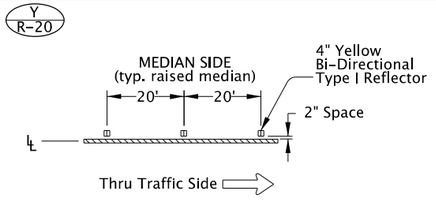
DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES

Y R-40



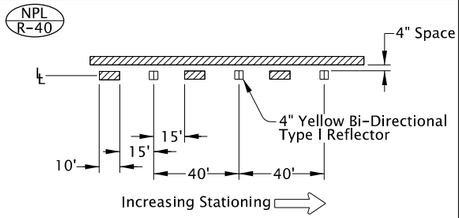
YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE

Y R-20



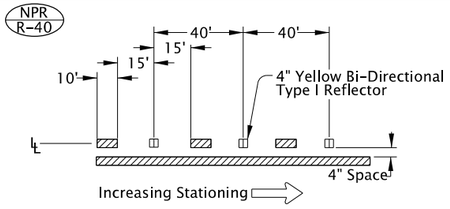
YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE

NPL R-40



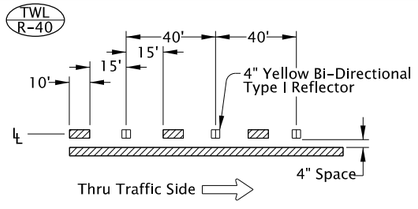
NO-PASS LEFT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

NPR R-40



NO-PASS RIGHT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

TWL R-40



TWO WAY LEFT TURN POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES

General note:

1) Surface mount Raised Pavement Markers (RPMs) unless otherwise specified.

LEGEND

- Direction Of Travel, Increasing Stationing or Thru Traffic Side
- ℄ — Lane line dimensions are shown on the striping plans
- Mono-directional crystal white marker reflects white to the left in this symbol
- Bi-directional yellow marker reflects yellow both left and right in this symbol

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Changed min. width of TM/B from 6' to 4.5'
01-2022	Removed "LANE" from W-2/R-20R title

CALC. BOOK NO. N/A

SDR DATE 01-03-2022

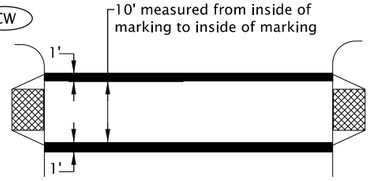
TM502

Effective Date: December 1, 2024 - May 31, 2025

07-08-2022

TM503.dgn

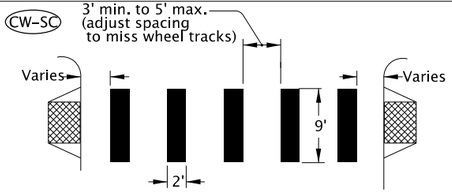
CW



STANDARD CROSSWALK
TWO 1' WHITE BARS

Install per Standard Drawing TM530

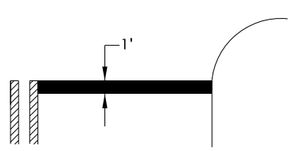
CW-SC



STAGGERED CONTINENTAL CROSSWALK
2' WHITE BARS

Install per Standard Drawing TM530

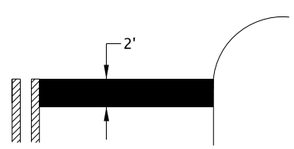
S



STOP BAR
1' WHITE BAR

Install per Standard Drawing TM530

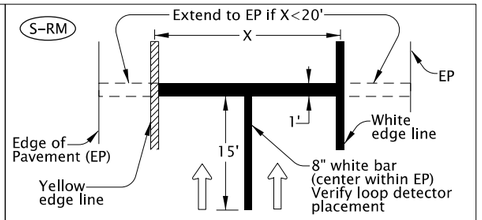
S-2



STOP BAR - LARGE
2' WHITE BAR

Install per Standard Drawing TM530

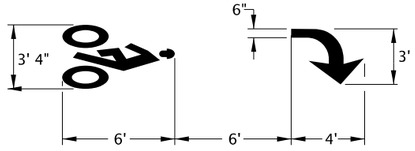
S-RM



RAMP METER STOP BAR
1' & 8" WHITE BARS

For multi-lane ramp meter applications

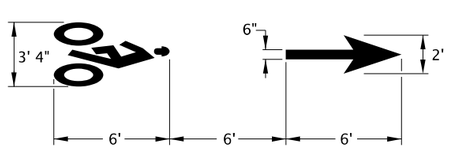
BR



BIKE RIGHT TURN STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

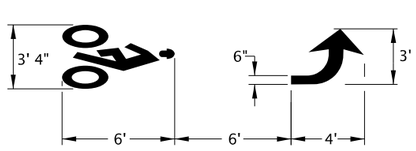
BS



BIKE LANE STANDARD STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

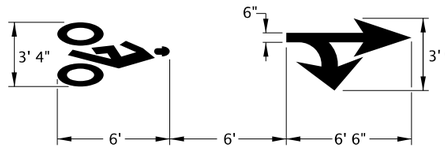
BL



BIKE LEFT TURN STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

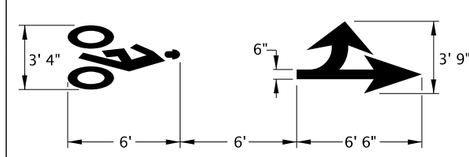
BRS



BIKE RIGHT TURN STRAIGHT STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

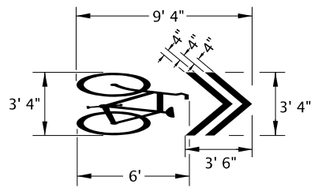
BLS



BIKE LEFT TURN STRAIGHT STENCIL (white)

Center marking within lane width
For proportion details, see current version of Standard Highway Signs

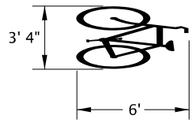
SLM



SHARED LANE MARKING (white)

Center marking within lane width or as shown
For proportion details, see current version of Standard Highway Signs

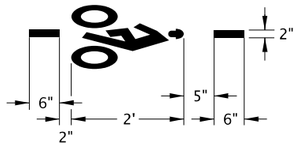
B



BIKE STENCIL (white)

Used for Intersection Bicycle Box applications
Place marking within bicycle box, ceneterd with motor vehicle lane width

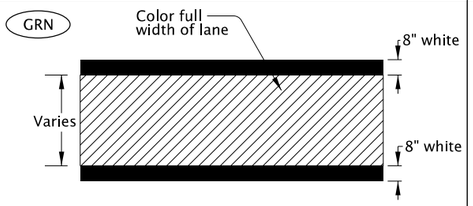
BD



BICYCLE DETECTOR MARKING (white)

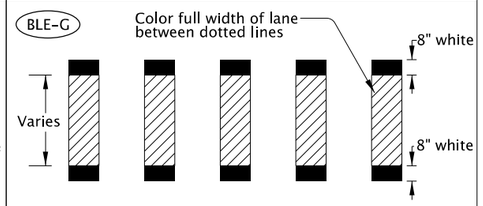
PLace Bicycle Detector Pavement Marking in optimum loction where bicycle acuates the traffic signal

GRN



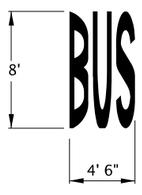
GREEN SUPPLEMENTAL BICYCLE LANE
SOLID LINE (green)

BLE-G



GREEN SUPPLEMENTAL BICYCLE LANE
DOTTED LINE EXTENSION (green)

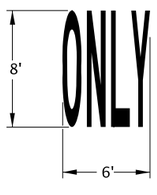
BUS



BUS (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

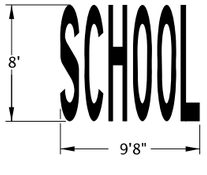
ON



ONLY (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

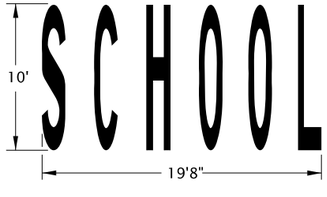
SCH



SCHOOL (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

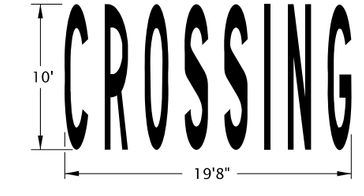
SCH-LG



SCHOOL - LARGE (white)

Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs

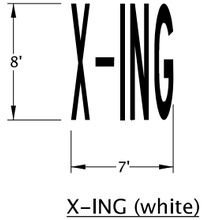
CRS-LG



CROSSING - LARGE (white)

Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs

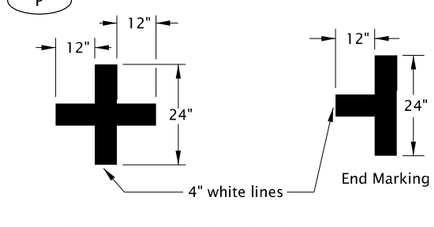
XNG



X-ING (white)

Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

P



ON-STREET PARKING DETAIL (white)

General Note:

1. Arrow, letter, and bike symbol dimensions nominal.

LEGEND

Direction of Trave

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

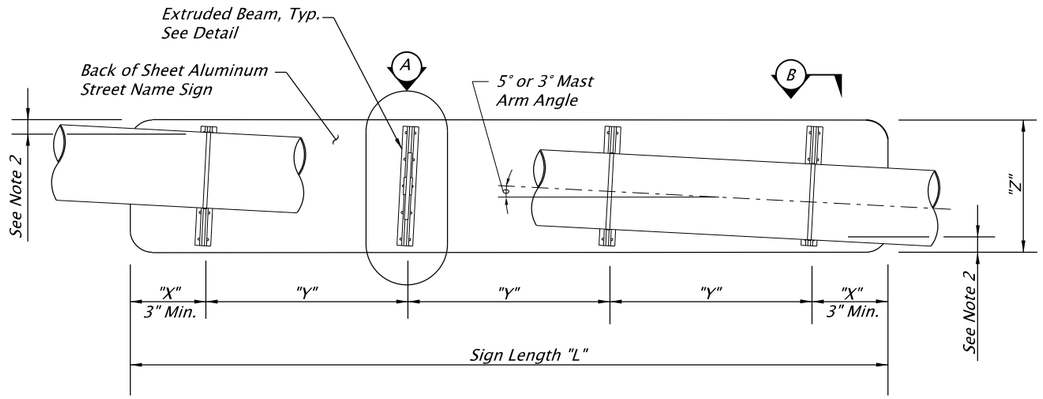
DATE	REVISION DESCRIPTION
07-2022	Added note for measurement of Standard Crosswalk

CALC. BOOK NO. N/A

SDR DATE 07-08-2022

TM503

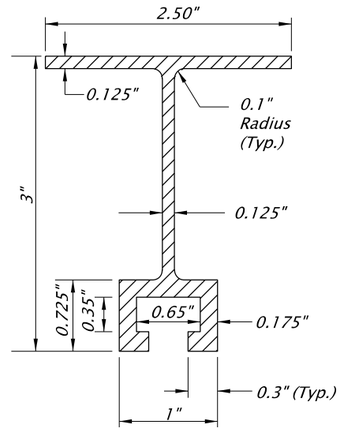
Effective Date: December 1, 2024 - May 31, 2025



Mast Arm Street Name Mount Requirements				
Sign Length "L"	Maximum Sign Height "Z"	Maximum Edge Distance "X"	Maximum Support Spacing "Y"	Number of Extruded Beam Locations
"L" Less than or Equal to 4'-0"	30"	"L"/4	"L"/2	2
"L" Greater than > 4'-0" and "L" less than or Equal to 8'-0"	30"	1'-0"	3'-0"	3
"L" Greater than > 8'-0" and "L" less than or Equal to 10'-0"	21"	1'-0"	2'-8"	4
"L" Greater than > 10'-0" and "L" less than or Equal to 12'-0"	21"	1'-0"	2'-6"	5

MAST ARM STREET NAME SIGN MOUNT

No Scale

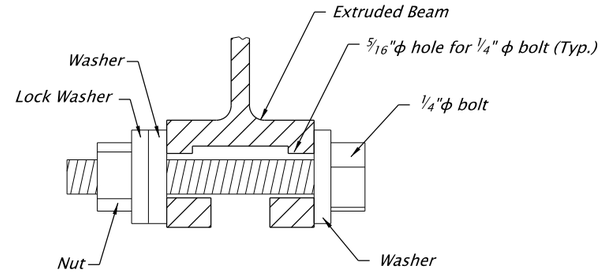


EXTRUDED BEAM DETAIL

No Scale

GENERAL NOTES:

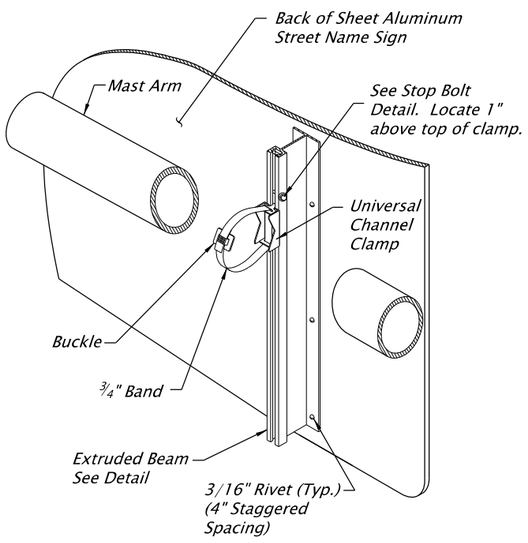
1. Physical fit of the sign must be verified. The edges of the street name sign shall not be within 6" of other signs or the mast arm connection flanges.
2. Equal spaces top and bottom.
3. The top of the street name sign shall be leveled.
4. Extruded Beams are to be set at an angle perpendicular to the mast arm.
5. Material for extruded beam shall be ASTM B 221 6061-T6 Aluminum.
6. Material for 3/4" Band shall be 3/4" wide, 0.03" thick, and ASTM A 666, Type 201 Stainless Steel.
7. Material for the Sign Bracket, Universal Channel Clamp, and buckle shall be ASTM A 666, Type 201 Stainless Steel.
8. Existing signal poles must be analyzed to verify that the pole and foundation can support the new street name sign loading. See TM650 for allowable street name sizes on new installations.



1. All hardware to be Type 316 Stainless Steel.
2. Locate 1" above the top of the Universal Channel Clamp.

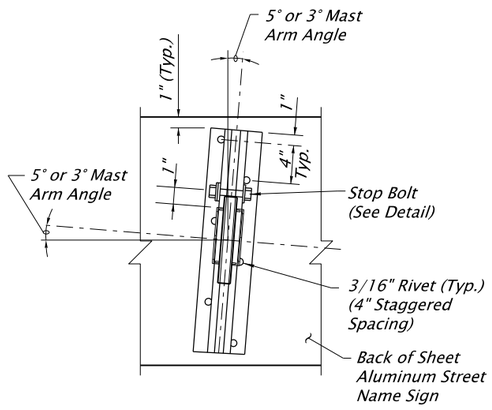
STOP BOLT DETAIL

No Scale



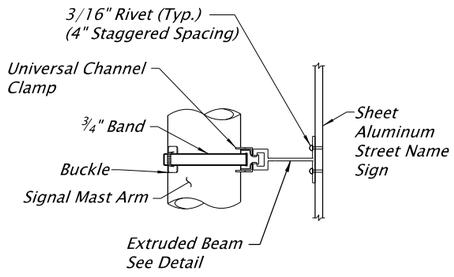
TYPICAL MAST ARM INSTALLATION

No Scale



DETAIL A

No Scale



DETAIL VIEW B

No Scale

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SIGNAL MAST ARM STREET NAME SIGN MOUNTS

2024

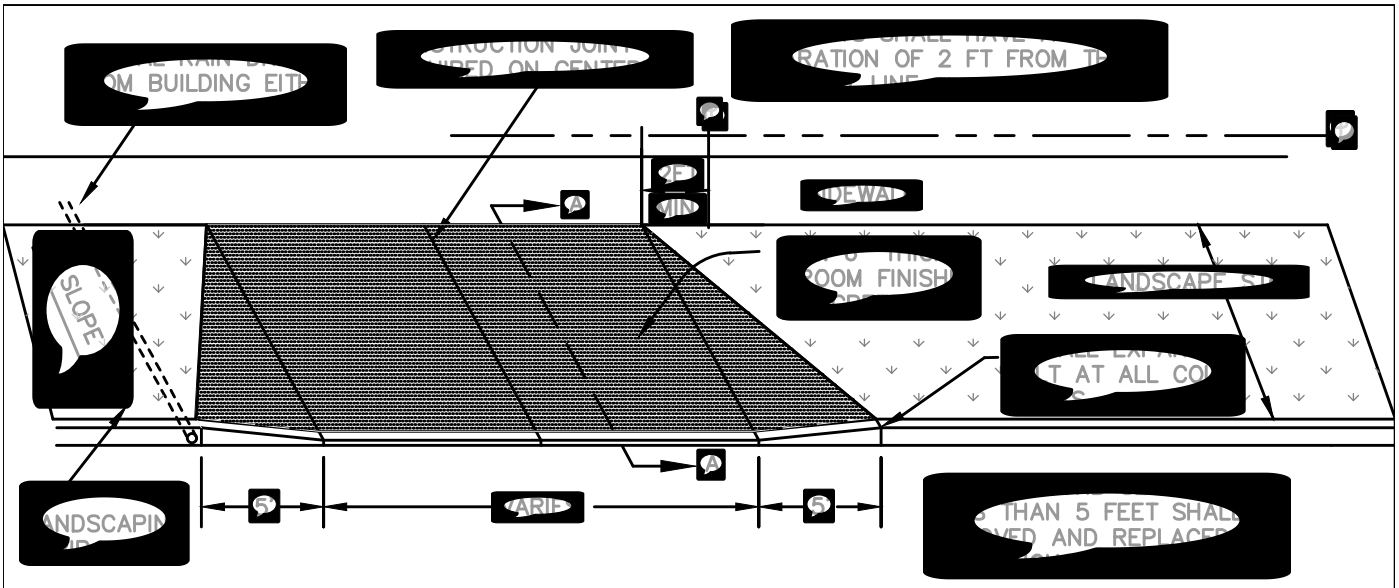
DATE	REVISION DESCRIPTION

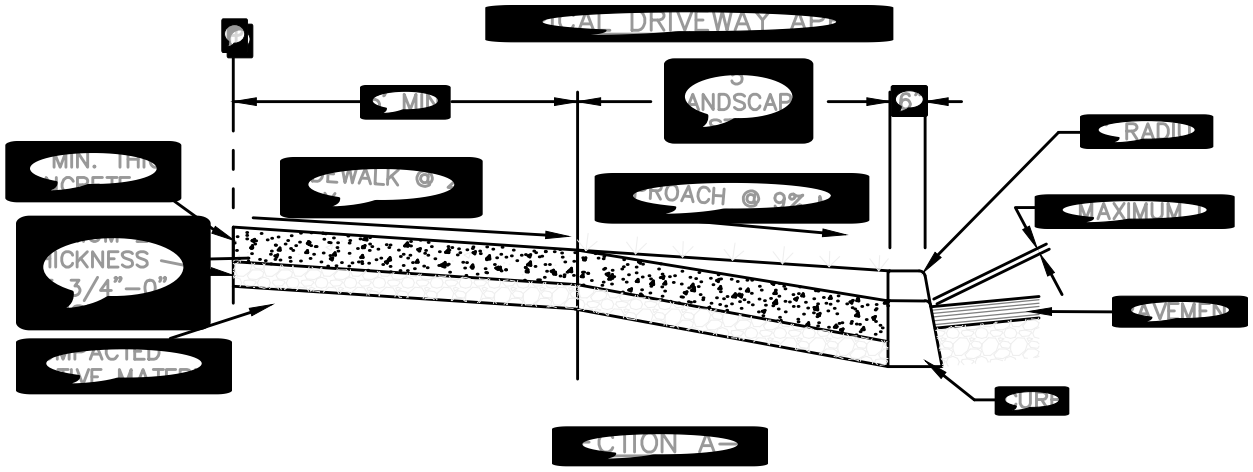
CALC. BOOK NO. N/A | SDR DATE 06-JAN-2012 | **TM679**

10-JUL-2020

TM679.dgn

Effective Date: December 1, 2024 - May 31, 2025





NOTES:

1. ... 12' TO 35' MAX.
2. ...WIDTH SHALL BE MINIMUM 28' FOR TWO LANES AND 42' FOR THREE LANES. DRIVEWAY ... STRIPING PLAN TO DELINEATE LANES. COMMERCIAL DRIVEWAYS CAN USE D600 EVEN THOUGH ...URE TO DROP THE SIDEWALK PANELS TO MEET ADA.
3. ...D IN CONSTRUCTION SHALL CONFORM TO CURRENT ODOT/APWA STANDARD SPECIFICATIONS.
4. ... DRIVEWAY ENTRANCES SHALL BE PLACED ON THE SECONDARY ROADWAY AND NO PORTION OF THE ... FEET OF THE PROPERTY CORNER OR INTERSECTION OF RIGHT-OF-WAY LINES.
5. ... SPACING BETWEEN DRIVEWAYS.
6. ...THE PIPE PER STANDARD DRAWING ...
7. ...D MISC. MATE...

TOP...

REVISION	DATE	BY
REV	1/21	BP

...AND DEVELOPMENT
...BEAVERCREEK ...

CLACKAMAS COUNTY

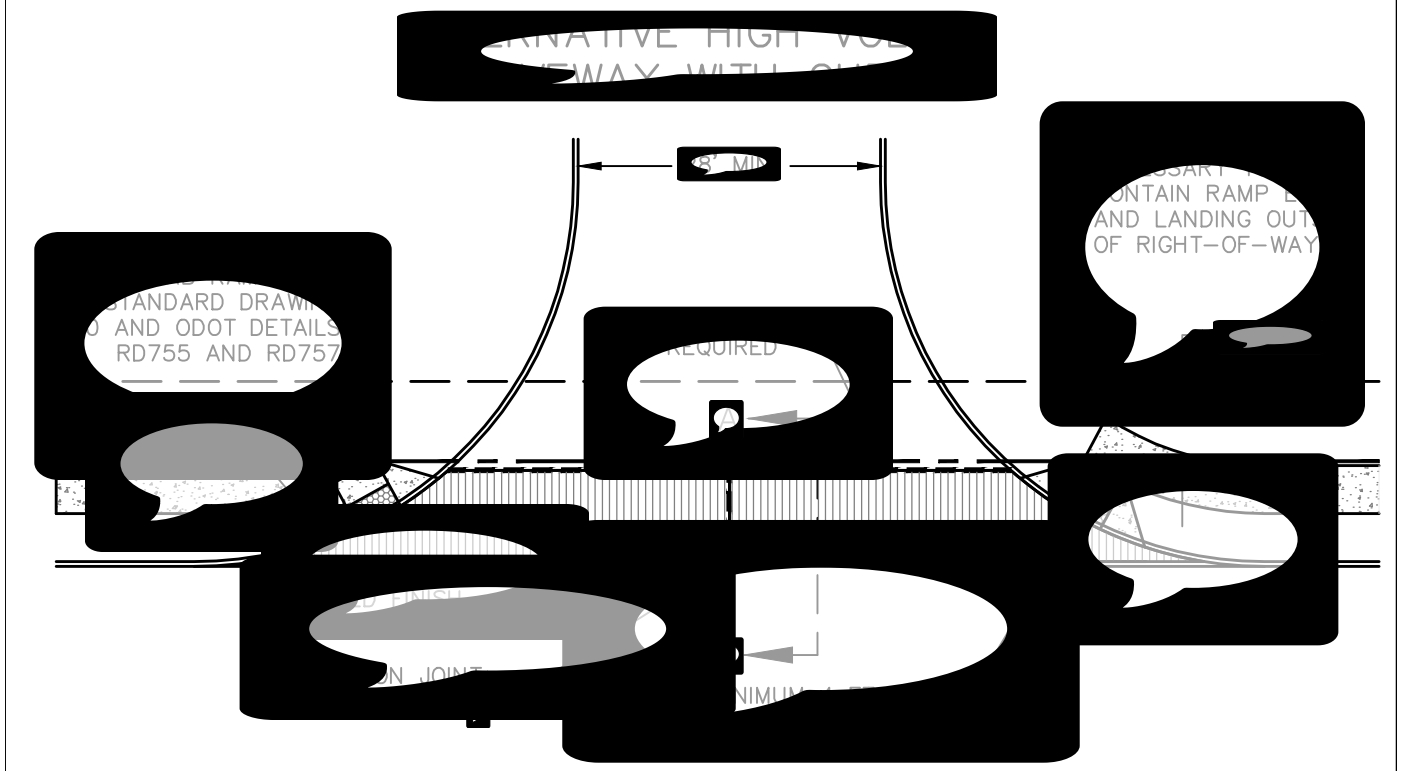
APPROVAL DA... 1/20...

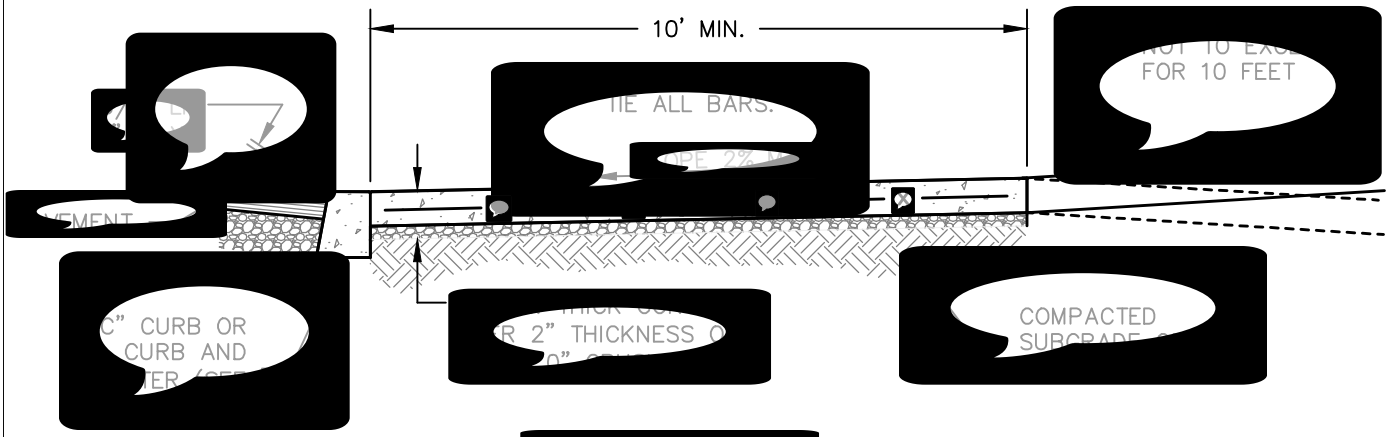
SCALE: N.T.S.

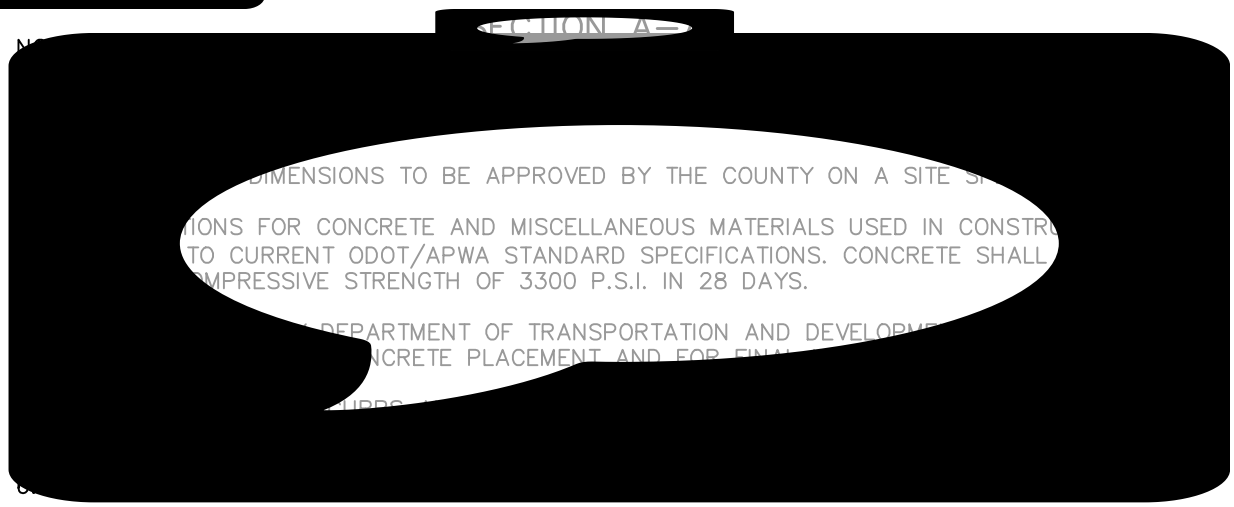
STANDARD DRIVEWAY TO CURBED COUNTY ROADS WITH LANDSCAPE STRIP

STANDARD DRAWING

D650







REVISIO	DATE	BY
REVISIO	1/1	RD

AND DEVELOPMENT
BEAVERCREEK

CLACKAMAS COUNTY

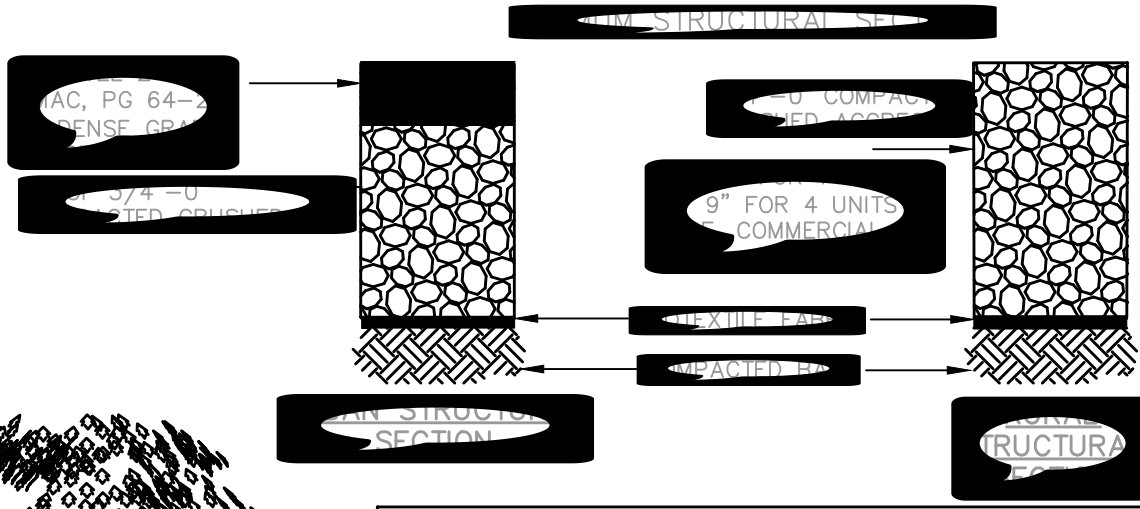
APPROVAL DA 1/20

SCALE: N.T.S.

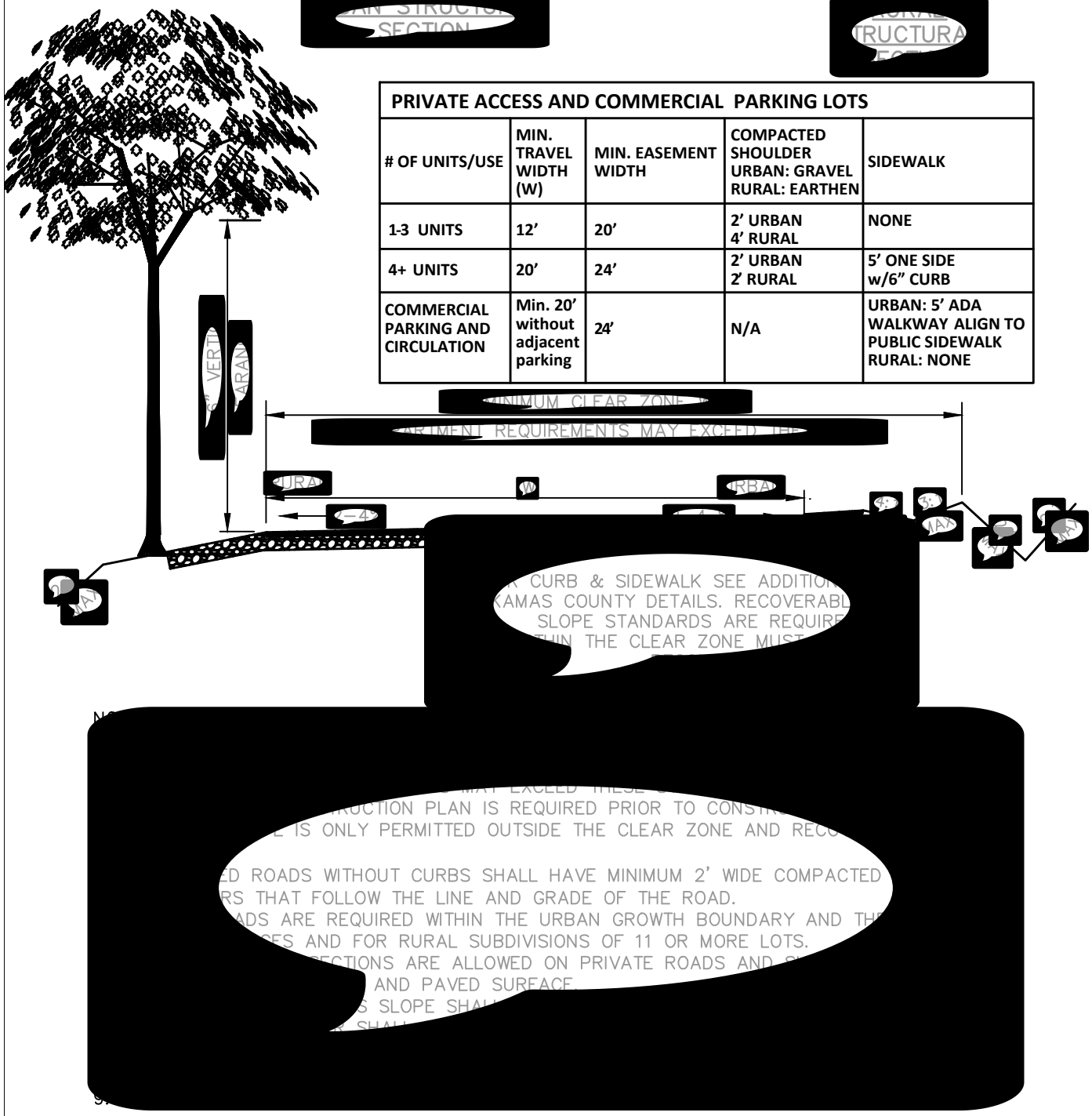
ALTERNATIVE HIGH VOLUME DRIVEWAY WITH CURBS

STANDARD DRAWING

D675



PRIVATE ACCESS AND COMMERCIAL PARKING LOTS				
# OF UNITS/USE	MIN. TRAVEL WIDTH (W)	MIN. EASEMENT WIDTH	COMPACTED SHOULDER URBAN: GRAVEL RURAL: EARTHEN	SIDEWALK
1-3 UNITS	12'	20'	2' URBAN 4' RURAL	NONE
4+ UNITS	20'	24'	2' URBAN 2' RURAL	5' ONE SIDE w/6" CURB
COMMERCIAL PARKING AND CIRCULATION	Min. 20' without adjacent parking	24'	N/A	URBAN: 5' ADA WALKWAY ALIGN TO PUBLIC SIDEWALK RURAL: NONE



REVISIO	DATE	BY
REVISIO	1/21	RD
REVISIO	7/20	RD
REVISIO	6/20	RD
REVISIO	6/20	RD

AND DEVELOPMENT
BEAVERCREEK

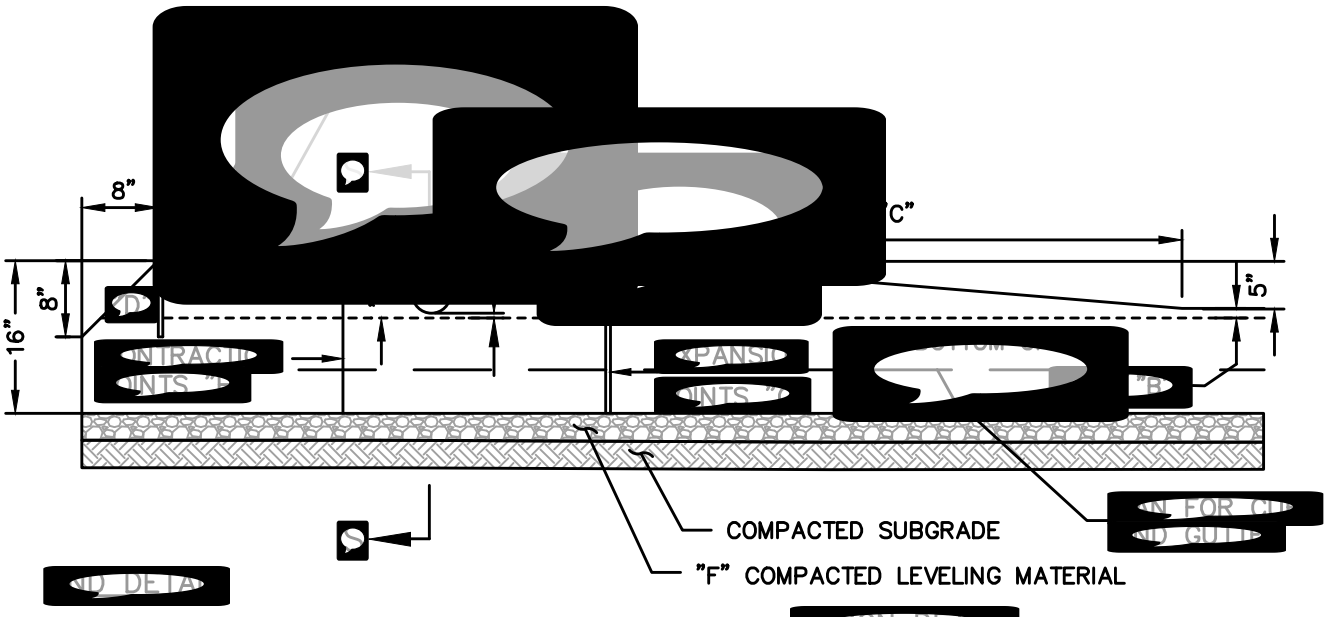
CLACKAMAS COUNTY

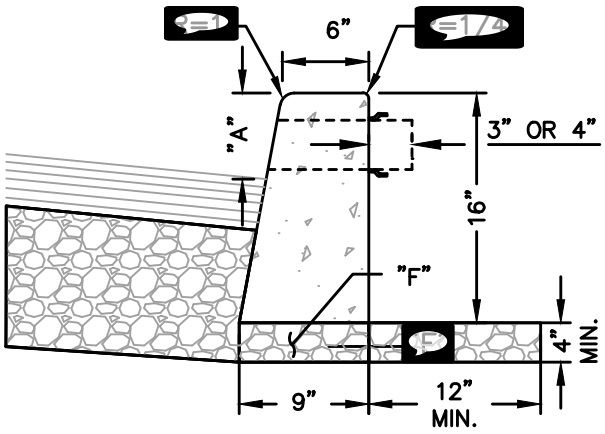
APPROVAL DA 1/20 SCALE N.T.S

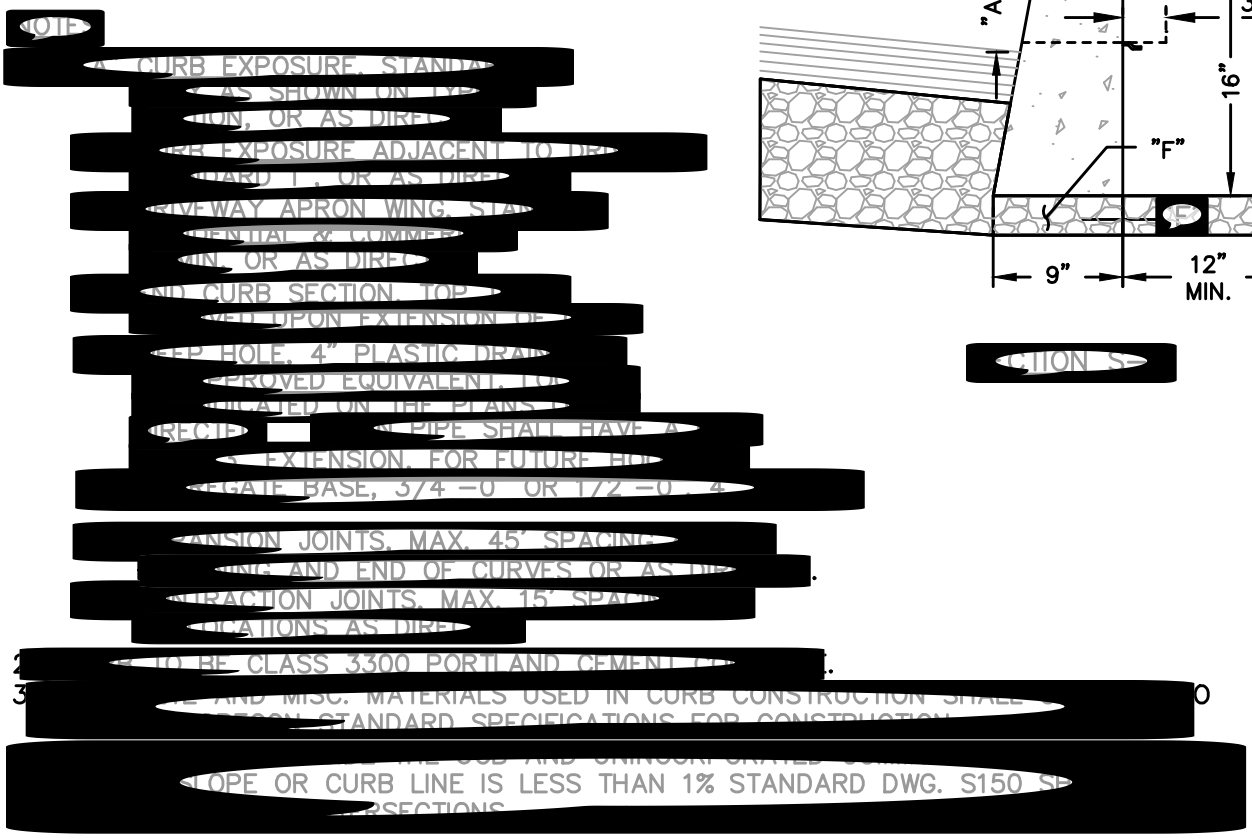
PRIVATE ROADS AND DRIVEWAYS MINIMUM STANDARDS

STANDARD DRAWING

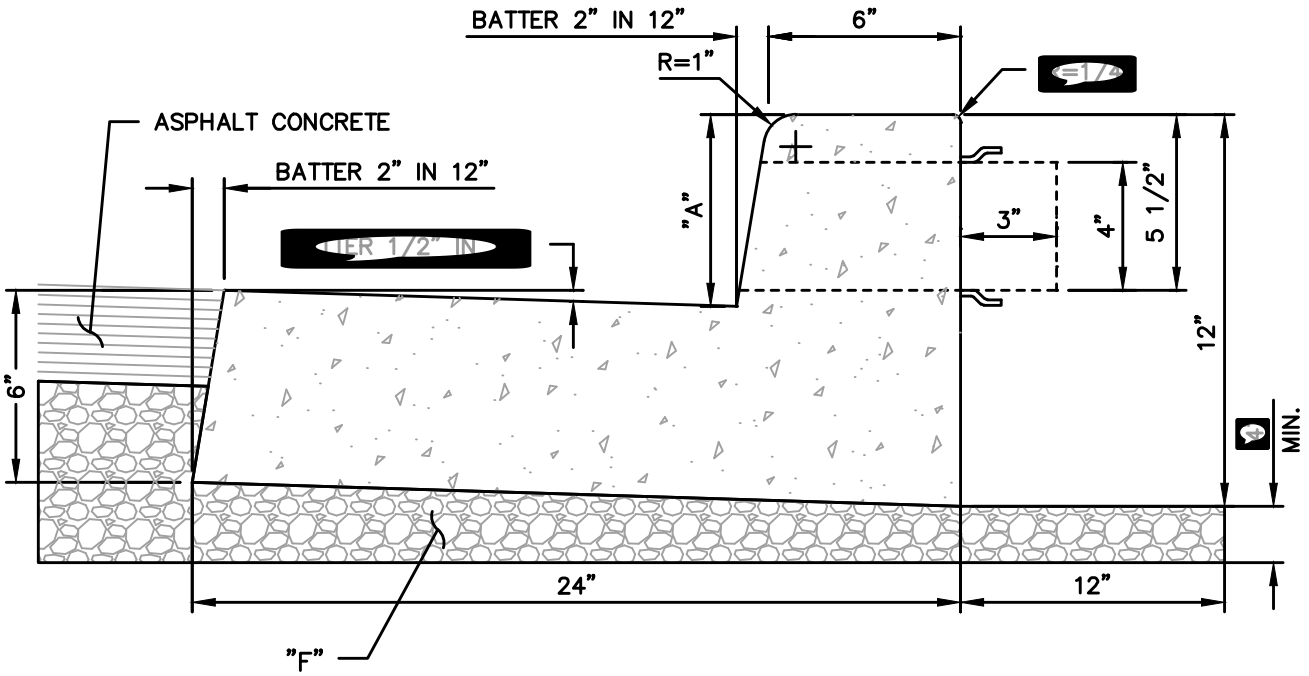
R100







			CLACKAMAS COUNTY	STANDARD TYPE 'C' VERTICAL CURB AND CURB DETAILS	S100



HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI IN

PIPE SHALL HAVE A BELL OR A 3" EXTENSION, FOR FUTURE HOOK-UP.

INTS, MAX. 45' SPACING AND AT BEGINNING AND END OF CURVES

AX. 15' SPACING AND AT LOCATIONS AS DIRE

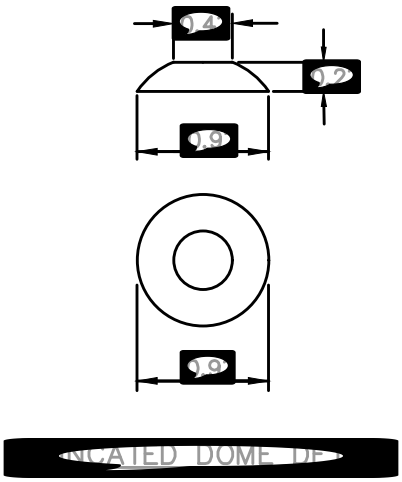
PUBLIC INTERE

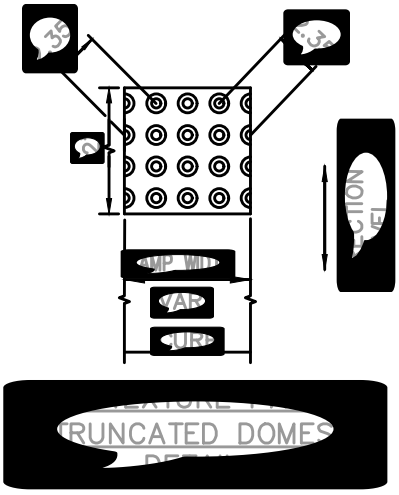
AND DEVELOPMENT

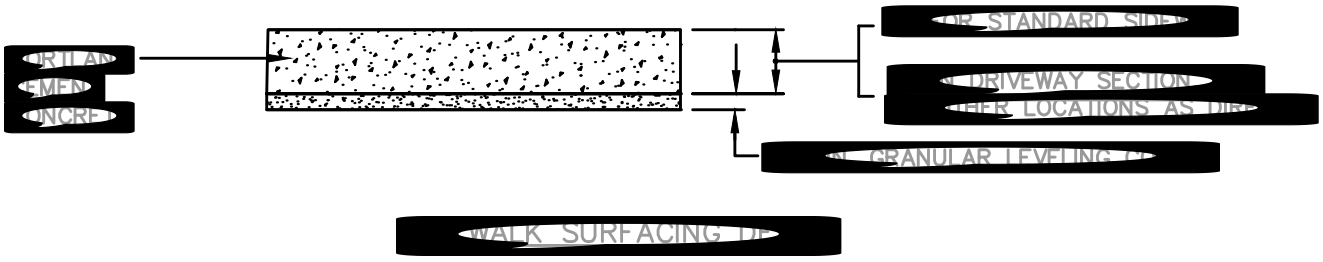
CLACKAMAS COUNTY

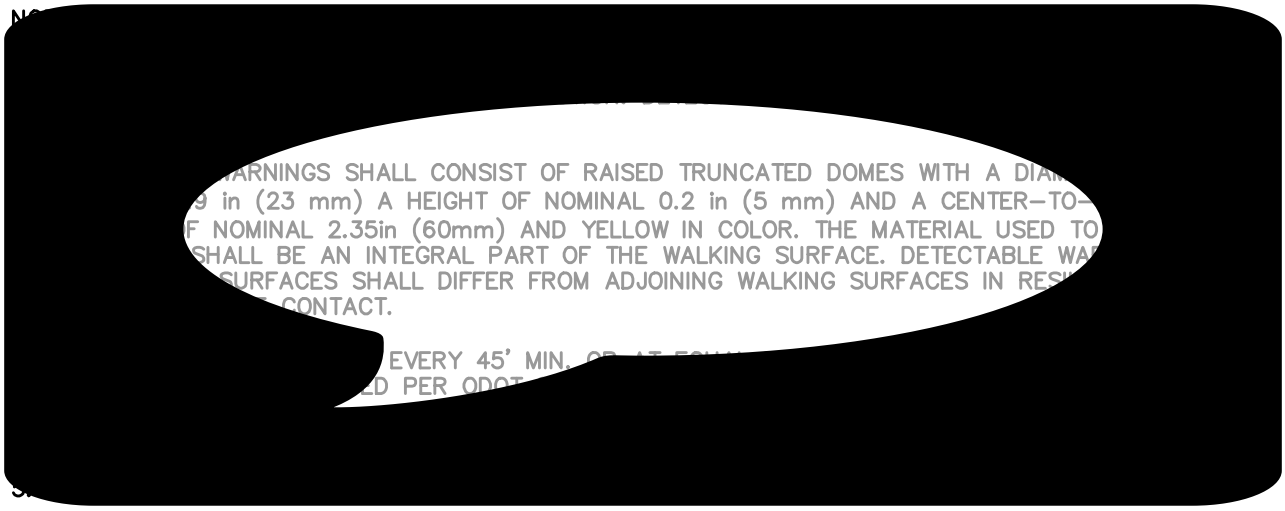
STANDARD CURB AND GUTTER

S150









REVISIO	DATE BY	AND DEVELOPMENT	CLACKAMAS COUNTY	PROVAL DA 7/20 SCALE N.T.S	STANDARD SIDEWALK & CURB RAMP NOTES & DETAILS	STANDARD DRAWING S960
REVISIO	2/21 RN					
REVISIO	2/21 RN					
REVISIO	7/20 BP					
REVISIO	7/20 RN					

AND DIMENSIONING

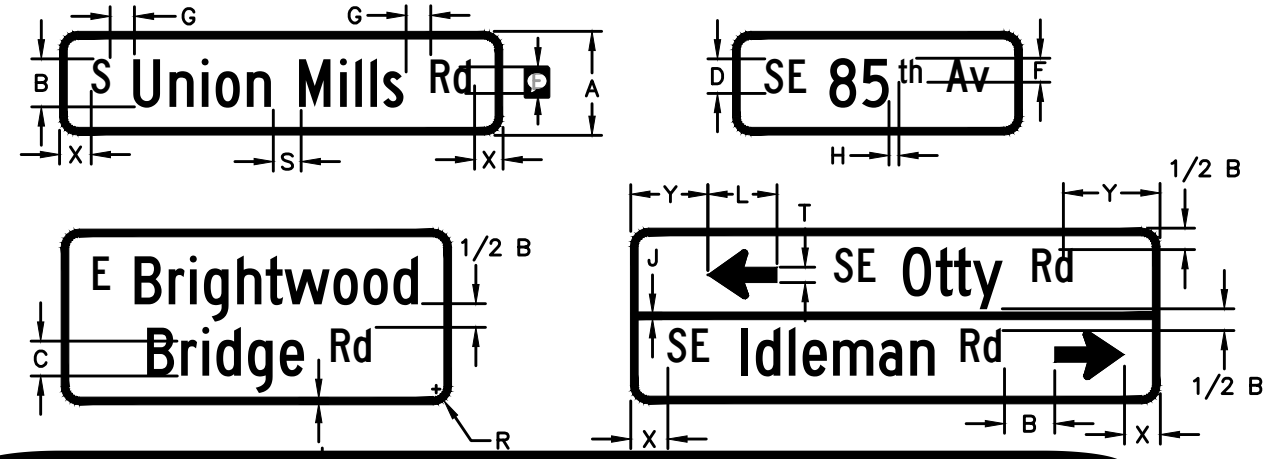
LOCATIO	STREET CLASSIFICA	SPEED	LANE WIDTH	MINIMUM LETTER HT	CASE LETTER	SUPPLEMENTAL LETTERING UPPER	LOWER	SCRIPT	DIVIDER THICK	BORDER	TAIL THICK	ARROW ANGLE
	ARTERIAL/COLLECTOR LANES											
	ARTERIAL/COLLECTOR LANES											
ROUNDABOUT	ARTERIAL/COLLECTOR LANES											
	LOCAL											
	INTERNATIONAL											
	STACKED TEXT											
	SIGNAL/CONNECTOR											
	ARRIVAL											
	INTERNATIONAL											
MAST ARM	STACKED TEXT											

NOTES

WORDS = ⅝ B.

MAINING SPACE. SHOULD BE APPROXIMATELY EQUAL TO LETTER HT (B) AND NO

ED IF 6" LETTERS YIELD SIGNS GREATER THAN 60"



BE ROUNDED.

HALL BE FLUSH WITH EDGE OF SIGN. BORDERS ARE NOT REQUIRED O

IGHT FOR ALL SIGNS AT AN INTERSECTION DICTATED BY THE HIGHEST

BE SUBMITTED

BE FHWA SERIES C AT 100% WIDTH UNLESS SPECIFIED OTHERWISE.

SHALL BE ABBREVIATED UPPER-CASE LETTERS.

AME SHALL CONSIST OF LOWER-CASE LETTERS WITH AN INITIAL UPPER-CAS

EVIATED AND CONSIST OF AN INITIAL UPPER-CAS

REEN TYPE III OR TYPE IV BACKGROUND WITH SILVER-WHITE

EGEND, OR SILVER-WHITE TYPE III OR TYPE IV SHEETING BACKGROUND OVER

T PASTE BACKGROUND WITH RETROFLECTIVE SILVER-WHITE SCREENED LEGEND

TED: GREEN TYPE III OR TYPE IV SHEETING BACKGROUND WITH WHITE

WHITE

REVISIO	DATE	BY
BORDER THICKNE	7/1	CLS
six ltr. upper/	7/1	CLS
	7/1	BD

AND DEVELOPMENT

BEAVERCREEK

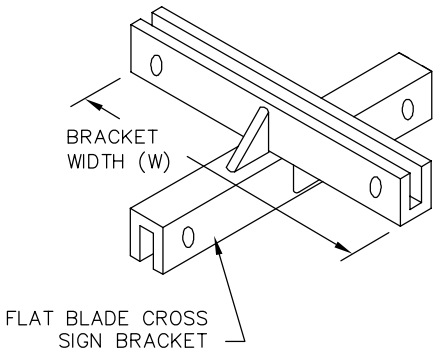
CLACKAMAS COUNTY

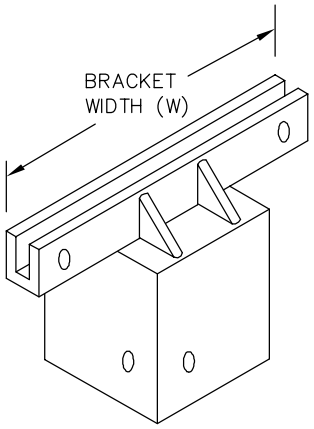
APPROVAL DA 7/20 SCALE N.T.S

STANDARD DRAWING

STREET NAME SIGNS & DETAILS

T100





FLAT BLADE SIGN BRACKETS

SIGN BRACKET SIZE

SIGN WIDTH (IN.)	MOUNTING
< 30	POST TOP BRACKET, W = 5 ¼"
30 TO 48	POST TOP BRACKET, W = 12"
> 48	RIVET TO POST

OVERHEAD MOUNTING

1. SIGNS TO BE MOUNTED USING REUSABLE BANDING TYPE ADJUSTABLE BRACKET (SKY BRACKET OR APPROVED EQUAL) UNLESS OTHERWISE SPECIFIED.
2. NEW PROJECTS: SIGNAL MAST ARM SIGNS TO BE INCLUDED ON SIGNING PLANS.
3. EXISTING SIGNAL POLES: PERFORM POLE STRUCTURAL ANALYSIS PRIOR TO ADDING OR ENLARGING SIGNS.

ABBREVIATIONS FOR STREET NAME SUFFIXES

AV = Avenue CT = Court LN = Lane PKWY = Parkway RD = Road TER = Terrace
BLVD = Boulevard DR = Drive LP = Loop PL = Place ST = Street WY = Way
CIR = Circle

S:\Engineering\Roadway Standards\2010 Roadway Standards\2010 Standards for Publish\Drawings\DWGs\ T100-T250.dwg

REVISION	DATE	BY

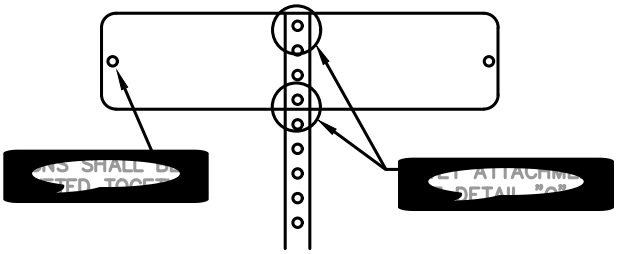
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

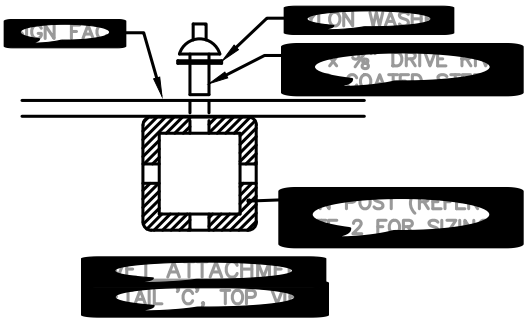
CLACKAMAS COUNTY

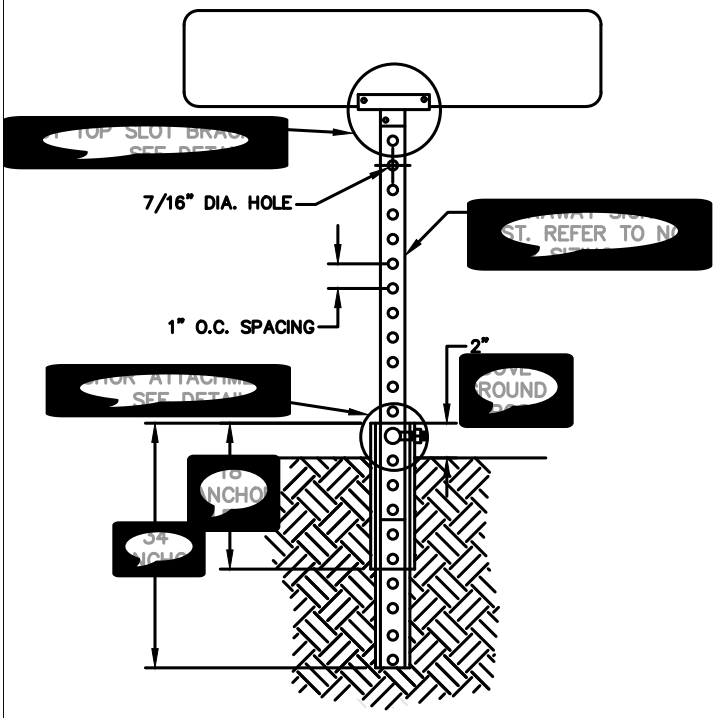
APPROVAL DATE: 1/1/10 SCALE: N.T.S.

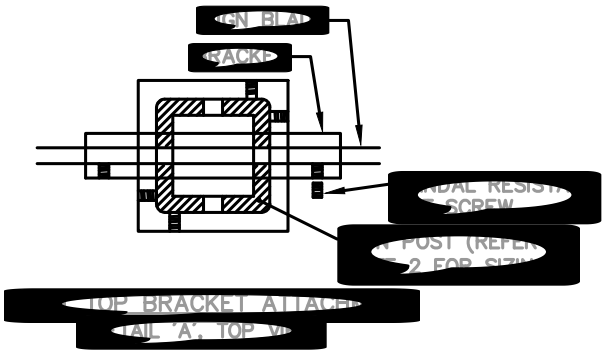
STREET NAME SIGNS & DETAILS (CONTINUED)

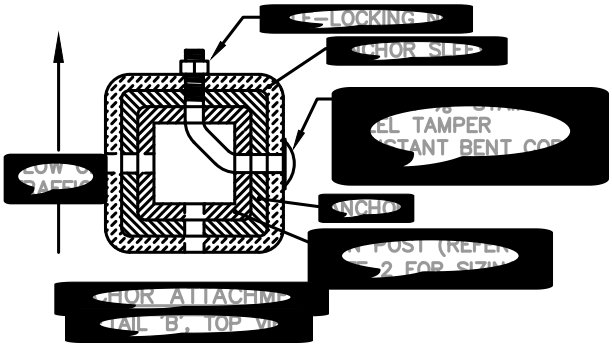
STANDARD DRAWING
T130











SIZING SHALL BE BASED ON OREGON STANDARD DRAWING TM681
TED STEEL SQUARE TUBE TABLE – 85 MPH). THE MINIMUM POST SIZ
2–GA. SQUARE TUBE. IF SIGN PANEL AREA IS GREATER THAN THA
2.5" 12–GA. SQUARE TUBE, THEN A 2.5" X 2.5" 10–GA. SQ
WITH A SLIP BASE FOUNDATION PER OREGON STAN

REVISIO	DATE	BY
REV	1/21	SP
REVISIO	9/20	SP

AND DEVELOPMENT
BEAVERCREEK

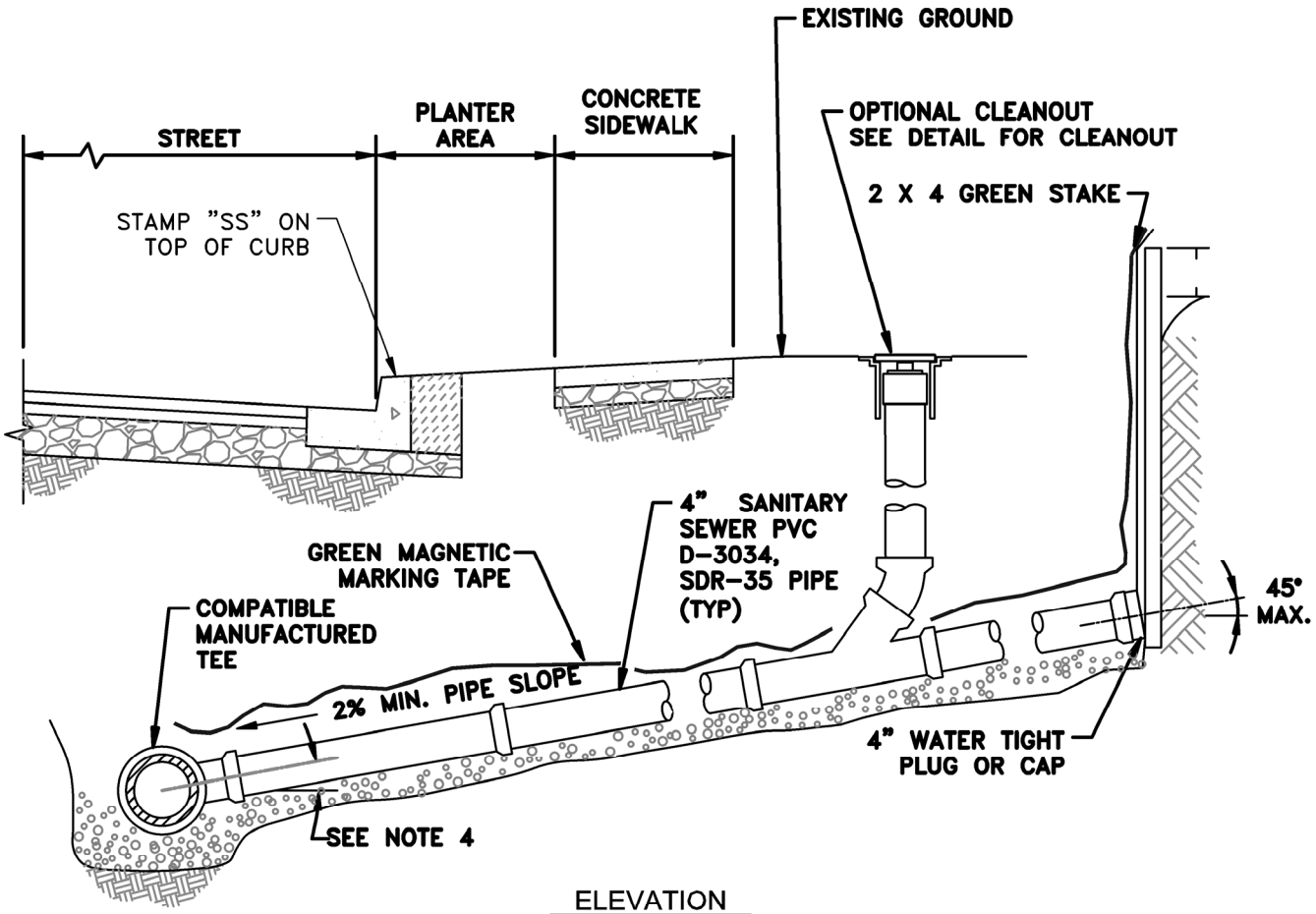
CLACKAMAS COUNTY

APPROVAL DA 1/20 SCALE N.T.S

SIGN MOUNTING AND ATTACHMENTS

STANDARD DRAWING

T150

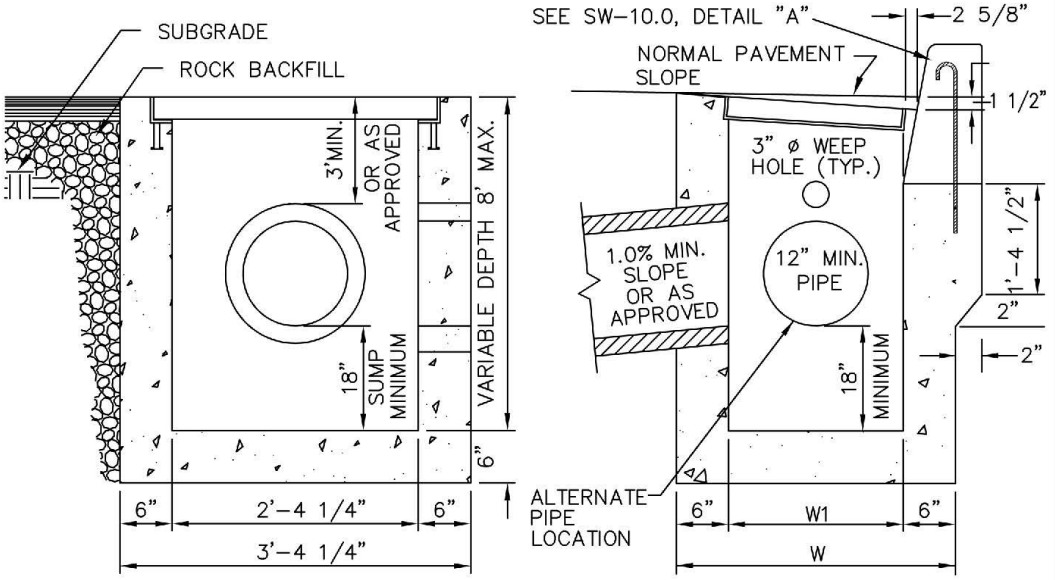


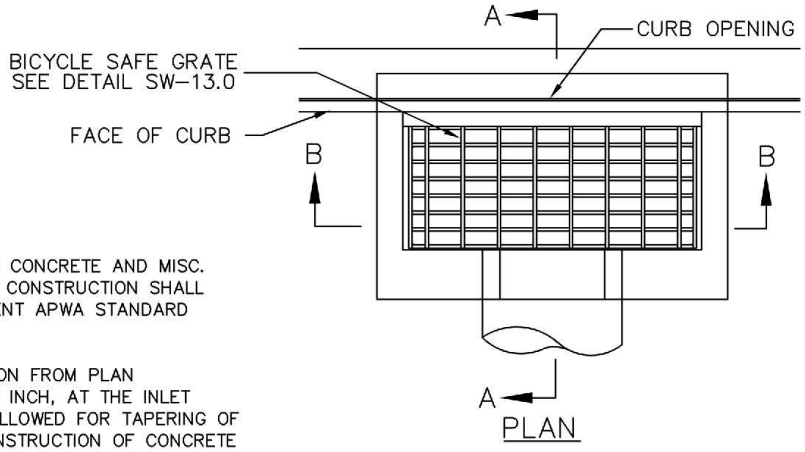
ELEVATION

NOTES:

1. INSTALL OPTIONAL CLEANOUT PER STANDARD DRAWING.
2. VIDEO INSPECT SERVICE CONNECTION IN ACCORDANCE WITH STANDARDS.
3. 2" x 4" TREATED STAKE FROM INVERT TO 1' ABOVE FINISH GRADE. SERVICE CONNECTION MARKER SHALL BE CONTINUOUS AND REMAIN VERTICAL AFTER BACKFILLING. END SHALL BE PAINTED GREEN.
4. CENTERLINE OF SERVICE OUTLET ON TEE SHALL BE ABOVE SPRINGLINE.
5. SANITARY SEWER SERVICE CONNECTIONS SHALL BE A FACTORY TEE INSTALLED 90° PERPENDICULAR TO SANITARY SEWER MAIN.
6. EVERY PROPERTY SHALL HAVE A SEPARATE SERVICE CONNECTED DIRECTLY TO THE MAINLINE, UNLESS OTHERWISE APPROVED BY THE DISTRICT. SHARED SERVICE CONNECTIONS ARE NOT ALLOWED.
7. THE SERVICE CONNECTION LOCATION SHALL GENERALLY BE LOCATED TEN FEET (10') OFFSET FROM THE PROPERTY LINE ON THE LOW SIDE OF LOT.
8. TEES FOR SERVICE CONNECTIONS SHALL BE LOCATED NO CLOSER THAN FIVE FEET (5') TO MANHOLES. SEPARATION BETWEEN WATER LINE, SANITARY SERVICE CONNECTION AND STORM SERVICE CONNECTION SHALL GENERALLY BE TEN FEET (10') WITH A MINIMUM OF FIVE FEET (5').
9. ANY OTHER PROPOSED LOCATION SHALL BE AT THE DISCRETION OF THE DISTRICT ON CASE BY CASE BASIS.

CLACKAMAS WATER ENVIRONMENT SERVICES	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	*APPROVAL DATE:* July, 2021 *SCALE:* N.T.S. SERVICE CONNECTION	*STANDARD DRAWING* SAN-021





NOTES

1. SPECIFICATIONS FOR CONCRETE AND MISC. MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT APWA STANDARD SPECIFICATIONS.
2. A MAXIMUM DEVIATION FROM PLAN DIMENSIONS OF ONE INCH, AT THE INLET FLOOR, SHALL BE ALLOWED FOR TAPERING OF FORMS USED IN CONSTRUCTION OF CONCRETE INLETS.
3. REFER TO CURRENT ODOT/APWA OREGON STATE CHAPTER DRAWING RD 366.
4. THE OUTSIDE DIAMETER OF THE PIPE MATERIAL SHALL NOT EXCEED 28".
5. PROVIDE 6" OF COMPACTED CRUSHED ROCK BELOW STRUCTURE.

CATCH BASIN TYPE	W	W1
GB-2	3' 3-3/8"	2' 3-3/8"

GB-1 NOT ALLOWED

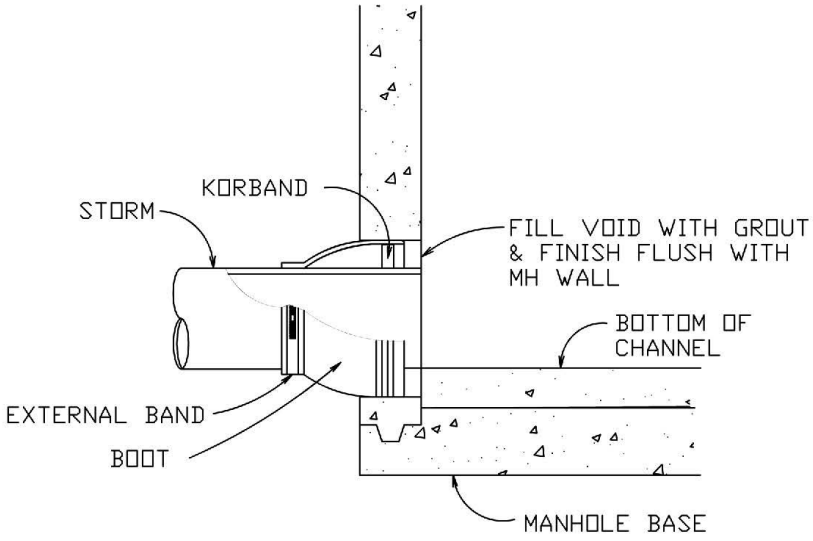
CLACKAMAS WATER ENVIRONMENT SERVICES

CLACKAMAS WES
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

APPROVAL DATE: July, 2022 *SCALE:* N.T.S.

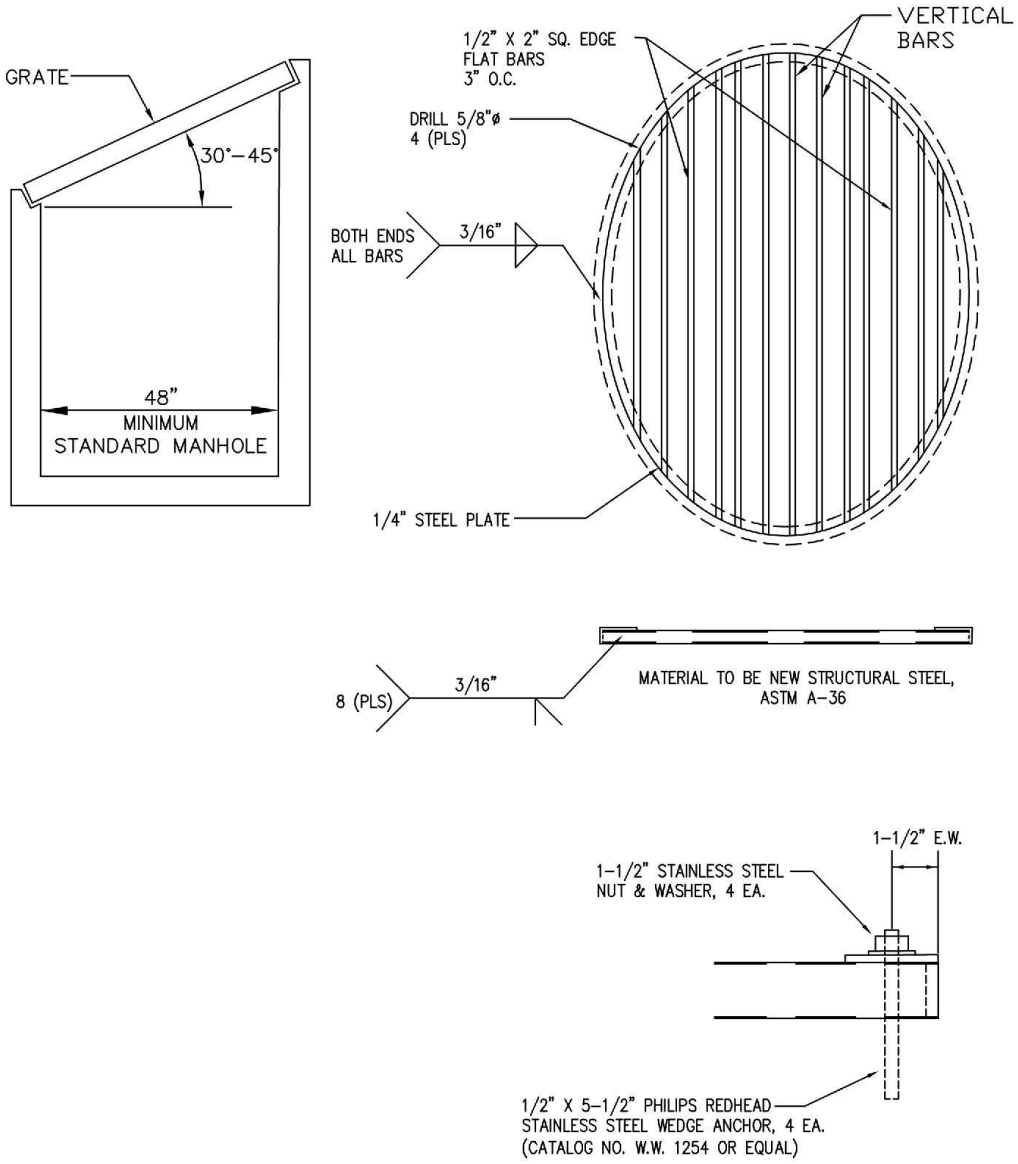
CB STANDARD GB2

STANDARD DRAWING
SWM -18



FLEXIBLE MANHOLE CONNECTION
(KOR-N-SEAL OR EQUAL)

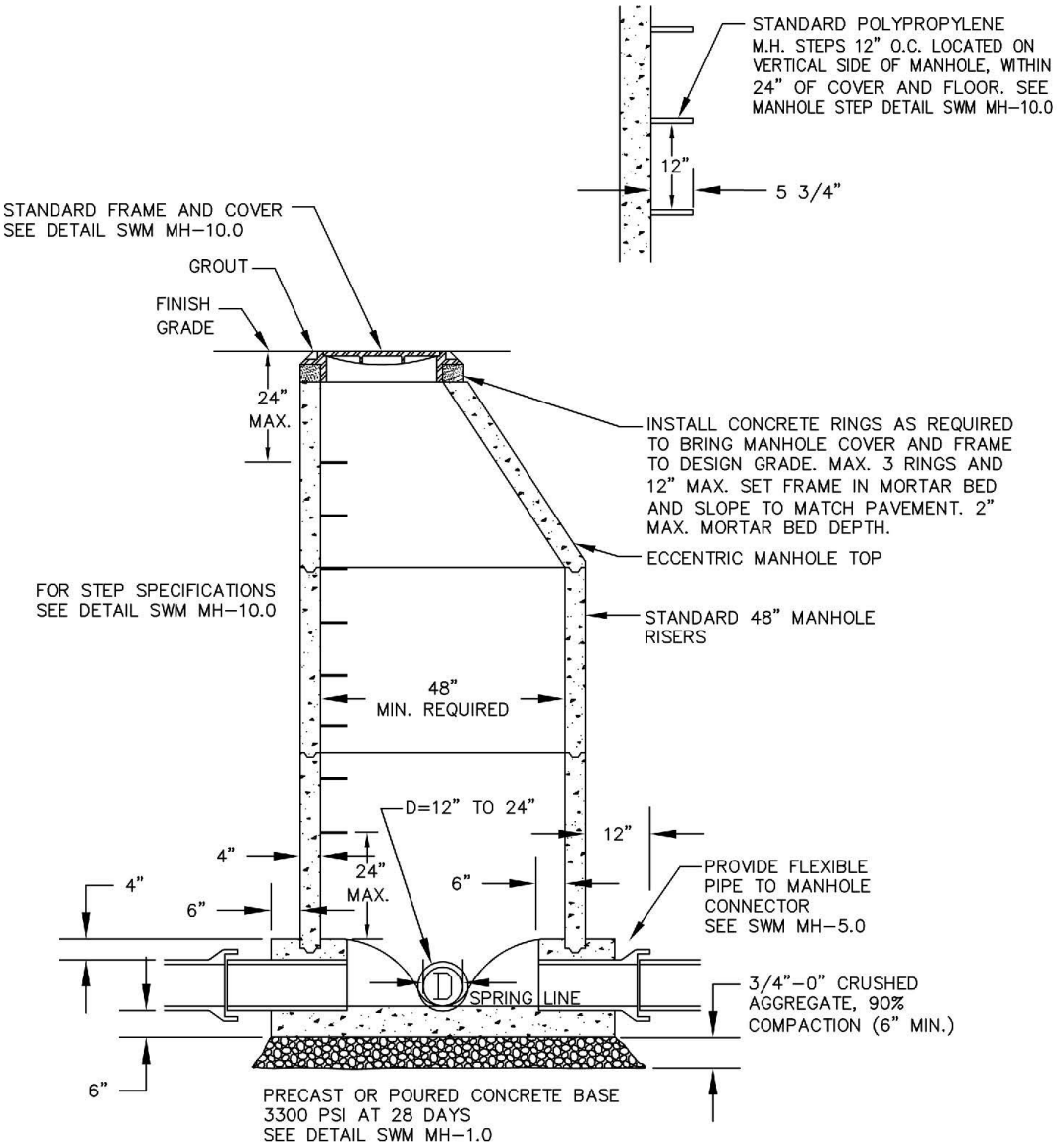
CLACKAMAS WATER ENVIRONMENT SERVICES	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	*APPROVAL DATE:* July, 2022 *SCALE:* N.T.S. MH FLEXIBLE CONNECTION	*STANDARD DRAWING* SWM -29



GRATE DETAIL

SCALE: N.T.S.

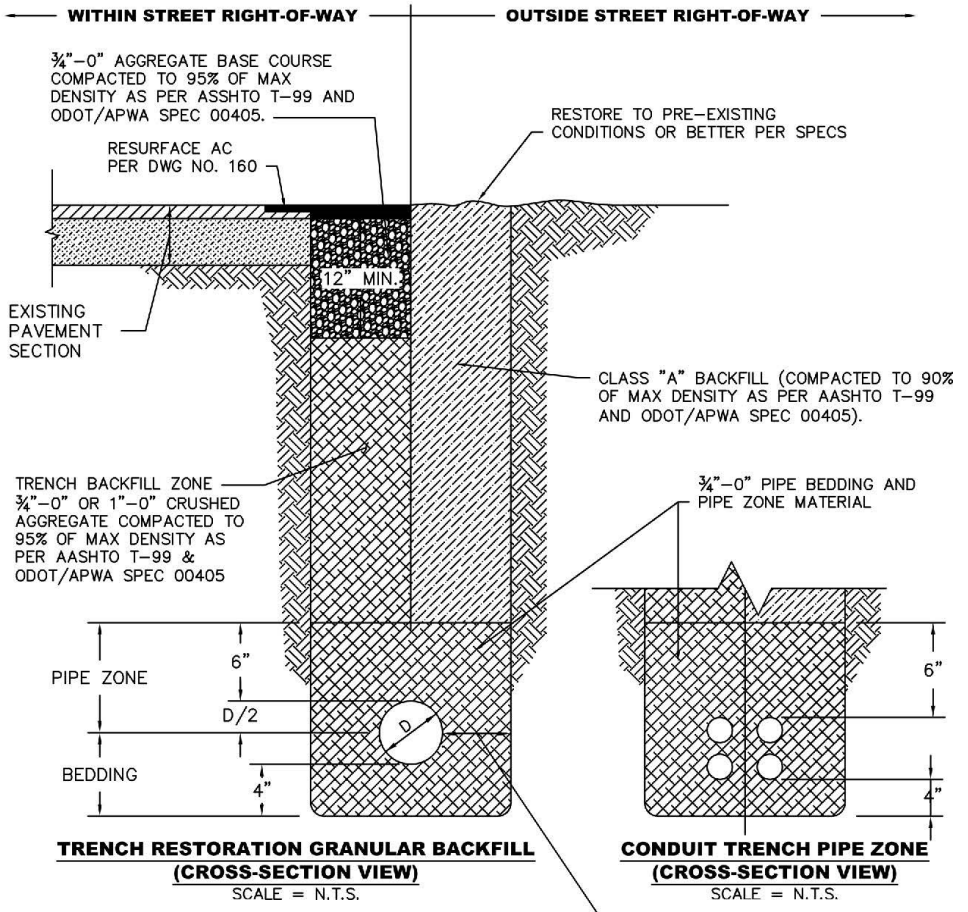
CLACKAMAS WATER ENVIRONMENT SERVICES	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	*APPROVAL DATE:* July, 2022 *SCALE:* N.T.S. MH OVAL GRATE DETAIL	*STANDARD DRAWING* SWM -31



NOTE

1. SPECIFICATIONS FOR CONCRETE AND MISCELLANEOUS MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT APWA STANDARD SPECIFICATIONS.

CLACKAMAS WATER ENVIRONMENT SERVICES	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	*APPROVAL DATE:* July, 2021 *SCALE:* N.T.S. MH STANDARD	*STANDARD DRAWING* SWM -33



TRENCH RESTORATION GRANULAR BACKFILL
(CROSS-SECTION VIEW)
SCALE = N.T.S.

CONDUIT TRENCH PIPE ZONE
(CROSS-SECTION VIEW)
SCALE = N.T.S.

NOTES:

1. PAVEMENT SHALL BE CUT PER STANDARD DRAWING 200.
2. PROVIDE COMPACT TEST RESULTS FOR TRENCH BACKFILL TO THE CITY FOR VERIFICATION.
3. CONTROL DENSITY FILL SHALL BE USED ON COLLECTOR AND ARTERIAL STREETS. REFER TO STANDARD DRAWING 210.

SHORING TRENCH CLEARANCE WIDTH	
D (IN.)	TRENCH (IN)
4–10	9
12–16	12
18–21	16
24–30	18
36–72	24

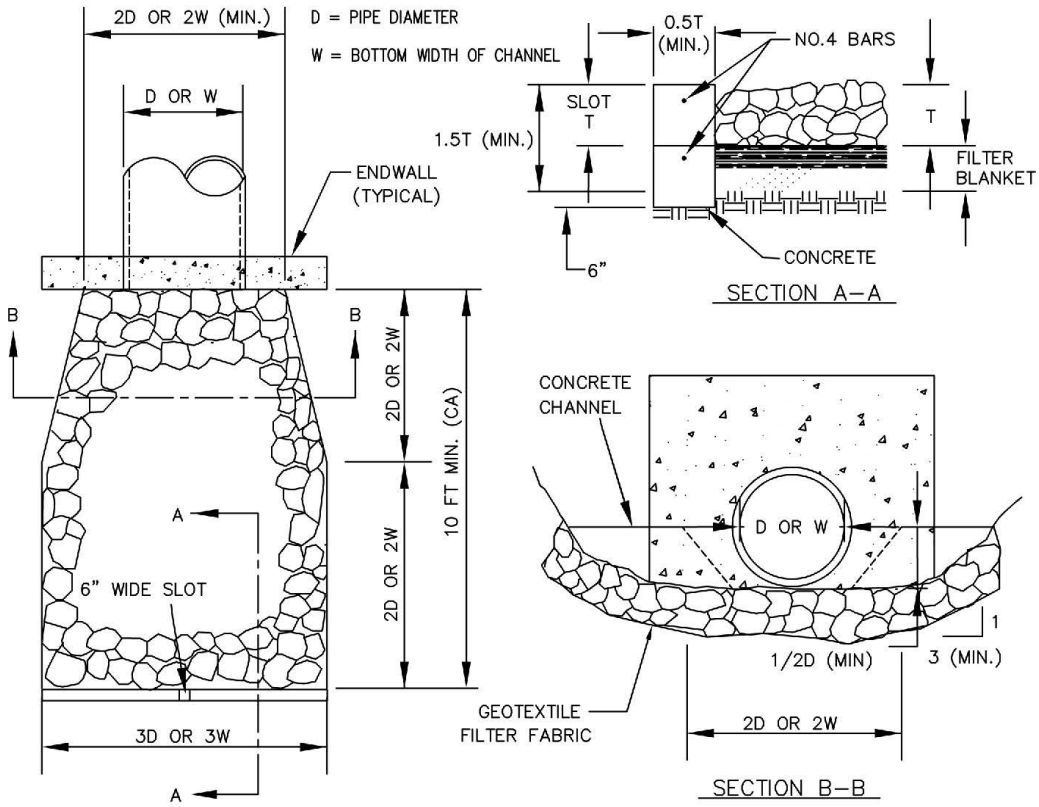
CLACKAMAS WATER ENVIRONMENT SERVICES

CLACKAMAS WES
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

APPROVAL DATE: July, 2022 *SCALE:* N.T.S.

TRENCH RESTORATION

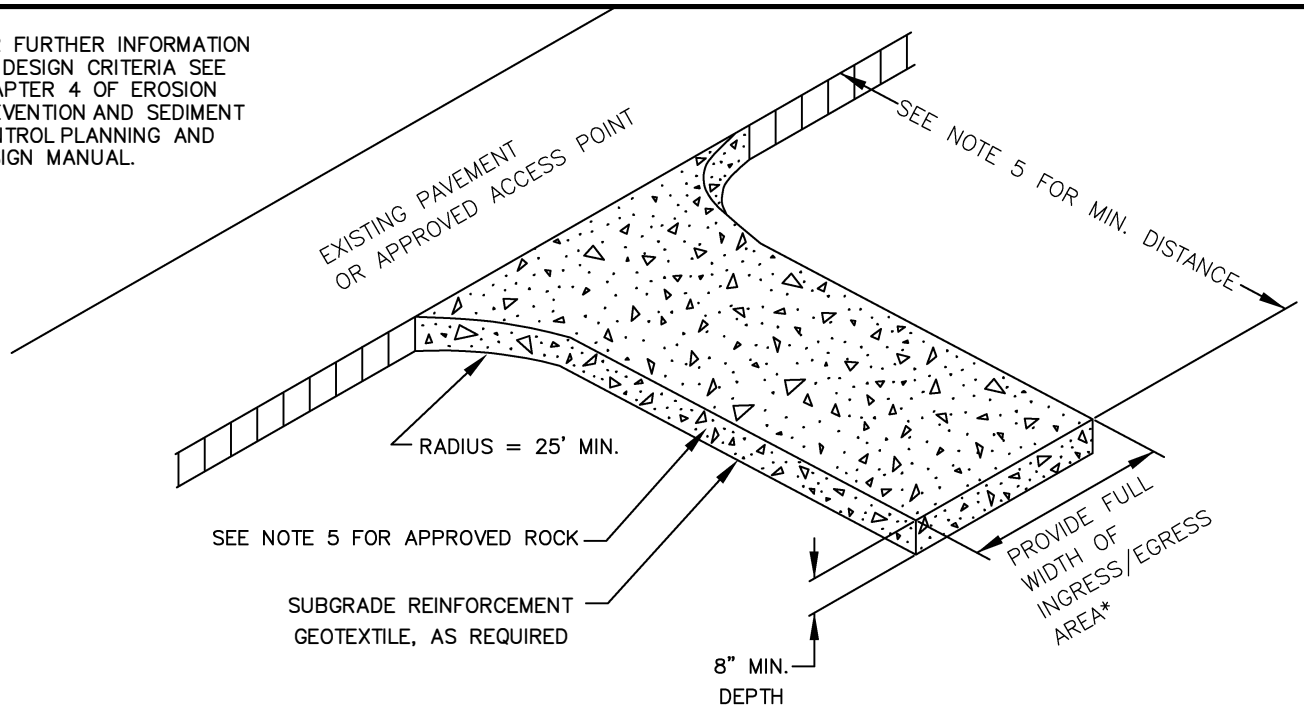
STANDARD DRAWING
SWM -38

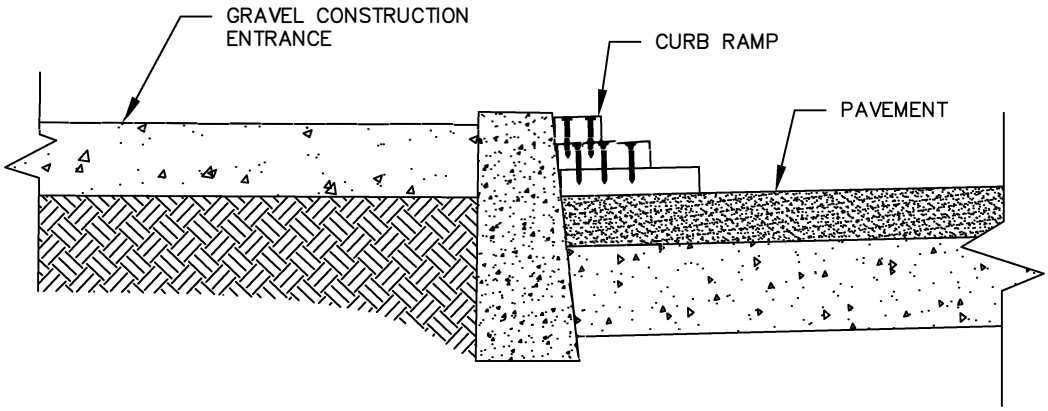


NOTES
1. PLANS SHALL SPECIFY:
   A) ROCK CLASS AND THICKNESS (T)
   B) FILTER MATERIAL, NUMBER OF LAYERS AND THICKNESS.
2. RIP RAP SHALL BE EITHER QUARRY STONE OR BROKEN CONCRETE (IF SHOWN ON THE PLANS). COBBLES ARE NOT ACCEPTABLE. SEE DETAIL SWM ST–10.1 FOR SIZING.
3. RAP RAP SHALL BE PLACED OVER FILTER BLANKET WHICH MAY BE EITHER GRANULAR MATERIAL OR PLASTIC FILTER CLOTH.
4. PLACEMENT
   A) MINIMUM DEPTH = 1–1/2 TIMES AVERAGE STONE SIZE.
   B) ROCKS SHALL BE PLACED TO PROVIDE A MINIMUM OF VOIDS.
   C) SURFACE ROCKS SHALL PROTRUDE AT LEAST 1/2 THEIR VERTICAL DIMENSION.
   D) RIPRAP IS TO BE PLACED OVER A GEOTEXTILE FABRIC ON A NATURAL BEDDING, OR IT MAY BE GROUTED OR PLACED OVER A GRAVEL BEDDING AS REQUIRED BY THE DISTRICT.

CLACKAMAS WATER ENVIRONMENT SERVICES	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	*APPROVAL DATE:* July, 2021 *SCALE:* N.T.S. OUTFALL RIP RAP	*STANDARD DRAWING* SWM -45

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.





NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF– WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS

   SINGLE FAMILY

   20' LONG BY 20' WIDE 8" DEEP OF ¾" MINUS CLEAN ROCK.

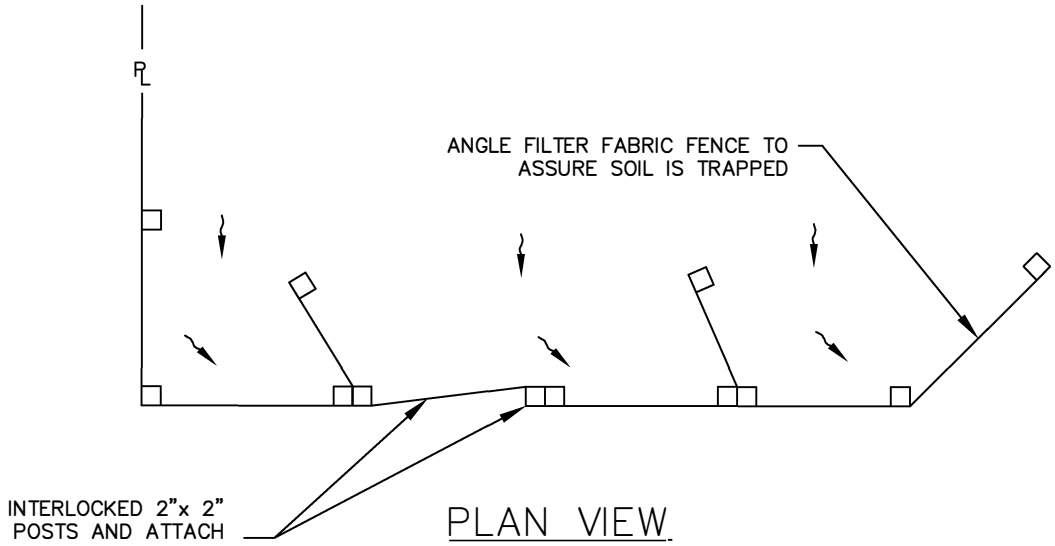
   COMMERCIAL/SITE DEVELOPMENT

   50' LONG BY 20' WIDE 3–6" CLEAN ROCK, GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB–SOIL PUMPING.

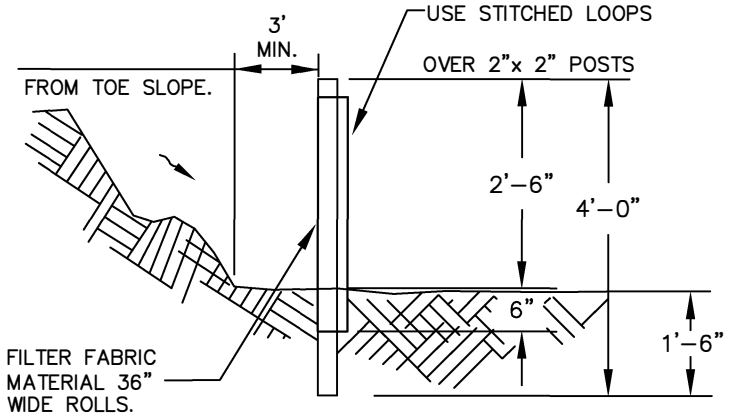
CONSTRUCTION ENTRANCE

DRAWING NO. 4-11

REVISED 10-31-19



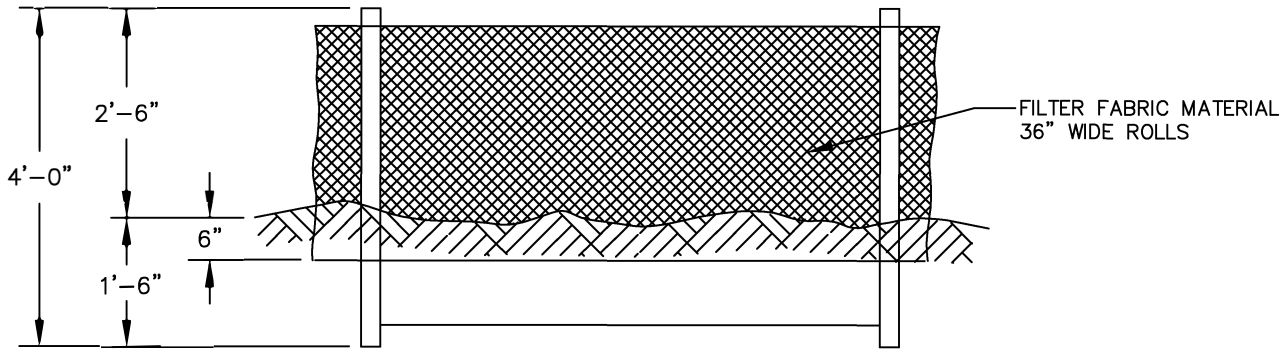
PLAN VIEW



PROFILE

NOTES:

1. SEDIMENT FENCE TO HAVE STITCHED LOOPS AROUND 2" x 2" POSTS.
2. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
3. 2"x 2" FIR, PINE OR STEEL FENCE POSTS.
4. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
5. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
6. PANELS MUST BE PLACED ACCORDING TO SPACING ON DRAWING NO. 4-28.



FRONT VIEW

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

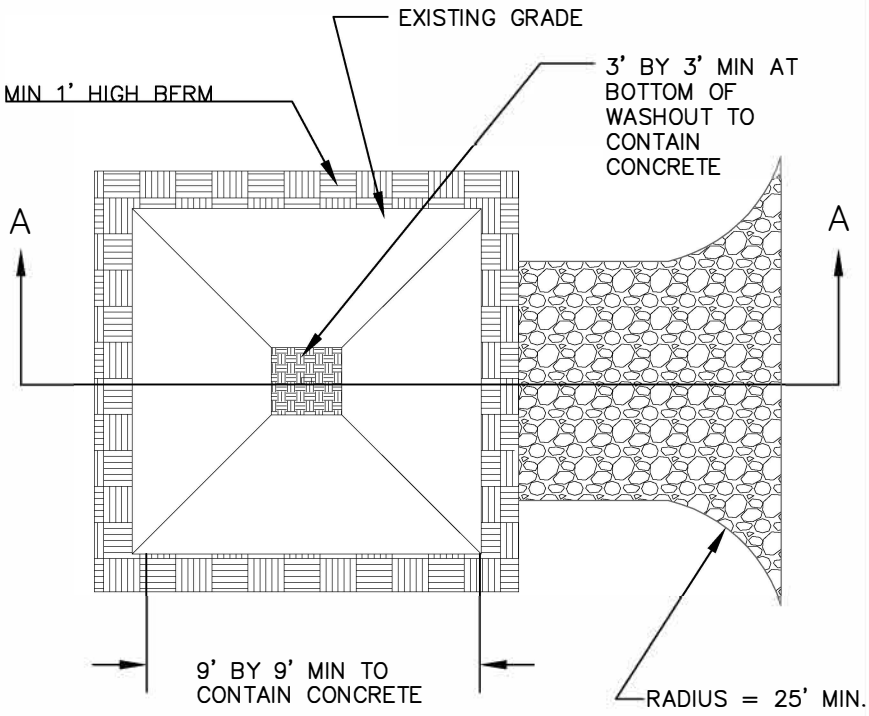
SEDIMENT FENCE

DRAWING NO. 4-15

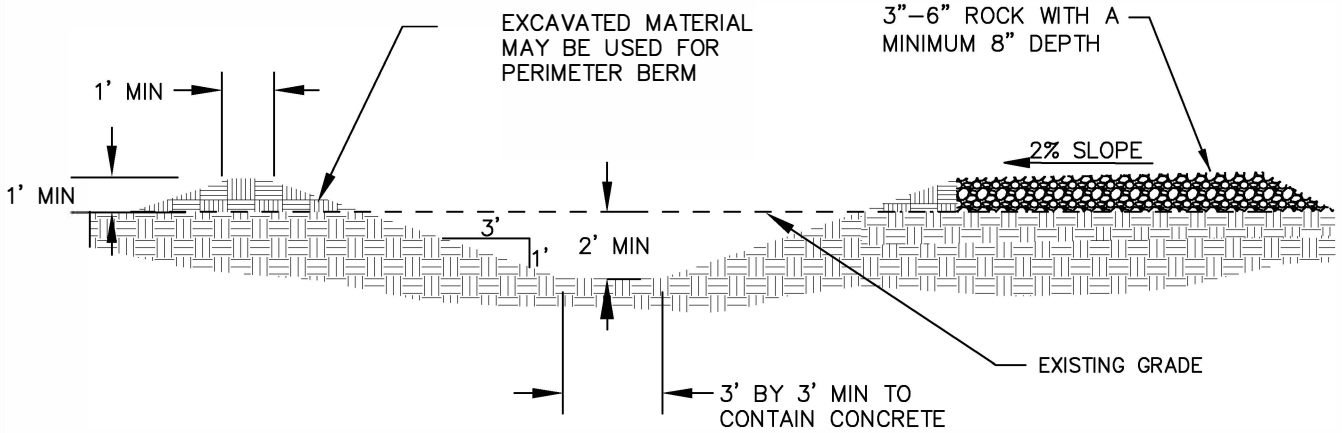
REVISED 10-31-19

NOTES:

1. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
2. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
3. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING OPEN DRAINAGE FACILITIES AND WATER SOURSES.
5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. INSTALL CONCRETE WASHOUT SIGN WITHIN 30 FEET OF TEMPORARY CONCRETE WASHOUT FACILITY.
7. TEMPORARY CONCRETE WASHOUTS MAY BE A PREFABRICATED CONTAINER THAT IS PORTABLE AND REUSABLE.



PLAN

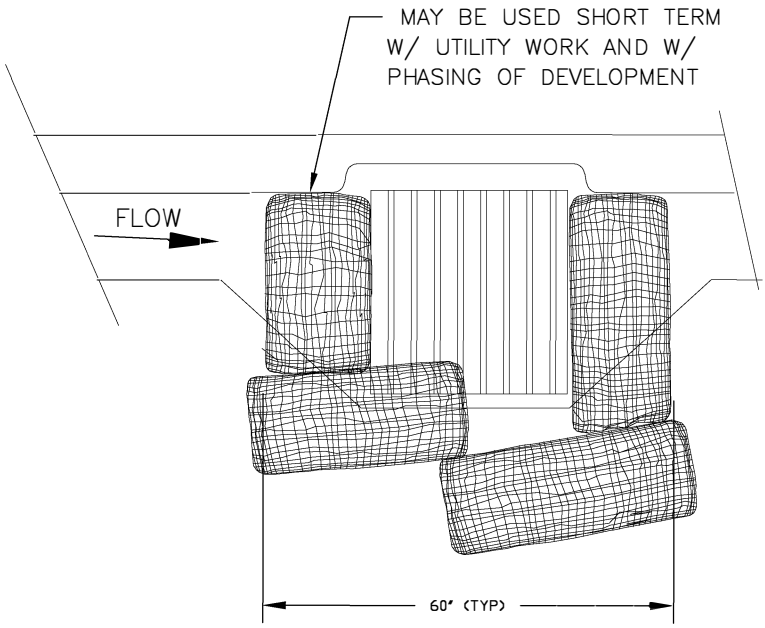


SECTION A–A

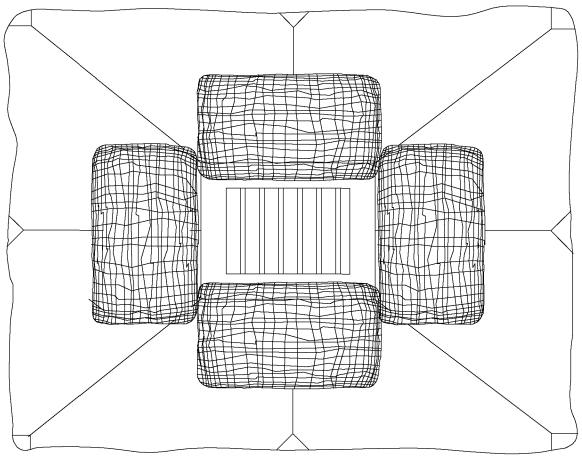
CONCRETE WASHOUT

DRAWING NO. 4-20

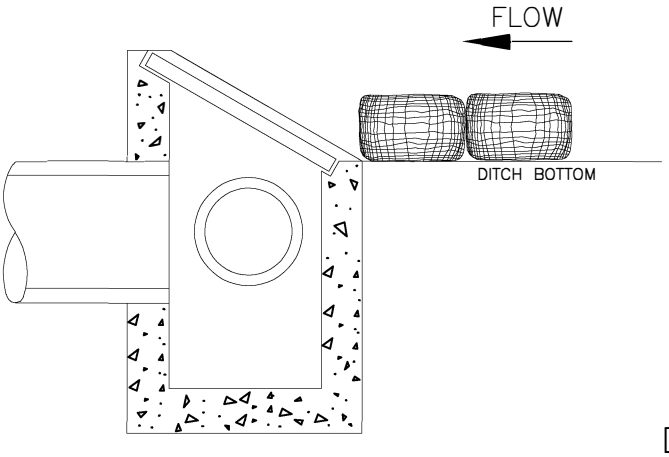
REVISED 10-31-19



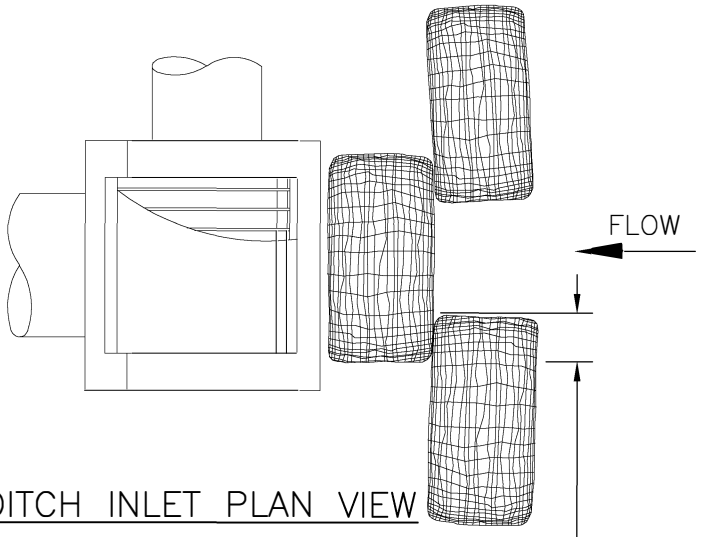
CATCH BASIN



AREA DRAIN



DITCH INLET



DITCH INLET PLAN VIEW

NOTES:

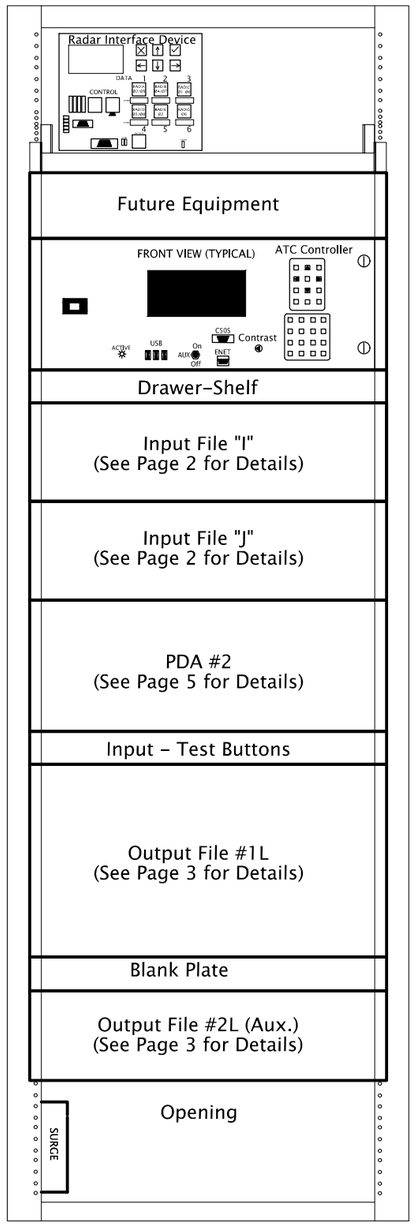
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

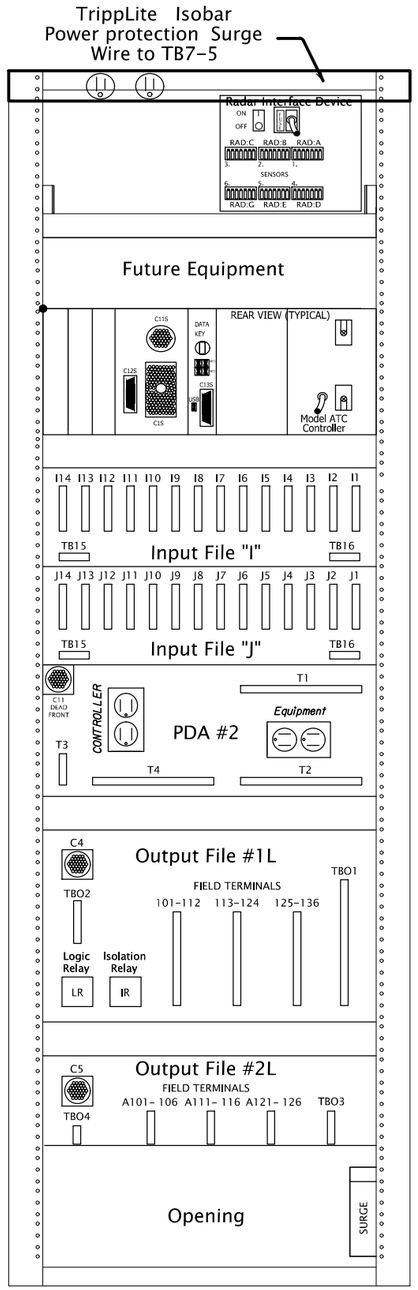
INLET PROTECTION TYPE 4

DRAWING NO. 4-23

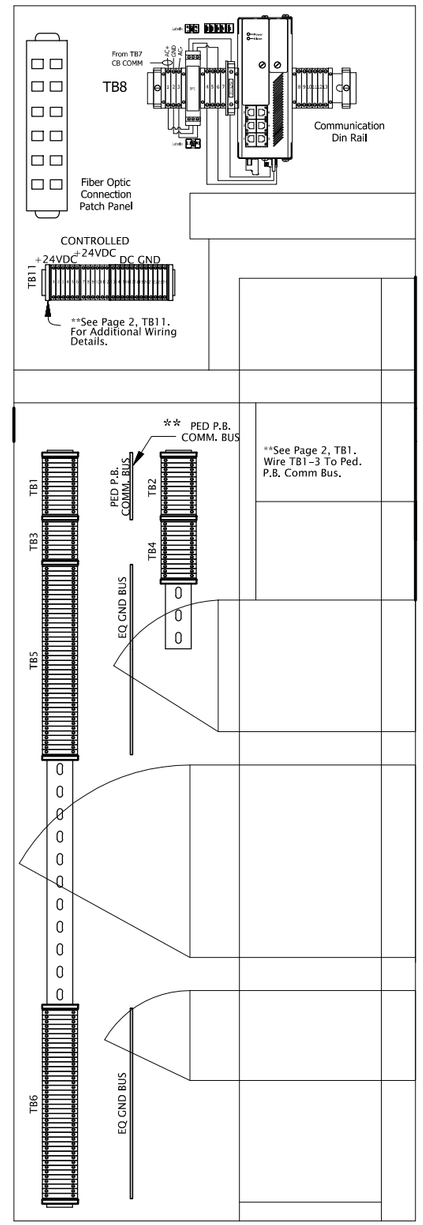
REVISED 10-31-19



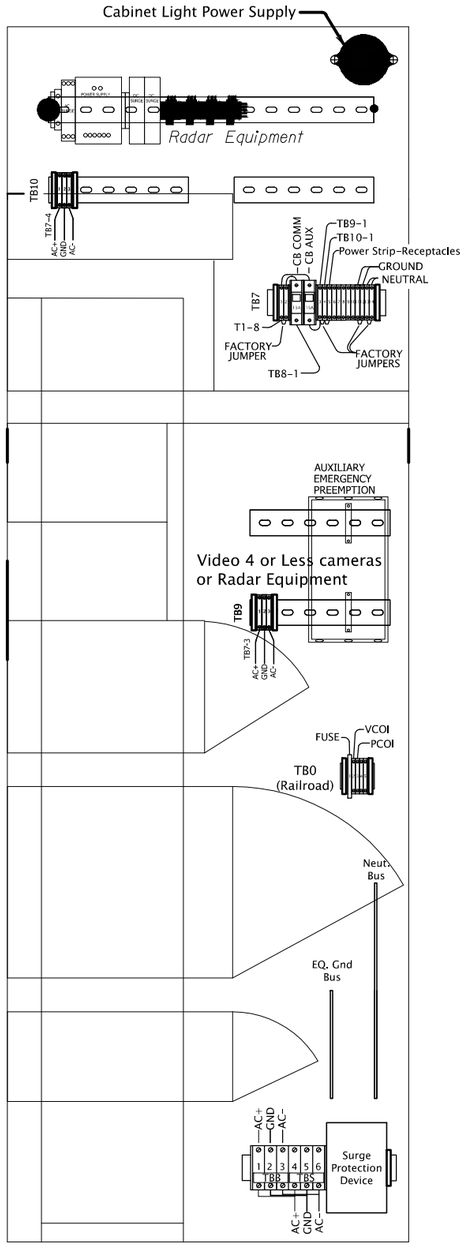
FRONT VIEW



REAR VIEW



SIDE VIEW (REAR LEFT)



SIDE VIEW (REAR RIGHT)

PAGE	332S ODOT STRETCH CABINET HOUSING	REV. NO.	DATE	INITIAL	REMARKS
1 of 7					

INTERSECTION: SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

HWY#: _____ M.P.#: _____ TSSU ID#: _____

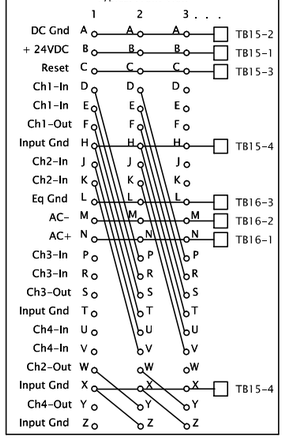
OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

332S ODOT CABINET PRINT

Rotation: 0° Scale: 1"=100'

INPUT FILE I & J

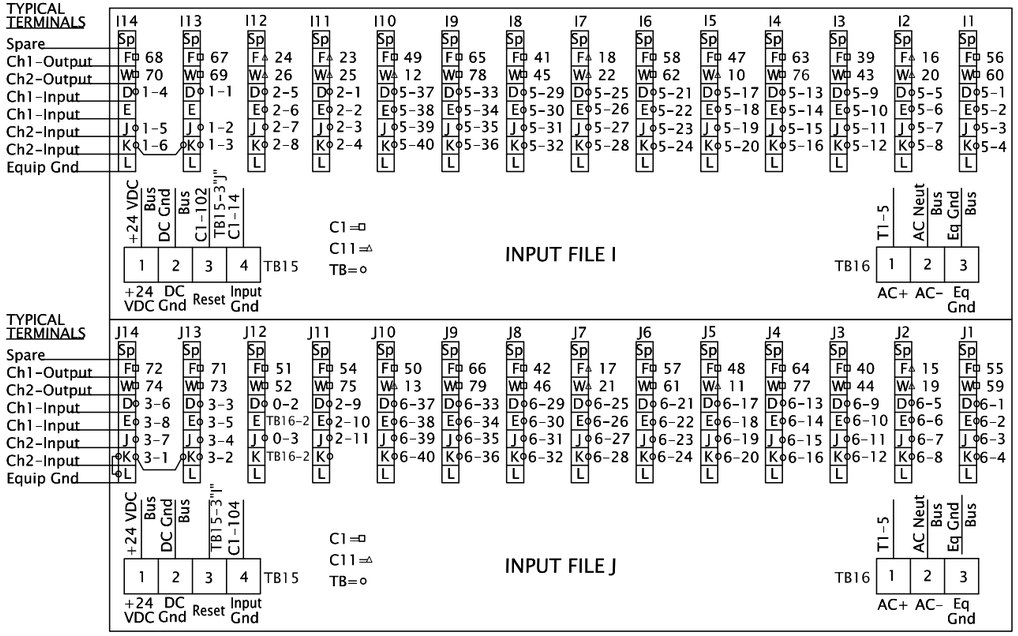
Slot 1 thru Slot 14
Typical Front View



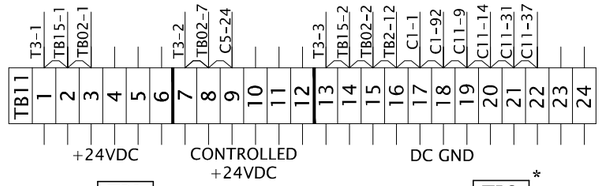
I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
.	.	.	.	.	.	.	.	.	.	.	.	242	242
Ø1 C1-56 MT1 MT13 C1-60 Ø1	Ø1 C11-16 MT29 MT30 C11-20 Ø1	Ø2 C1-39 MT2 MT3 C1-43 Ø2	Ø2 C1-63 MT4 MT5 C1-76 Ø2	Ø2 C1-47 MT6 MT31 C11-10 Ø2	Ø3 C1-58 MT7 MT14 C1-62 Ø3	Ø3 C11-18 MT32 MT33 C11-22 Ø3	Ø4 C1-41 MT8 MT9 C1-45 Ø4	Ø4 C1-65 MT10 MT11 C1-78 Ø4	Ø4 C1-49 MT12 MT34 C11-12 Ø4	SPARE C11-23 C11-25 SPARE	SPARE C11-24 C11-26 SPARE	2 PED C1-67 C1-69 4 PED	6 PED C1-68 C1-70 8 PED
J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14
.	.	.	.	FLIR	EDGE	.	.	.	.	.	.	752	752
Ø5 C1-55 MT15 MT 27 C1-59 Ø5	Ø5 C11-15 MT35 MT36 C11-19 Ø5	Ø6 C1-40 MT16 MT17 C1-44 Ø6	Ø6 C1-64 MT18 MT19 C1-77 Ø6			Ø7 C11-17 MT38 MT39 C11-21 Ø7	Ø8 C1-42 MT22 MT23 C1-46 Ø8	Ø8 C1-66 MT24 MT25 C1-79 Ø8	Ø8 C1-50 MT26 MT40 C11-13 Ø8	SPARE C1-54 C1-75 GPS	PCOI C1-51 C1-52 VCOI	EVA C1-71 C1-73 EVC	EVB C1-72 C1-74 EVD

INPUT FILE - WIRING
TYPICAL WIRING DETAILS

INPUT FILE I & J (FRONT VIEW)
(NOT TO SCALE)

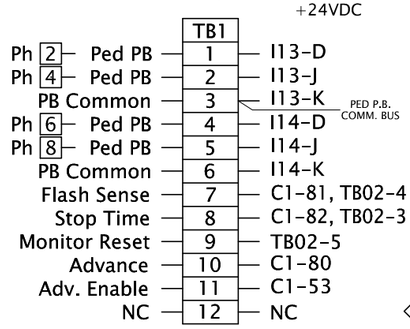


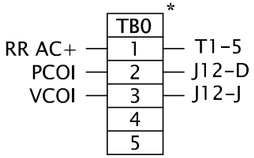
INPUT FILE I & J (REAR VIEW)
(NOT TO SCALE)



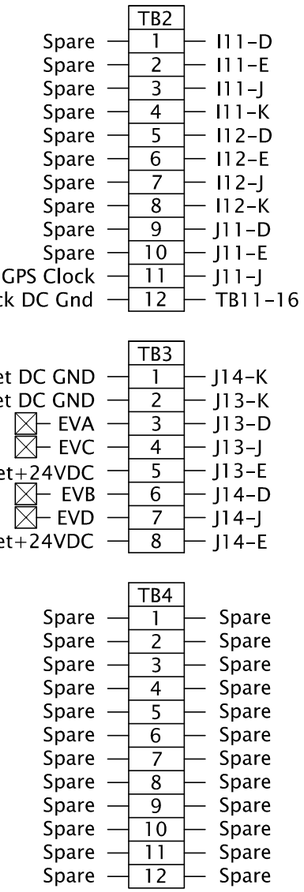
TERMINAL BLOCK DEFINITIONS

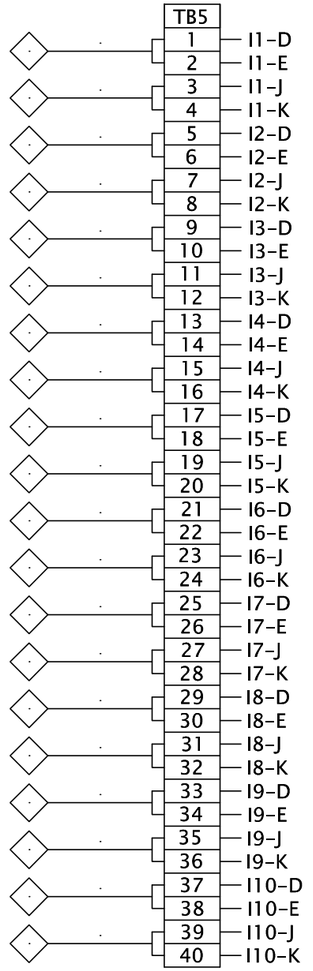
- TB0 - Railroad
- TB1 - PEDS & Controller
- TB2 - Spares - GPS Clock
- TB3 - EV Preemption
- TB4 - AUX EV Preemption
- TB5 - I File Loop Feeders
- TB6 - J File Loop Feeders
- TB7 - COMM. and AUX. Breakers
- TB8 - COMM. Equipment
- TB9 - Video or Radar Din Rail
- TB10 - Video or Radar Din Rail
- TB11 - 24VDC Bus Bar

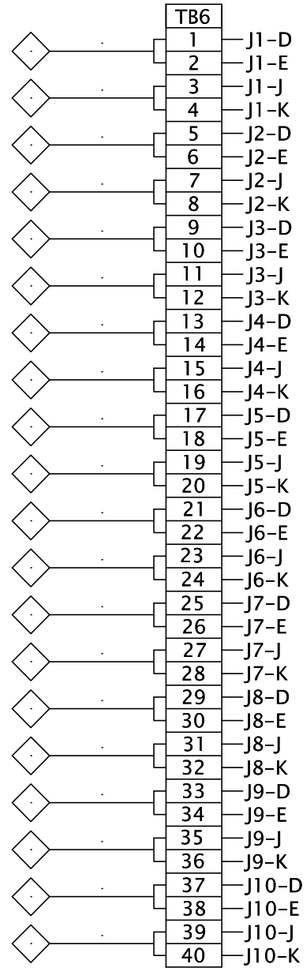




* NOTE
See Pages 1 & 5 For Railroad Interconnect Wiring Details







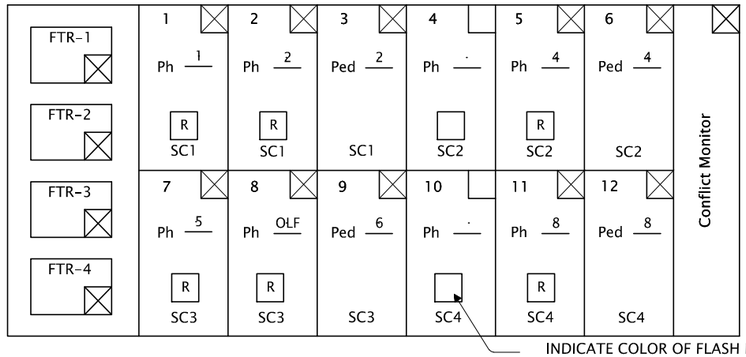
REV. NO.	DATE	INITIAL	REMARKS

INTERSECTION: SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

HWY#: _____ M.P.#: _____ TSSU ID#: _____

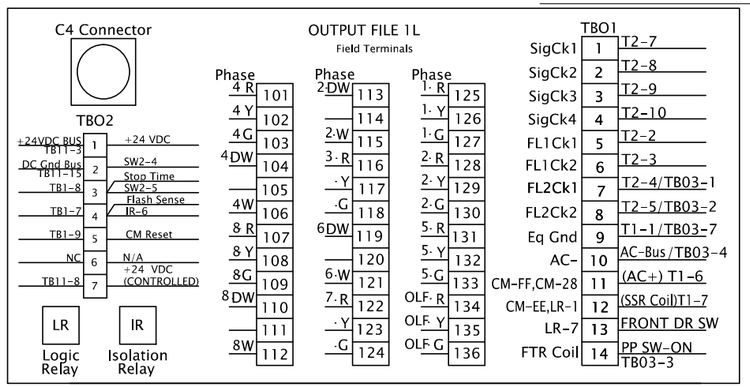
OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION
332S ODOT CABINET PRINT

Rotation: 0° Scale: 1"=100'

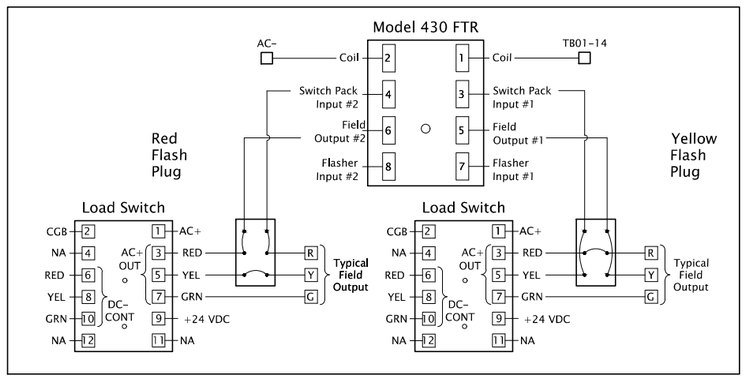


INDICATE COLOR OF FLASH PLUG BEING USED BY ADDING R=RED, Y=YELLOW, OR W=WHITE IN BOX ON LOAD SWITCH. DEFAULT IS R=RED.

OUTPUT FILE 1L (FRONT VIEW)
(NOT TO SCALE)



OUTPUT FILE 1L (REAR VIEW)
(NOT TO SCALE)



FIELD OUTPUTS - TYPICAL WIRING

CONFLICT MONITOR DIODE CARD

CHANNEL ASSIGNMENT

Ch.1 Ph: 1	Ch.5 Ph: 5	Ch.9 Ph. 1 FYA	Ch.13 Ped 2
Ch.2 Ph: 2	Ch.6 OLF	Ch.10 OLA	Ch.14 Ped 4
Ch.3 ·	Ch.7 ·	Ch.11 Ph. 5 FYA	Ch.15 Ped 6
Ch.4 Ph: 4	Ch.8 Ph: 8	Ch.12 OLB	Ch.16 Ped 8

YELLOW INHIBIT JUMPERS

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

DIODES - Diode Removed Makes Movement Allowable (Diode IN4148)

1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9
1-3	2-4	3-5	4-6	5-7	6-8	7-9	8-10
1-4	2-5	3-6	4-7	5-8	6-9	7-10	8-11
1-5	2-6	3-7	4-8	5-9	6-10	7-11	8-12
1-6	2-7	3-8	4-9	5-10	6-11	7-12	8-13
1-7	2-8	3-9	4-10	5-11	6-12	7-13	8-14
1-8	2-9	3-10	4-11	5-12	6-13	7-14	8-15
1-9	2-10	3-11	4-12	5-13	6-14	7-15	8-16
1-10	2-11	3-12	4-13	5-14	6-15	7-16	9-16
1-11	2-12	3-13	4-14	5-15	6-16	10-16	9-15
1-12	2-13	3-14	4-15	5-16	11-16	10-15	9-14
1-13	2-14	3-15	4-16	12-16	11-15	10-14	9-13
1-14	2-15	3-16	13-16	12-15	11-14	10-13	9-12
1-15	2-16	14-16	13-15	12-14	11-13	10-12	9-11
1-16	15-16	14-15	13-14	12-13	11-12	10-11	9-10

CONFLICT MONITOR DIODE CARD CUTOUT
(NOT TO SCALE)

CONFLICT MONITOR - TYPICAL CONNECTOR PIN ASSIGNMENTS

Term	Function	Pin
130	SP2-G	1
115	SP3-W	2
135	SP8-Y	3
103	SP5-G	4
106	SP6-W	5
108	SP-11Y	6
133	SP7-G	7
114	SP3-Y	8
126	SP1-Y	9
124	SP10-G	10
105	SP6-Y	11
117	SP4-Y	12
A123	ASP1-G	13
-	NC	14
-	T&B	15
-	T&B	16
-	NC	17
-	T&B	18
-	NC	19
TB01-9	EQ Gnd	20
TB01-10	AC-	21
C4-37	Watch Dog	22
TB02-1	+24VDC	23
LRCoil	Interlock	24
TB02-2	Interlock	25
-	NC	26
-	NC	27
TB01-11	Norm. Closed	28

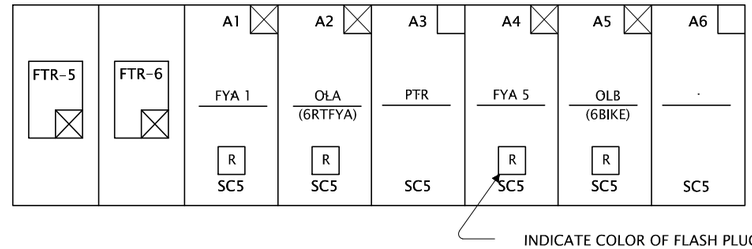
CHANNEL ASSIGNMENTS (TYPICAL)

Ch	PH
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	Ø1FYA/YA
10	OLA
11	Ø5FYA/YA
12	OLB
13	2PED
14	4PED
15	6PED
16	8PED

T&B= Tied & Bundled

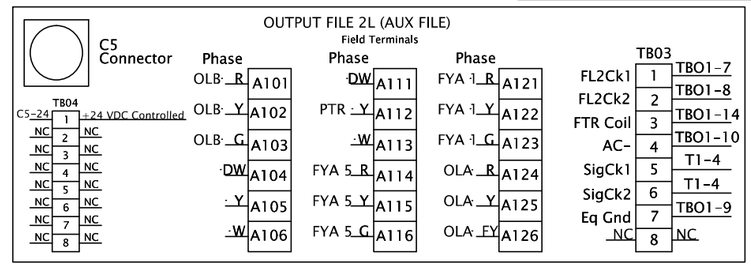
Pin	Function	Term
A	SP2-Y	129
B	SP8-G	136
C	SP9-W	121
D	SP5-Y	102
E	SP11-G	109
F	SP12-W	112
H	SP7-Y	132
J	SP1-G	127
K	SP9-Y	120
L	SP10-Y	123
M	SP4-G	118
N	SP12-Y	111
P	NC	-
R	ASP2-G	A126
S	ASP4-G	A116
T	NC	-
U	T&B	-
V	ASP5-G	A103
W	NC	-
X	NC	-
Y	DC Gnd	TB02-2
Z	Ext. Reset	TB02-5
AA	T&B	-
BB	Stop Time	TB02-3
CC	NC	-
DD	NC	-
EE	Clapper	TB01-12
FF	AC+	TB01-11

CONFLICT MONITOR
(NOT TO SCALE)



INDICATE COLOR OF FLASH PLUG BEING USED BY ADDING R=RED, Y=YELLOW, OR W=WHITE IN BOX ON LOAD SWITCH. DEFAULT IS R=RED.

OUTPUT FILE 2L (AUX FILE)
FRONT VIEW - (NOT TO SCALE)



OUTPUT FILE 2L (AUX FILE)
REAR VIEW - (NOT TO SCALE)

PAGE	OUTPUT FILES - FIELD WIRING DETAILS	REV. NO.	DATE	INITIAL	REMARKS
3 of 7					

INTERSECTION: SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

HWY#: _____ M.P.#: _____ TSSU ID#: _____

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION
332S ODOT CABINET PRINT

THIS IS THE FILENAME LOCATION ################################ DD-MMM-YYYY HH:MM USERNAME

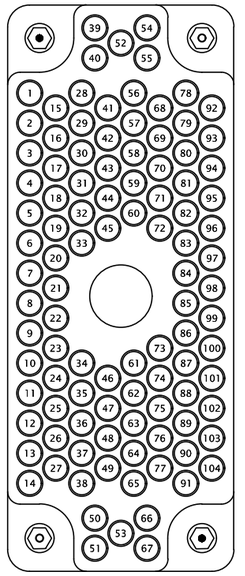
Rotation: 0° Scale: 1"=100'

Program Assigned Functions	C1 Connector		C4 Connector				Field Term.
	Pin	Termination	Pin	Switch Pack			
				In	Position	Out	
DC Gnd	1	DC Gnd Bus	-	-	-	-	-
Ø4 D.WALK	2	C4-1	1	6	6-DW	3	104
Ø4 WALK	3	C4-2	2	10	6-W	7	106
Ø4 RED	4	C4-3	3	6	5-R	3	101
Ø4 YELLOW	5	C4-4	4	8	5-Y	5	102
Ø4 GREEN	6	C4-5	5	10	5-G	7	103
Ø3 RED	7	C4-6	6	6	4-R	3	116
Ø3 YELLOW	8	C4-7	7	8	4-Y	5	117
Ø3 GREEN	9	C4-8	8	10	4-G	7	118
Ø2 D.WALK	10	C4-9	9	6	3-DW	3	113
Ø2 WALK	11	C4-10	10	10	3-W	7	115
Ø2 RED	12	C4-11	11	6	2-R	3	128
Ø2 YELLOW	13	C4-12	12	8	2-Y	5	129
Input Gnd	14	TB15-4"I"	-	-	-	-	-
Ø2 GREEN	15	C4-13	13	10	2-G	7	130
Ø1 RED	16	C4-14	14	6	1-R	3	125
Ø1 YELLOW	17	C4-15	15	8	1-Y	5	126
Ø1 GREEN	18	C4-16	16	10	1-G	7	127
Ø8 D.WALK	19	C4-17	17	6	12-DW	3	110
Ø8 WALK	20	C4-18	18	10	12-W	7	112
Ø8 RED	21	C4-19	19	6	11-R	3	107
Ø8 YELLOW	22	C4-20	20	8	11-Y	5	108
Ø8 GREEN	23	C4-21	21	10	11-G	7	109
Ø7 RED	24	C4-22	22	6	10-R	3	122
Ø7 YELLOW	25	C4-23	23	8	10-Y	5	123
Ø7 GREEN	26	C4-24	24	10	10-G	7	124
Ø6 D.WALK	27	C4-25	25	6	9-DW	3	119
Ø6 WALK	28	C4-26	26	10	9-W	7	121
Ø6 RED	29	C4-27	27	6	8-R	3	134
Ø6 YELLOW	30	C4-28	28	8	8-Y	5	135
Ø6 GREEN	31	C4-29	29	10	8-G	7	136
Ø5 RED	32	C4-30	30	6	7-R	3	131
Ø5 YELLOW	33	C4-31	31	8	7-Y	5	132
Ø5 GREEN	34	C4-32	32	10	7-G	7	133
Ø1 FLTYA	35	C4-33	33	8	3-Y	5	114
Ø5 FLTYA	36	C4-34	34	8	9-Y	5	120
Ø3 FLTYA	37	C4-35	35	8	6-Y	5	105
Ø7 FLTYA	38	C4-36	36	8	12-Y	5	111

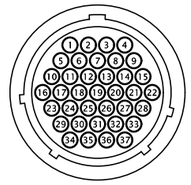
Program Assigned Functions	C1 Connector		Input Files		
	Pin	Termination	Terminals		Field Terminals
			Out	In	
Ø2 DET	39	I3-1	F	D&E	TB5-9&10
Ø6 DET	40	J3-1	F	D&E	TB6-9&10
Ø4 DET	41	I8-1	F	D&E	TB5-29&30
Ø8 DET	42	J8-1	F	D&E	TB6-29&30
Ø2 DET	43	I3-2	W	J&K	TB5-11&12
Ø6 DET	44	J3-2	W	J&K	TB6-11&12
Ø4 DET	45	I8-2	W	J&K	TB5-31&32
Ø8 DET	46	J8-2	W	J&K	TB6-31&32
Ø2 DET	47	I5-1	F	D&E	TB5-17&18
Ø6 DET	48	J5-1	F	D&E	TB6-17&18
Ø4 DET	49	I10-1	F	D&E	TB5-37&38
Ø8 DET	50	J10-1	F	D&E	TB6-37&38
PCOI	51	J12-1	F	D	TB0-2
VCOI	52	J12-2	W	J	TB0-3
ADV ENABLE	53	-	-	-	TB1-11
SPARE	54	J11-1	F	D&E	TB2-9&10
Ø5 DET	55	J1-1	F	D&E	TB6-1&2
Ø1 DET	56	I1-1	F	D&E	TB5-1&2
Ø7 DET	57	J6-1	F	D&E	TB6-21&22
Ø3 DET	58	I6-1	F	D&E	TB5-21&22
Ø5 DET	59	J1-2	W	J&K	TB6-3&4
Ø1 DET	60	I1-2	W	J&K	TB5-3&4
Ø7 DET	61	J6-2	W	J&K	TB6-23&24
Ø3 DET	62	I6-2	W	J&K	TB5-23&24
Ø2 DET	63	I4-1	F	D&E	TB5-13&14
Ø6 DET	64	J4-1	F	D&E	TB6-13&14
Ø4 DET	65	I9-1	F	D&E	TB5-33&34
Ø8 DET	66	J9-1	F	D&E	TB6-33&34
Ph2 Ped	67	I13-1	F	D	TB1-1
Ph6 Ped	68	I14-1	F	D	TB1-4
Ph4 Ped	69	I13-2	W	J	TB1-2
Ph8 Ped	70	I14-2	W	J	TB1-5
EVA	71	J13-1	F	D	TB3-3
EVB	72	J14-1	F	D	TB3-6
EVC	73	J13-2	W	J	TB3-4
EVD	74	J14-2	W	J	TB3-7
GPS CLOCK	75	J11-2	W	J&K	TB2-11&12
Ø2 DET	76	I4-2	W	J&K	TB5-15&16
Ø6 DET	77	J4-2	W	J&K	TB6-15&16
Ø4 DET	78	I9-2	W	J&K	TB5-35&36
Ø8 DET	79	J9-2	W	J&K	TB6-35&36
Advance	80	-	-	-	TB1-10
Flash Sense	81	-	-	-	TB1-7
Stop Time	82	-	-	-	TB1-8

Program Assigned Functions	C1 Connector		C5 Connector				Field Term.
	Pin	Termination	Pin	Switch Pack			
				In	Position	Out	
Ø3 D.WALK	83	C5-1	1	6	A6-DW	3	A104
Ø3 WALK	84	C5-2	2	10	A6-W	7	A106
OLD RED	85	C5-3	3	6	A5-R	3	A101
OLD YELLOW	86	C5-4	4	8	A5-Y	5	A102
OLD GREEN	87	C5-5	5	10	A5-G	7	A103
OLC RED	88	C5-6	6	6	A4-R	3	A114
OLC YELLOW	89	C5-7	7	8	A4-Y	5	A115
OLC GREEN	90	C5-8	8	10	A4-G	7	A116
Ø1 D.WALK	91	C5-9	9	6	A3-DW	3	A111
DC Gnd	92	DC Gnd Bus	-	-	-	-	-
Ø1 WALK	93	C5-10	10	10	A3-W	7	A113
OLB RED	94	C5-11	11	6	A2-R	3	A124
OLB YELLOW	95	C5-12	12	8	A2-Y	5	A125
OLB GREEN	96	C5-13	13	10	A2-G	7	A126
OLA RED	97	C5-14	14	6	A1-R	3	A121
OLA YELLOW	98	C5-15	15	8	A1-Y	5	A122
OLA GREEN	99	C5-16	16	10	A1-G	7	A123
PTR SIGN	100	C5-17	17	8	A6-Y	5	A105
PTR SIGN	101	C5-18	18	8	A3-Y	5	A112
FLASH OUT	102	TB15-3"I"					
Watchdog	103	C4-37	Monitor-Pin 22				
Input Gnd	104	TB15-4"J"					
			19...23	-	NC	-	-
			24	TB11-7	All	9	+24VDC CONTROL

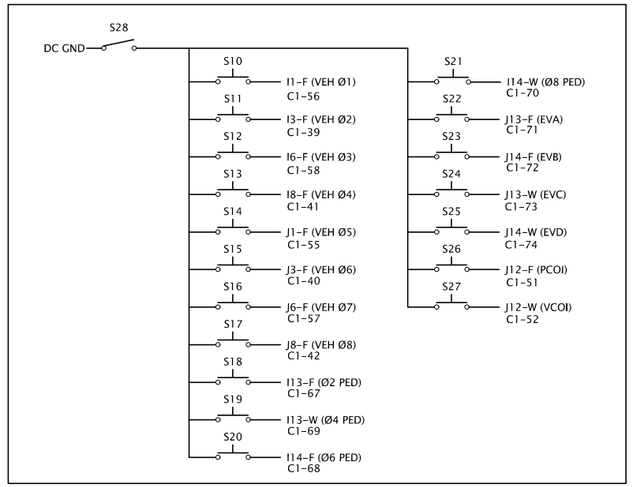
Program Assigned Functions	C11 Connector		Input Files		
	Pin	Termination	Terminals		Field Terminals
			Out	In	
NOT ASSIGN	1...8	T&B	-	-	- -
DC Gnd	9	DC Gnd Bus	-	-	- -
Ø2 DET	10	I5-2	W	J&K	TB5-19&20
Ø6 DET	11	J5-2	W	J&K	TB6-19&20
Ø4 DET	12	I10-2	W	J&K	TB5-39&40
Ø8 DET	13	J10-2	W	J&K	TB6-39&40
DC Gnd	14	DC Gnd Bus	-	-	- -
Ø5 DET	15	J2-1	F	D&E	TB6-5&6
Ø1 DET	16	I2-1	F	D&E	TB5-5&6
Ø7 DET	17	J7-1	F	D&E	TB6-25&26
Ø3 DET	18	I7-1	F	D&E	TB5-25&26
Ø5 DET	19	J2-2	W	J&K	TB6-7&8
Ø1 DET	20	I2-2	W	J&K	TB5-7&8
Ø7 DET	21	J7-2	W	J&K	TB6-27&28
Ø3 DET	22	I7-2	W	J&K	TB5-27&28
SPARE	23	I11-1	F	D&E	TB2-1&2
SPARE	24	I12-1	F	D&E	TB2-5&6
SPARE	25	I11-2	W	J&K	TB2-3&4
SPARE	26	I12-2	W	J&K	TB2-7&8
NOT ASSIGN	27...30	T&B	-	-	- -
DC Gnd	31	DC Gnd Bus	-	-	- -
NOT ASSIGN	32...36	T&B	-	-	- -
DC Gnd	37	DC Gnd Bus	-	-	- -



C1 PLUG PINOUT



C11 PLUG PINOUT



Detector Test Panel Wiring

Typical Wiring Diagram

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INTERSECTION: SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

HWY#: _____ M.P.#: _____ TSSU ID#: _____

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

332S ODOT CABINET PRINT

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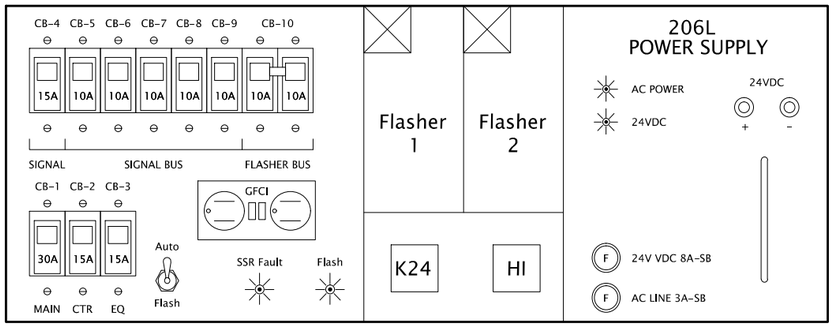
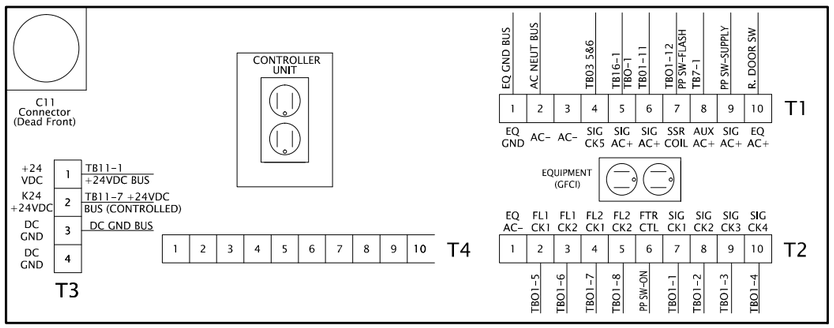


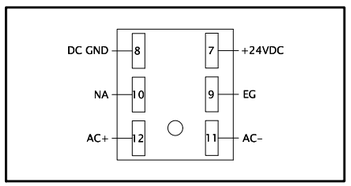
ODOT PDA 2 LAYOUT (FRONT VIEW)

(NOT TO SCALE)



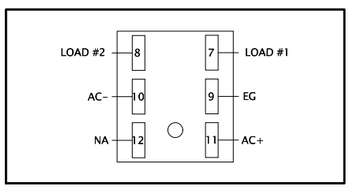
ODOT PDA 2 LAYOUT (REAR VIEW)

(NOT TO SCALE)



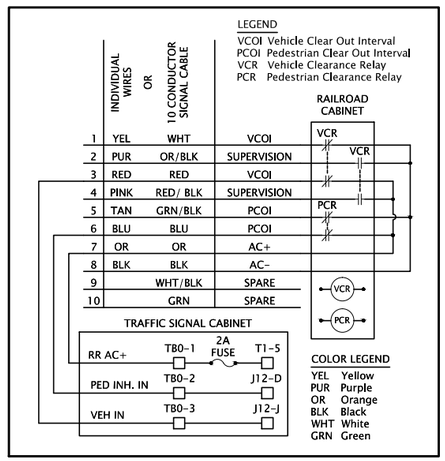
MODEL 206L POWER SUPPLY

TYPICAL CONNECTOR DETAIL



MODEL 204 FLASHER

TYPICAL CONNECTOR DETAIL



RAILROAD INTERCONNECT

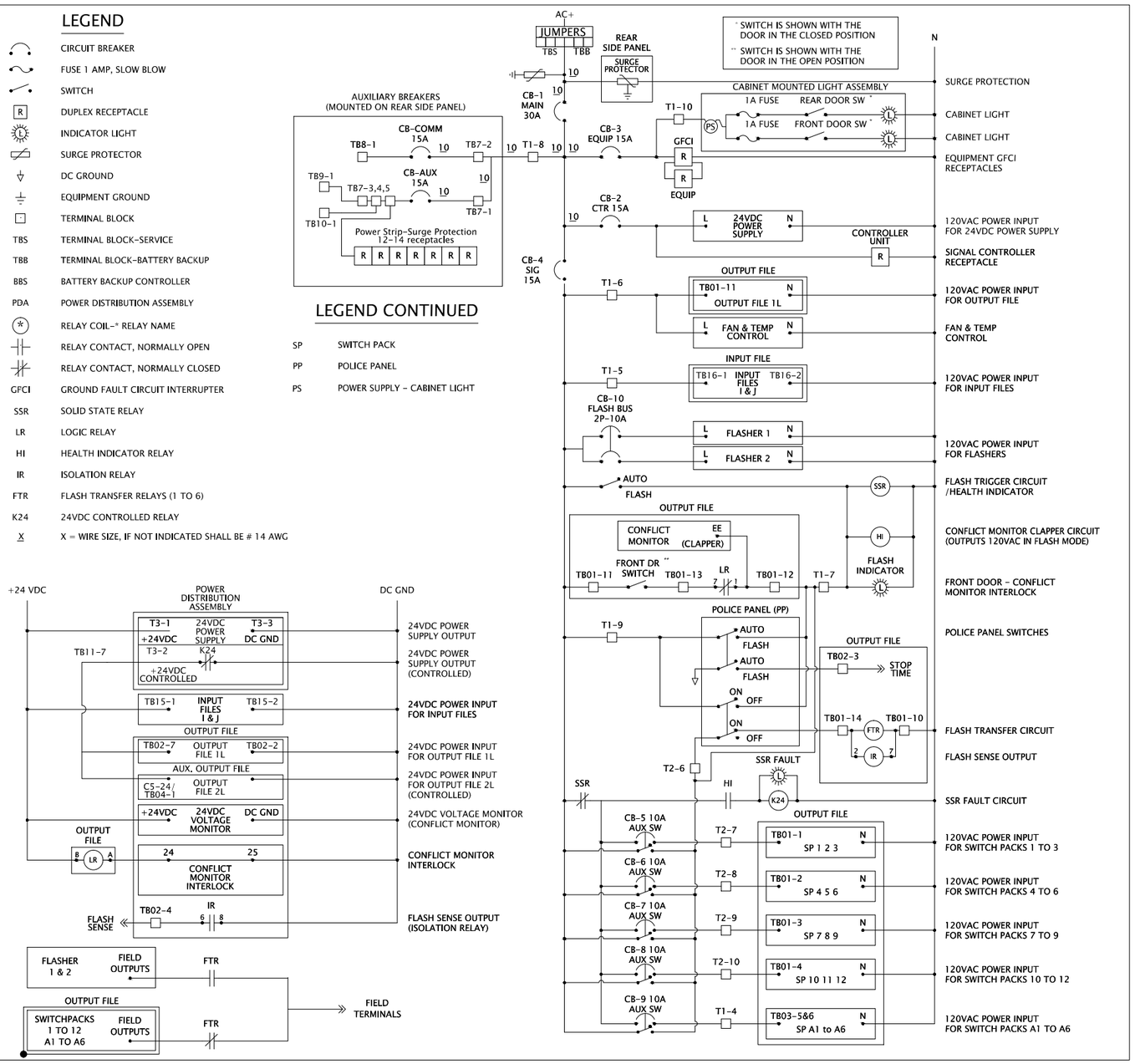
TYPICAL WIRING DETAILS

LEGEND

- CIRCUIT BREAKER
- FUSE 1 AMP, SLOW BLOW
- SWITCH
- R — DUPLEX RECEPTACLE
- L — INDICATOR LIGHT
- SURGE PROTECTOR
- DC GROUND
- EQUIPMENT GROUND
- TERMINAL BLOCK
- TBS — TERMINAL BLOCK-SERVICE
- TBB — TERMINAL BLOCK-BATTERY BACKUP
- BBS — BATTERY BACKUP CONTROLLER
- PDA — POWER DISTRIBUTION ASSEMBLY
- RELAY COIL-* RELAY NAME
- RELAY CONTACT, NORMALLY OPEN
- RELAY CONTACT, NORMALLY CLOSED
- GFCI — GROUND FAULT CIRCUIT INTERRUPTER
- SSR — SOLID STATE RELAY
- LR — LOGIC RELAY
- HI — HEALTH INDICATOR RELAY
- IR — ISOLATION RELAY
- FTR — FLASH TRANSFER RELAYS (1 TO 6)
- K24 — 24VDC CONTROLLED RELAY
- X — X = WIRE SIZE, IF NOT INDICATED SHALL BE # 14 AWG

LEGEND CONTINUED

- SP — SWITCH PACK
- PP — POLICE PANEL
- PS — POWER SUPPLY - CABINET LIGHT



PDA #2 ELEMENTARY DIAGRAM

TYPICAL WIRING DETAILS

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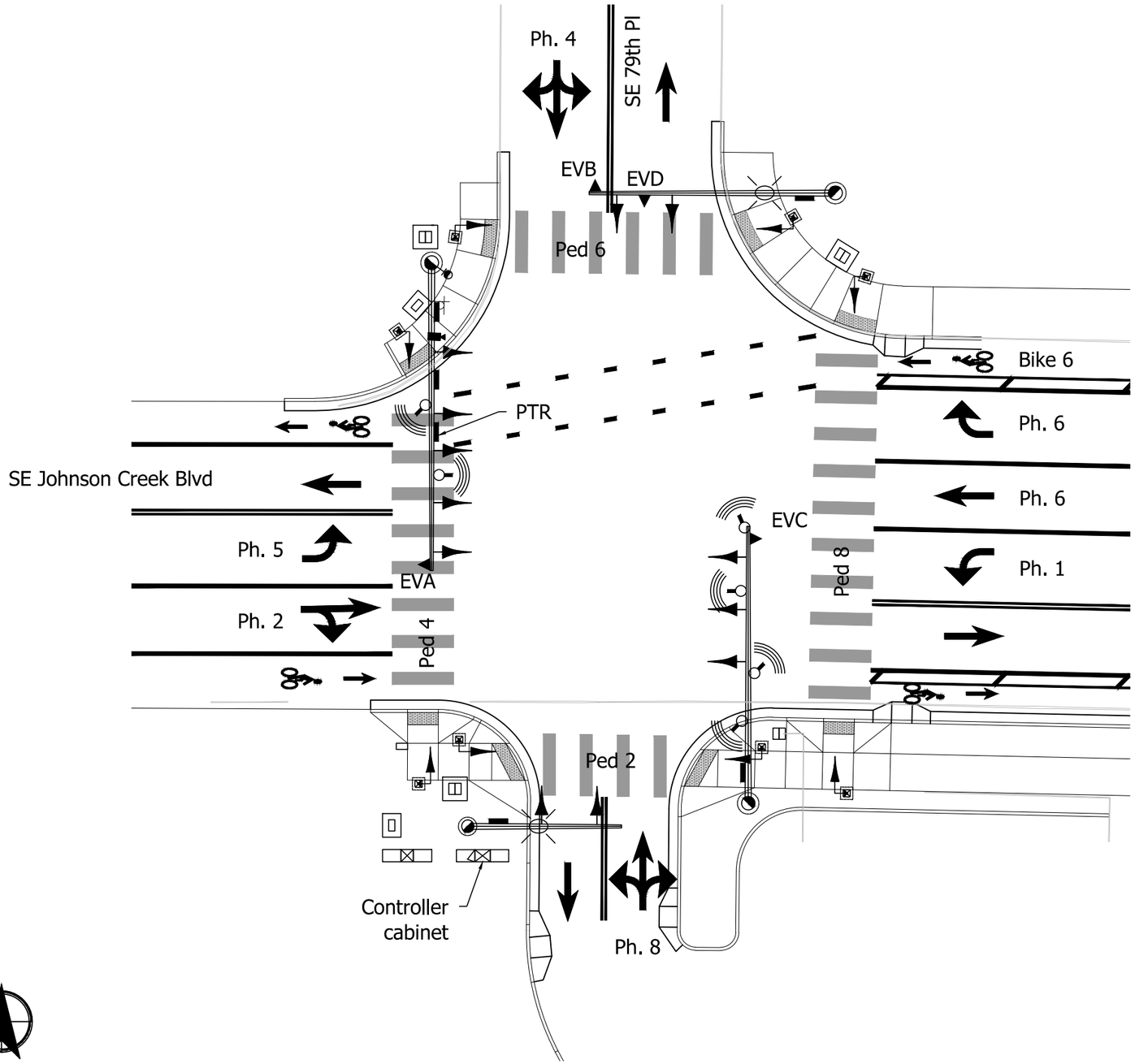
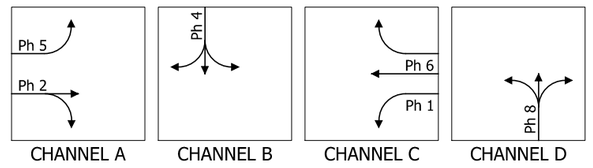
INTERSECTION: SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

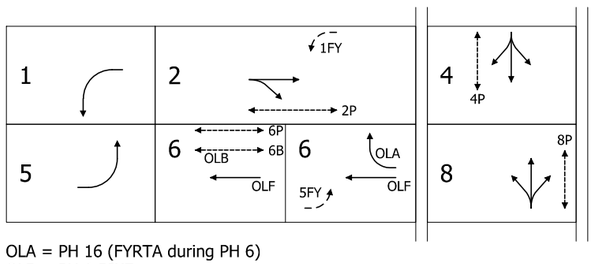
HWY#: _____ M.P.#: _____ TSSU ID#: _____

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION
332S ODOT CABINET PRINT





FIRE PREEMPTION OPERATION



OLA = PH 16 (FYRTA during PH 6)
OLB = PH 6 BIKE
OLF = PH 6 + PH 16
*PTR sign to be activated when PH 6 Bike Signal (OLB) is green or yellow.

NORMAL PHASE ROTATION

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INTERSECTION: ● SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

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OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION
332S ODOT CABINET PRINT

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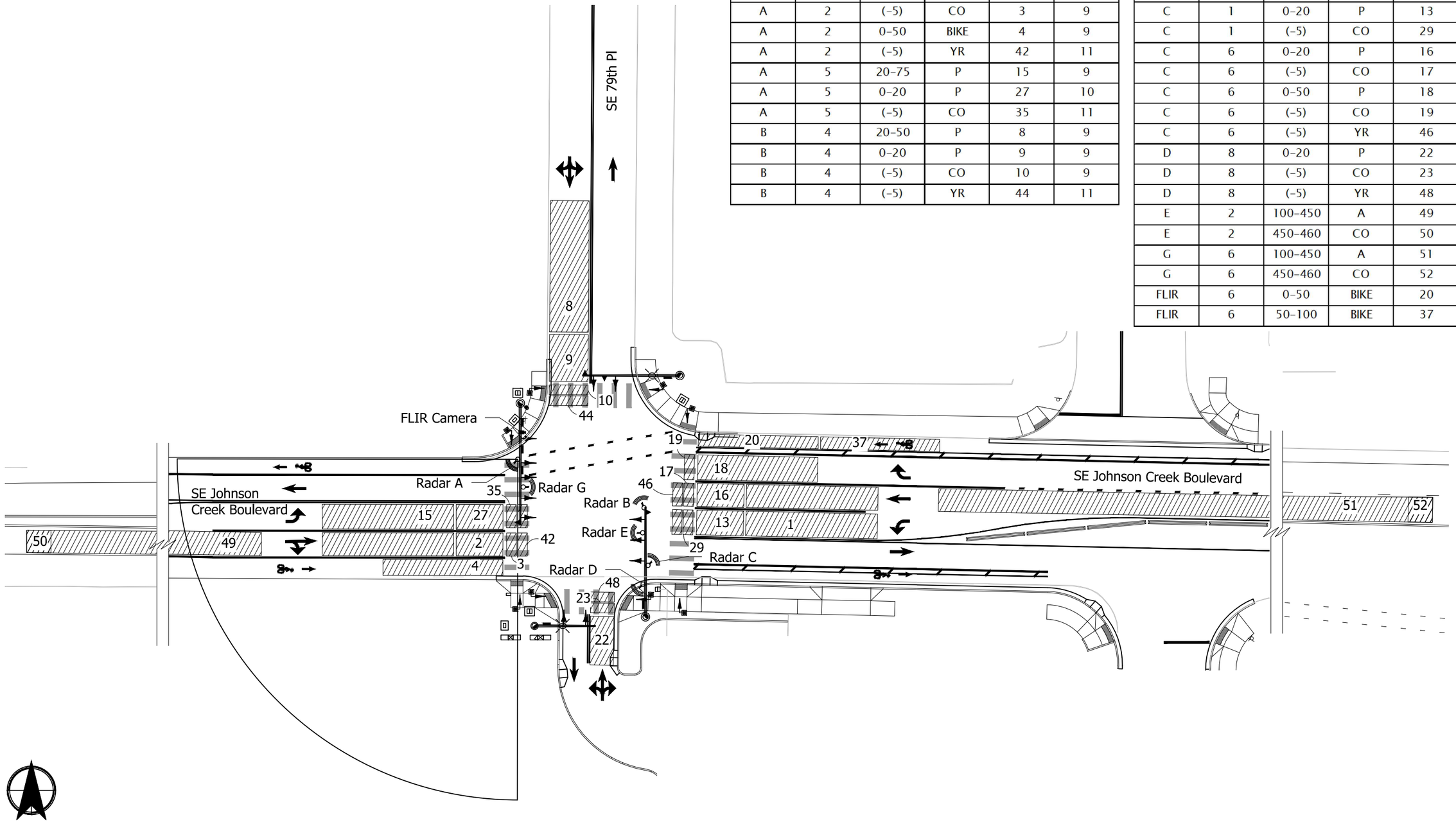
Rotation: 0° Scale: 1"=100'

Device	Phase	Zone Size (Feet)	Function	MT #	BIU
A	2	0–20	P	2	9
A	2	(–5)	CO	3	9
A	2	0–50	BIKE	4	9
A	2	(–5)	YR	42	11
A	5	20–75	P	15	9
A	5	0–20	P	27	10
A	5	(–5)	CO	35	11
B	4	20–50	P	8	9
B	4	0–20	P	9	9
B	4	(–5)	CO	10	9
B	4	(–5)	YR	44	11

Device	Phase	Zone Size (Feet)	Function	MT #	BIU
C	1	20–75	P	1	9
C	1	0–20	P	13	9
C	1	(–5)	CO	29	10
C	6	0–20	P	16	9
C	6	(–5)	CO	17	10
C	6	0–50	P	18	10
C	6	(–5)	CO	19	10
C	6	(–5)	YR	46	11
D	8	0–20	P	22	10
D	8	(–5)	CO	23	10
D	8	(–5)	YR	48	11
E	2	100–450	A	49	11
E	2	450–460	CO	50	12
G	6	100–450	A	51	12
G	6	450–460	CO	52	12
FLIR	6	0–50	BIKE	20	N/A
FLIR	6	50–100	BIKE	37	N/A



PAGE	Additional Intersection Information	REV. NO.	DATE	INITIAL	REMARKS
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INTERSECTION: ● SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

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OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC – ROADWAY SECTION
332S ODOT CABINET PRINT

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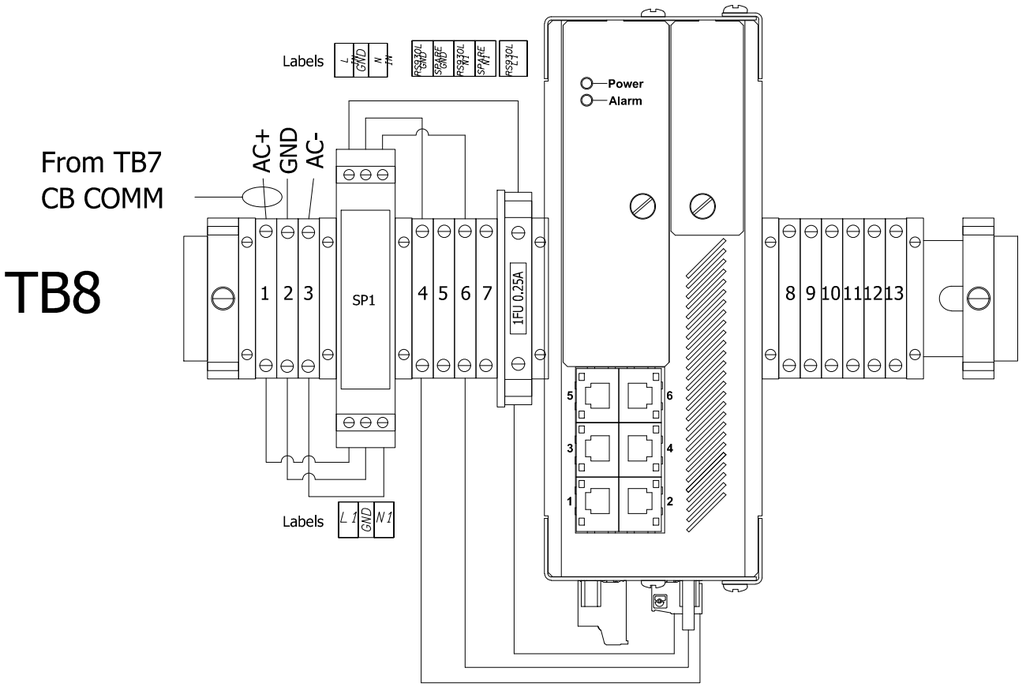
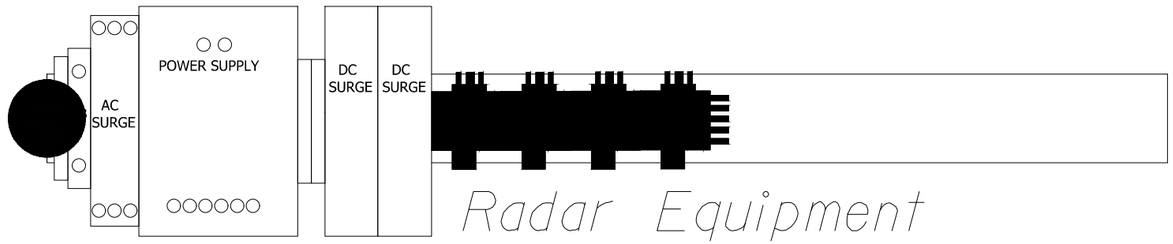


DIN RAIL
COMM.
BRACKET
WIRELESS
AND FIBER



Radar Equipment

INTERSECTION: ● SE Johnson Creek Blvd @ SE 79th Pl Clackamas County, Oregon

HWY#: _____ M.P.#: _____ TSSU ID#: _____

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC - ROADWAY SECTION

332S ODOT CABINET PRINT

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SPECIAL PROVISIONS
FOR CONSTRUCTION

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
CLACKAMAS COUNTY, OREGON

Grading, Paving, Drainage, Roadside Development, Signing, Pavement Markings, Signals

SE Johnson Creek Blvd: 79th Pl – 82nd Ave

CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

Grading, Drainage, Roadside Development, Signing, Pavement Markings, and Signals
SE Johnson Creek Blvd: 79th Pl – 82nd Avenue
SE Johnson Creek Boulevard
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Roadway and Traffic Control. Modified Special Provisions were prepared by me or under my supervision.
	Section(s) 00210, 00220, 00221, 00222, 00223, 00224, 00225, 00228, 00280, 00290, 00310, 00320, 00330, 00331, 00350, 00620, 00640, 00730, 00744, 00748, 00749, 00759, 01050, 01070, 01170

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

Grading, Drainage, Roadside Development, Signing, Pavement Markings, and Signals
SE Johnson Creek Blvd: 79th PI – 82nd Avenue
SE Johnson Creek Boulevard
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Stormwater. Modified Special Provisions were prepared by me or under my supervision.
	Section(s) 00405, 00415, 00430, 00445, 00470, 00490, 00842, 01011, 01030, 01040

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

Grading, Drainage, Roadside Development, Signing, Pavement Markings, and Signals
SE Johnson Creek Blvd: 79th Pl – 82nd Avenue
SE Johnson Creek Boulevard
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Hazardous Materials. Modified Special Provisions were prepared by me or under my supervision.
	Section(s) 00294, 00295, 00296

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

Grading, Drainage, Roadside Development, Signing, Pavement Markings, and Signals
SE Johnson Creek Blvd: 79th Pl – 82nd Avenue
SE Johnson Creek Boulevard
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Signing, Pavement Markings, Illumination, and Signals. Modified Special Provisions were prepared by me or under my supervision.
	Section(s) 00850, 00855, 00865, 00867, 00868, 00902, 00905, 00920, 00930, 00940, 00960, 00962, 00963, 00970, 00990

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

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SE Johnson Creek Blvd: 79th Pl – 82nd Ave
Grading, Paving, Drainage, Roadside Development, Signing, Pavement Markings, Signals

SPECIAL PROVISIONS

WORK TO BE DONE

The Work to be done under this Contract consists of the following on the 79th Place to 82nd Avenue Section of the SE Johnson Creek Boulevard in Clackamas County:

1. Install and remove temporary traffic control measures.
2. Install and remove erosion and sediment control measures.
3. Perform construction survey work.
4. Demolish existing house.
5. Perform earthwork.
6. Install storm drain facilities.
7. Construct curbs, driveway approaches, driveways, sidewalks, and ADA Ramp improvements.
8. Furnish and place aggregate base and hot mix asphalt concrete.
9. Construct water quality facility.
10. Furnish and install traffic signal and interconnect system.
11. Furnish and install permanent signs and striping.
12. Complete seeding and landscaping.
13. Perform additional and incidental Work, as called for by the Specifications and Plans.

APPLICABLE SPECIFICATIONS

The Specifications that are applicable to the Work on this Project are the General Conditions for Construction for Clackamas County published by the Agency, which contain Part 00100 General Conditions and the 2024 "Oregon Standard Specifications for Construction," Parts 00200 through 03000, published by the Oregon Department of Transportation which contain the detailed “Technical Specifications”.

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the General Conditions or Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

CLASS OF PROJECT

This is a Federal-Aid Project.

SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS, AND DEFINITIONS

Comply with Section 00110 of the General Conditions for Construction for Clackamas County modified as follows:

00110.05(e) Reference to Websites - Add the following bullet list to the end of this subsection:

- American Traffic Safety Services Association (ATSSA)

www.atssa.com

- Clackamas County's Local Contract Review Board (LCRB) Rules

https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685

- EquipmentWatch

www.equipmentwatch.com

- ODOT Construction Section

www.oregon.gov/odot/construction/pages/index.aspx

- ODOT Construction Section - Qualified Products List (QPL)

www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx

- ODOT Construction Surveying Manual for Contractors

www.oregon.gov/ODOT/ETA/Documents_Geometronics/Construction-Survey-Manual-Contractors.pdf

- ODOT Estimating

www.oregon.gov/ODOT/Business/Pages/Steel.aspx

- ODOT Oregon Trucking Online - "Highway Restriction Notice - Size and/or Weight" (Form No. 734-2357)

www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restriction/

- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms

www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx

- ODOT Procurement Office - Construction Contracts Unit Notice of Intent

www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx

- ODOT Procurement Office - Construction Contracts Unit prequalification forms

www.oregon.gov/odot/business/procurement/pages/bid_award.aspx

- ODOT Traffic Control Plans Unit

www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx

- ODOT Traffic Standards

www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx

- Oregon Legislative Counsel

www.oregonlegislature.gov/lc

- Oregon Secretary of State: State Archives

sos.oregon.gov/archives/Pages/default.aspx

SECTION 00120 – BIDDING REQUIREMENTS AND PROCEDURES

Comply with Section 00120 of the General Conditions for Construction for Clackamas County modified as follows:

00120.00 Prequalification of Bidders – Add the following bullet to the end of the bullet list:

- If delivered by electronic mail, the application shall be sent to:

ODOTProcurementOfficeConstruction@odot.oregon.gov

Replace the bullet that begins "If delivered by mail…" with the following bullet:

- If delivered by mail or parcel delivery service, the application shall be sent to:

Oregon Department of Transportation
Procurement Construction Contracts, MS #33
355 Capitol Street NE
Salem, OR 97301

00120.05 Request for Plans, Special Provisions, and Bid Booklets - Add the following to the end of this subsection:

The Plans, which are applicable to the Work to be performed under the Contract, are included in these Special Provisions.

00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered - Add the following to the end of this subsection:

Certain Specifications included in the Project require additional experience or personnel qualifications. Refer to the subsection requirements that may affect bidding considerations, including but not limited to the following:

Subsection	Title
00256.30	Personnel Qualifications
00293.30	Personnel Qualifications
00294.30	Personnel Qualifications
00295.30	Personnel Qualifications
00296.30	Personnel Qualifications
00297.30	Personnel Qualifications
00298.30	Personnel Qualifications
00299.30	Personnel Qualifications
00299A.30	Personnel Qualifications
00380.30	Personnel Qualifications
00396.30	Personnel Qualifications
00398.30	Personnel Qualifications
00411.30	Personnel Qualifications
00412.30	Personnel Qualifications
00413.30	Personnel Qualifications
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00590.30 Personnel Qualifications
00591.30 Personnel Qualifications
00592.30 Personnel Qualifications
00759.30 Personnel Qualifications
00921.30 Personnel Qualifications
00963.30 Personnel Qualifications
00987.30 Personnel Qualifications
01030.30 Personnel Qualifications

00120.40(b) Bidding Considerations – Add the following to the end of the list:

00160.20(d) Build America Buy America Act Requirements

00120.40(f) Disclosure of First-Tier Subcontractors – Replace the paragraph beginning "If no subcontracts subject to the above…" with the following paragraph:

If no subcontracts subject to the above disclosure requirements are anticipated, a Bidder shall so indicate by entering "NONE" or by filling in the appropriate check box. For each Subcontractor listed, Bidders shall provide all requested information. Failure to submit a form or submission of a form that does not include the information required by ORS 279C.370 for each Subcontractor listed, specifically the name of each Subcontractor, the dollar amount of each subcontract and the category of Work that each Subcontractor will perform, will result in the rejection of the Bid. The Agency is not required to determine the accuracy or the completeness of the Subcontractor disclosure. See ORS 279C.370 and OAR 731-005-0420.

00120.70 Rejection of Nonresponsive Bids - Add the following bullet to the end of the bullet list:

- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the General Conditions for Construction for Clackamas County.

SECTION 00140 - SCOPE OF WORK

Comply with Section 00140 of the General Conditions for Construction for Clackamas County.

SECTION 00150 - CONTROL OF WORK

Comply with Section 00150 of the General Conditions for Construction for Clackamas County, modified as follows:

00150.15(b) Agency Responsibilities - Replace this subsection, except for the subsection number and title, with the following:

The Engineer will perform the Agency responsibilities described in the Construction Surveying Manual for Contractors, Chapter 1.5 (see Section 00305).

00150.15(c) Contractor Responsibilities - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall perform the Contractor responsibilities described in the Construction Surveying Manual for Contractors, Chapter 1.6 (see Section 00305).

The Contractor shall perform slope staking including intersections and set stakes defining limits for clearing which approximate Right-of-Way and easements.

Add the following subsection:

00150.50(f) Utility Information (No Anticipated Relocations) - Within the Project limits, there are no anticipated relocations with the Utilities listed below. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Utility	**Contact Person's Name, Address, Email, and Phone Number**
Comcast	Todd Royer 7900 NE Killingsworth Street Portland, OR 97223 Todd_Royer@comcast.com 971-801-5610

The Contractor shall notify, in writing, the Utilities listed above, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project.

(Portland General Electric) - Power Suppliers -

Add the following subsection:

00150.50(g) Utility Information (Anticipated Relocations):

The following organizations may be adjusting Utilities within the limits of the Project during the period of the Contract with relocation Work estimated to be completed by the following dates and times:

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
00150.50(g)(1)	NW Natural	Ed Panit 220 NW 2nd Avenue Portland, OR 97209 Edward.Panit@nwnatural.com	Per Construction Schedule
00150.50(g)(2)	Portland General Electric	Jim McLean 209 Warner Milne Road Oregon City, OR 97045 Jim.McLean@pgn.com 971-202-9112	Per Construction Schedule
00150.50(g)(3)	Lumen/CenturyLink	Jonathan Myrick 4501 NE Minnehaha Street, Bldg. 2 Vancouver, WA 98661 jonathan.myrick@lumen.com Scott Larson (Pearce Services LLC) SCOTT.LARSON@pearce-services.com 612-916-4339	August 15, 2025 Per Construction Schedule (Work During Construction)
00150.50(g)(4)	Clackamas River Water	Joe Eskew 16770 SE 82nd Drive Clackamas, OR 97015 jeskew@crwater.com 503-747-8520	Per Construction Schedule
00150.50(g)(5)	Zayo	James Black 618 Gassmere Park Drive Nashville, TN 37211 Zayo.relo.oregon@zayo.com Jamesr.black@zayo.com	August 15, 2025 Per Construction Schedule

(1) (NW Natural) - "Gas Utility":

The Contractor shall notify the Gas Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the gas pipeline.

The Contractor shall notify the Gas Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of the new driveway connection on the south leg of the intersection of SE Johnson Creek Blvd and SE 79th Pl . After the Contractor has completed this Work or 14 Calendar Days after the Gas Utility receives the notification, whichever occurs later, the Contractor shall then allow the Gas Utility 10 Calendar Days to schedule and complete the relocation and adjustment work.

In the event of an emergency, and in addition to the calls required by the Utilities notification system, the Contractor shall call:

- Northwest Natural Gas 1-800-882-3377; or

(2) (Portland General Electric) - "Power Supplier":

The Contractor shall notify the Power Supplier(s) in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the power line(s).

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, once the Telecommunication Utilities have completed their relocation work at the utility poles located at Station 7+51 and 8+97. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 28 Calendar Days to schedule and complete the relocation and adjustment work to remove the existing utility poles at Station 7+51 and Station 8+97.

Energized power lines overhang portions of the Work with a minimum vertical clearance of 18 feet. The Contractor shall maintain at least 10 feet of safety clearance. Exceptions require written approval from the Power Supplier(s) and may require an On-Site safety watcher, at no cost to the Contractor. The Contractor shall provide the Engineer a copy of the written approval of exception before beginning work.

(3) (Lumen/CenturyLink) - "Telecommunication Utility":

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin performing final paving at Station 8+51. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 2 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing final paving at Station 8+51.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin performing earthwork at Station 8+93 near SE 80th Avenue. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 5 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing earthwork at SE 80th Avenue.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an On-Site safety representative at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(4) (Clackamas River Water) - "Water Utility":

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Water Utility facilities.

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of new water meter installation at 7922 SE Johnson Creek Blvd. After the Contractor has completed this Work

or 14 Calendar Days after the Water Utility receives the notification, whichever occurs later, the Contractor shall then allow the Water Utility 1 Calendar Days to schedule and complete the relocation and adjustment work to abandon the existing service at the main at Station 6+60.

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin performing building demolition. After the Water Utility receives the notification, the Contractor shall then allow the Water Utility 1 Calendar Days to schedule and complete the relocation and adjustment work to abandon the service to 7920 SE Johnson Creek Blvd before the Contractor begins performing building demolition.

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of curb line survey stakes on SE Johnson Creek Blvd at Station 7+06. After the Contractor has completed this Work or 14 Calendar Days after the Water Utility receives the notification, whichever occurs later, the Contractor shall then allow the Water Utility 1 Calendar Day to schedule and complete the relocation and adjustment work to install a new service tap and water meter serving 7922 SE Johnson Creek Blvd.

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of curb line survey stakes on SE Johnson Creek Blvd at Station 7+64. After the Contractor has completed this Work or 14 Calendar Days after the Water Utility receives the notification, whichever occurs later, the Contractor shall then allow the Water Utility 1 Calendar Day to schedule and complete the relocation and adjustment work to relocate the existing water meter serving 7926 SE Johnson Creek Blvd.

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of curb line survey stakes on SE Johnson Creek Blvd at Station 8+29. After the Contractor has completed this Work or 14 Calendar Days after the Water Utility receives the notification, whichever occurs later, the Contractor shall then allow the Water Utility 1 Calendar Day to schedule and complete the relocation and adjustment work to relocate the existing water meter serving 7930 SE Johnson Creek Blvd.

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of curb line survey stakes on SE Johnson Creek Blvd at Station 8+59. After the Contractor has completed this Work or 14 Calendar Days after the Water Utility receives the notification, whichever occurs later, the Contractor shall then allow the Water Utility 2 Calendar Days to schedule and complete the relocation and adjustment work to relocate the existing fire hydrant.

(5) (Zayo) - "Telecommunication Utility":

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

Existing aerial attachments on PGE Pole No.'s 4636 and 4637 are to be relocated and the poles removed by PGE.

00150.55 Cooperation with Other Contractors - Add the following to the end of this subsection:

The following contract work will be ongoing within the Project site during the following times:

Contract Name (Contractor's Name)	**Estimated Times (From - To)**
Johnson Ck Blvd: 79th Pl – End of County Mtce. *Jordan Cools, Project Mgr: 971-288-8136*	*July 2025 to July 31, 2026*
OR213 (82nd Ave): SE Foster Rd - SE Thompson Rd. *Kerr Contractors*	*Feb 2025 to Aug 2025*

SECTION 00160 - SOURCE OF MATERIALS

Comply with Section 00160 of the General Conditions for Construction for Clackamas County modified as follows:

00160.20 Preferences for Materials - Add the following paragraph to the beginning of this subsection:

Section 1518 of Moving Ahead for Progress in the 21st Century Act provides that Buy America applies to all Contracts eligible for federal assistance under Title 23, United States Code, included within the scope of an applicable National Environmental Policy Act (NEPA) finding, determination or decision, regardless of the funding source of such Contracts, where at least one Contract is funded with Title 23 funds. This Contract includes Title 23 funds under such a NEPA finding, determination or decision and Buy America under subsection (a) and Build America Buy America under subsection (d) apply to this Contract.

00160.20(a) Buy America - Replace this subsection, except for the subsection number and title, with the following:

If $500,000 or more of federal highway funds are involved on the Project, the Contractor shall limit the quantity of foreign Materials incorporated into the Work as follows. Section 635.410 of Title 23, Code of Federal Regulations, and the Intermodal Surface Transportation Efficiency Act require that all iron or steel manufacturing processes, including, without limitation, the casting of ingots, for iron or steel Materials permanently incorporated into the Project shall occur in the United States, unless the cost of foreign-origin iron or steel Materials does not exceed one-tenth of one percent (0.1%) of the Contract Amount or $2,500, whichever is greater. Buy America requirements apply to any steel or iron component of a manufactured product regardless of the overall composition of the manufactured product (e.g., Buy America applies to the steel wire mesh or steel reinforcing components of a precast reinforced concrete pipe). The Contractor shall not incorporate foreign-origin iron or steel Materials in excess of this amount into the Project. All foreign-origin iron or steel Materials incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic iron or steel Materials at the Contractor's expense. For purposes of this Specification, the cost of foreign-origin iron or steel Materials shall be the value of the iron or steel products as of the date they are delivered to the Project Site.

Manufacturing processes include without limitation the casting of ingots and the application of coatings to finished iron or steel products or components. Coatings include epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the steel or iron product or component. The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any iron or steel products into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all domestic iron or steel Materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

The Contractor shall include this provision in all subcontracts.

The Contractor shall comply with HB3332 (2023) which specifies that steel, iron, coatings for steel and iron and manufactured products that a contractor purchases for or uses in the public improvement contract or public works contract, and that become part of a permanent structure, must be produced in the United States. For iron and steel products all manufacturing processes, from the initial melting stage through the application of coatings, shall occur within the United States. For manufactured products, the manufacture of the product shall occur within the United States and the cost of the components of the product that are mined, produced or manufactured in the United States shall be more than 55 percent of the total cost of all components of the product.

No de minimis amount has been established for foreign or unknown origin and no list of exempted items has been created. ODOT or DAS may adopt rules or make findings according to HB3332 (2023).

The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any iron or steel products into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all domestic iron or steel Materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

The Contractor shall include this provision in all subcontracts.

00160.20(d) Build America Buy America Act Requirements – Replace this subsection, except for the subsection number and title, with the following:

If federal highway funds are involved on the Project, the Contractor shall comply with the Build America Buy America Act and implementing regulations (Infrastructure Investment and Jobs Act (“IIJA”), Pub. L. No. 117-58, which includes the Build America, Buy America Act (“the Act”). Pub. L. No. 117-58, Sections 70901-70941).

The Build America Buy America Act requirements apply to construction materials permanently incorporated in the Project. All construction materials permanently incorporated in the Project must be produced in the United States.

Construction materials include an article, Material, or supply that is or consists primarily of only one of the following, with the standard for the material to be considered ‘‘produced in the United States’’:

- **Non-ferrous metals -** All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.

- **Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)** - All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
- **Glass (including optic glass)** - All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
- **Fiber optic cable (including drop cable)** - All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
- **Optical fiber** - All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
- **Lumber** - All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
- **Drywall** - All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
- **Engineered wood** - All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

The classification of an article, material, or supply as construction material is based on its status at the time it is brought to the work site for incorporation in the Project. In general, the work site is the location of the Project at which the construction materials will be incorporated.

Manufactured products assembled outside the Project Site are not subject to the Build America Buy America requirements. Manufactured products means articles, materials, or supplies that have been:

- Processed into a specific form and shape; or
- Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

The USDOT issued a Public Interest Waiver for De Minimis Costs and Small Grants. The final waiver can be viewed here: https://www.federalregister.gov/documents/2023/08/16/2023-17602/waiver-of-buy-america-requirements-for-de-minimis-costs-and-small-grants and this waiver applies to Materials covered by the Build America Buy America Act.

The public interest waiver is for manufactured products and construction materials for which:

- The total value of the non-compliant products (foreign or unknown origin) is no more than the lesser of $1,000,000 or 5% of total applicable costs for the project*; or

- The total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

*The “total value of the non-compliant products” includes construction materials only. The “total applicable costs” includes construction materials, iron and steel, and manufactured products. The value of materials are the actual cost of the materials, not the anticipated cost of materials. Furthermore, this bullet does not apply to iron and steel subject to the requirements of 23 U.S.C. 313. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for steel and iron. (See 00160.20(a).)

Strict compliance with the Build America, Buy America domestic preferences is required, except to the extent the above public interest waiver applies. The Contractor shall not incorporate construction materials in excess of this amount into the Project. All foreign origin construction Materials incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic construction Materials at the Contractor's expense.

The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any applicable construction materials into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the products and Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all applicable construction materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

Iron and steel Materials and manufactured products that are predominately iron or steel are subject to 00160.20(a).

The Contractor shall include this provision in all subcontracts.

00160.21 Cargo Preference Act Requirements - Add the following to the end of this subsection:

Additional information may be available at the following websites:

https://www.fhwa.dot.gov/construction/cqit/cargo.cfm

https://www.fhwa.dot.gov/construction/cqit/cargo/qa.cfm.

SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 s of the General Conditions for Construction for Clackamas County modified as follows:

00165.35(e) Certificate of Origin of Construction Materials – Replace this subsection, except for the subsection number and title, with the following:

When a certificate of material origin for construction materials is specified, complete the form furnished by the Engineer as required by 00160.20(d) for Federal-aid projects.

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

Add the following subsection:

00170.06 Federal-Aid Participation - This Project is to be conducted according to the regulations applying to Federal-Aid Highway Projects.

00170.61(a) Workers' Compensation - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide workers' compensation coverage for on-the-job injuries as required by 00170.70(e).

00170.65(b)(1) Minimum Wage Rates – Replace the paragraph that begins "The Bureau of Labor and Industries (BOLI) …" with the following paragraph:

The Bureau of Labor and Industries (BOLI) determines and publishes the existing State prevailing wage rates in the publication *Prevailing Wage Rates for Public Works Contracts*. The Contractor shall pay workers not less than the specified minimum hourly wage rate according to ORS 279C.838 and ORS 279C.840, and shall include this requirement in all subcontracts.

00170.70(a) Insurance Coverages -

Add the following to the end of this subsection:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	$2,000,000	$4,000,000
Commercial Automobile Liability	$2,000,000	(aggregate limit not required)
Pollution Liability	$1,000,000	$2,000,000

- With Asbestos Liability Endorsement or separate coverage
- With Lead Liability Endorsement or separate coverage

Commercial Automobile Liability with Pollution Coverage	$1,000,000	(aggregate limit not required)

00170.70(d) Additional Insured - Replace the paragraph that begins "The liability insurance coverages of 00170.70(a)…" with the following paragraph:

The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement endorsing the "State of Oregon, the Oregon Transportation Commission and

the Oregon Department of Transportation, and their respective officers, members, agents, and employees" as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

Add the following paragraph and bullets to the end of this subsection:

Add the following as Additional Insureds under the Contract:

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- Kittelson and Associates, Inc.

00170.70(g) Certificate(s) of Insurance - Replace the bullet that begins "List the "State of Oregon…" with the following bullet:

- List the "State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents and employees" as a Certificate holder and endorse as an Additional Insured;

00170.72 Indemnity/Hold Harmless - Add the following paragraph and bullet*(s)* to the end of this subsection:

Extend indemnity, defense and hold harmless to the Agency and the following:

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- Kittelson and Associates, Inc.

SECTION 00180 - PROSECUTION AND PROGRESS

Comply with Section 00180 of the General Conditions for Construction modified as follows:

Add the following subsection:

00180.40(c) Specific Limitations - Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

Limitations	Subsection
Cooperation with Utilities	00150.50
Cooperation with Other Contractors	00150.55
Contract Time	00180.50(h)
Right-of-Way and Access Delays	00180.65
Closed Lanes	00220.40(e)(1)
Special Events	00220.40(e)(2)(b)
Noise Control	00290.32
Maintenance Under Traffic	00620.43
Opening Sections to Traffic	00744.51

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

00180.41 Project Work Schedules -

After the paragraph that begins "The Contractor shall submit a Project Work schedule meeting the requirements…" add the following paragraphs:

Submit an overall sequencing and phasing plan showing the timeline for construction of all curb ramps. Submit a list of individual curb ramps or groups of curb ramps not to exceed 32 curb ramps to include in the schedule for approval by the Engineer.

The Contractor shall include the following curb ramp tasks in the Project Work schedule:

- Contractor initial site visit(s) for ramp existing conditions;
- Submittal of Working Drawings for each ramp, submitted to the Agency according to 00759.03(c);
- Submittal of Curb Ramp Plan(s); and
- Preplacement Conference(s).

In the paragraph that begins "The Contractor shall submit a supplemental “look ahead” Project Work schedule each week to the Engineer.” add the following bullets to the end of the bullet list:

- Identify date of curb ramp site visit to include Contractor and Agency, to review Working Drawings;
- Identify curb ramp resubmittal of Working Drawings, as required according to 00759.03;

- Identify the anticipated date of curb ramp closure;
- Identify the field markings for excavation limits for curb ramps;
- Identify when the curb ramp formwork begins;
- Identify when the curb ramp Concrete placement begins; and
- Identify the anticipated opening curb ramp date.

After the paragraph that begins "One of the following Type…" add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type B schedule as detailed in the Standard Specifications is required on this Contract.

00180.42 Preconstruction Conference - Add the following to the end of this subsection:

The Contractor shall conduct a group Utilities scheduling meeting with representatives from the Utility companies involved with this Project and the Engineer before the preconstruction conference. The Contractor shall incorporate the Utilities time needs into the Contractor's schedule submitted at the preconstruction conference.

Add the following subsection:

00180.50(h) Contract Time - There are two Contract Times on this Project as follows:

(1) The Contractor shall complete all Work related to the house demolition at the former 7920 SE Johnson Creek Blvd property (File #5), not later than August 27, 2025.

(2) The Contractor shall complete all Work to be done under the Contract, except for seeding and plant establishment not later than June 30, 2026.

00180.65 Right-of-Way and Access Delays - Add the following paragraph and table to the end of this subsection:

The Contractor shall incorporate the special conditions for each property listed in the table below to progress the Work to be done under the Contract:

Additionally, the contractor’s representative shall make personal contact and notification in writing, with each property owner a minimum 14 days prior to entering property for construction purposes or limiting of access.

ROW File #	Address	Owner	Phone	Special Conditions
04	7926 SE Johnson Creek Blvd	7926 SE Johnson Creek, LLC	Prop Mgr: 707-387-9550	The project has a Temporary Construction Easement (3,370 square feet) for the purpose of reconstructing the driveway, parking lot improvements, and drainage improvements, and the agreement expires 30 Calendar Days from the date that construction starts on the

				property. The temporary construction easement impacts 3 parking spaces and is limited to 9 am to 4 pm during the 30 Calendar Day construction period.
06	7922 SE Johnson Creek Blvd	Linda J. Livingston	360-461-0082	The project has a Temporary Construction Easement Agreement for the purpose of reconstructing the driveway and the agreement expires 30 Calendar Days from the date that construction starts on the property. The Contractor shall construct the 6-foot-tall chain link fence with privacy slats prior to construction of the water quality facility at the former 7920 SE Johnson Creek Blvd. property. The Contractor shall provide access to the 7922 SE Johnson Creek Blvd. property during construction.

00180.85(b)(2) Multiple Contract Times - Add the following paragraph and bullet list to the end of this subsection:

The Agency determined percentages of the value of Work required to be complete by the Contract Times listed under 00180.50(h) are as follows:

- For Contract Time 00180.50(h)(1) the Agency determined percentage of Work is 3 percent.
- For Contract Time 00180.50(h)(2) the Agency determined percentage of Work is 97 percent.

Add the following subsection:

00180.85(c) Lane Closures - Lane closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event Traffic Lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, $500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e) .

The Engineer will determine when it is safe to reopen lanes to traffic. Assessment of liquidated damages will stop when all lanes have been safely reopened. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b).

Add the following subsection:

00180.85(e) Traffic Delays Beyond 20 Minutes - Stopping or holding vehicles beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event traffic is stopped or held longer than the 20-minute limit listed in 00220.02. Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, $500 per 20 minutes, or for a portion of 20 minutes, for stopping or holding traffic longer than 20 minutes.

Assessment of liquidated damages will stop when the Engineer determines that traffic is no longer stopped or held beyond the 20-minute limit. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b).

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

Comply with Section 00190 of the General Conditions for Construction for Clackamas County modified as follows:

00190.20(g) Agency-Provided Weigh Technician - Add the following paragraph to the end of this subsection:

The Contractor must provide a weigh technician. The Agency will not provide one for the Contractor.

SECTION 00195 - PAYMENT

Comply with Section 00195 of the General Conditions for Construction for Clackamas County, modified as follows:

00195.12(d) Steel Materials Pay Item Selection - Add the following paragraph to the end of this subsection:

No Pay Items under this Contract qualify for the steel escalation/de-escalation program for this Project.

00195.50(c)(1) Cash, Alternate A – Replace this subsection, except for the subsection number and title, with the following:

Retainage will be deducted from progress payments and held by the Agency until final payment is made according to 00195.90, unless otherwise specified in the Contract.

Except as otherwise provided, the Agency will deposit the cash retainage withheld in an interest bearing account, established through the State Treasurer for the benefit of the Agency, as required by ORS 279C.560(5). Interest earned on the account shall accrue to the Contractor. Amounts retained and interest earned will be included in the final payment made according to 00195.90, unless otherwise specified in the Contract.

Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

00195.50(c)(2) Cash, Alternate B (Retainage Surety Bond) - Replace this subsection, except for the subsection number and title, with the following:

The Contractor may submit a Surety bond in lieu of all or a portion of the retainage required under the Contract. The Agency will accept this Surety bond unless the Agency first finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560(1)(c).

The Surety bond must be in substantially the form specified in ORS 701.435 (4) (Oregon House Bill 4006, 2024), and executed by a Surety bonding company that is authorized to transact Surety business in the State of Oregon and may not be a Surety obligation of an individual. The Surety bond and any proceeds of the Surety bond must be made subject to all claims and liens and in the same manner and priority specified for retainage under ORS 279C.550 to 279C.570 and ORS 279C.600 to 279C.625. Agency will reduce the cash retainage held by an amount equal to the value of the Surety bond and pay the amount of the reduction to Contractor according to ORS 279C.570. Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

When the Agency accepts a Surety bond in lieu of retainage from the Contractor, the Contractor shall accept Surety bonds from Subcontractors or Suppliers from which the Contractor has withheld retainage. At any time before final payment a Subcontractor may submit a Surety bond to the Contractor and request that the Contractor submit a Surety bond as described above for the portion of the Contractor's retainage that pertains to the

Subcontractor. The Surety bond the Subcontractor provides to the Contractor must meet the Agency requirements specified in the paragraph above. When a Contractor at a Subcontractor's request obtains and submits a Surety bond under this subsection, the Contractor may withhold from payments to the Subcontractor an amount equivalent to the portion of the Contractor's Surety bond premium for which the Subcontractor is responsible in accordance with ORS 279C.560 (Oregon House Bill 4006, 2024).

Within 30 Days after a Subcontractor's request the Contractor shall provide a Surety bond as described above, and the Agency will accept the Surety bond unless:

- the Agency finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560;
- a Surety bond is not commercially available;
- the Subcontractor refuses to pay to the Contractor the Subcontractor's portion of the Surety bond premium; or
- the Subcontractor refuses to provide the Contractor with a Surety bond that meets the requirements of ORS 279C.560(1)(b).

Notwithstanding 00195.50(d), within 30 Days of receiving a Surety bond from Contractor at a Subcontractor's or Supplier's request, Agency will release to the Contractor the amount held as retainage that is equivalent to the amount the Contractor submitted as a Surety bond. Contractor shall, within 30 Days after receiving a Surety bond from a Subcontractor or Supplier, release to the Subcontractor or Supplier the amount the Contractor holds as retainage that is equivalent to the amount of the Surety bond submitted, in accordance with ORS 279C.560(8).

00195.50(c)(3) Bonds, Securities, and Other Instruments - Replace this subsection, except for the subsection number and title, with the following:

Contractor may deposit bonds, securities or other instruments with the Agency or in a bank or other financial institution, to be held by Agency instead of cash retainage for the benefit of the Agency, which the Agency will accept unless the Agency first finds in writing good cause for rejection based on unique project circumstances, in accordance with ORS 279C.560(1)(c).

If the Contractor deposits bonds, securities or other instruments, and Agency does not reject the bonds, securities or other instruments as permitted by ORS 279C.560(1)(c), the Agency will reduce the cash retainage by an amount equal to the value of the bonds, securities and other instruments. Interest or earnings on the bonds, securities and other instruments accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be of a character approved by the Director of the Oregon Department of Administrative Services, including, but not limited to:

- Bills, certificates, notes or bonds of the United States;
- Other obligations of the United States or agencies of the United States;
- Obligations of a corporation wholly owned by the federal government;
- Indebtedness of the Federal National Mortgage Association;

- General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon;
- Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

00195.50(f) Prompt Payment Policy - Replace this subsection, except for the subsection number and title, with the following:

Payments shall be made promptly according to ORS 279C.560, ORS 279C.570, ORS 279C.580 and other applicable legal requirements.

SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the General Conditions for Construction for Clackamas County.

SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the General Conditions for Construction for Clackamas County.

SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the General Conditions for Construction for Clackamas County.

SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications modified as follows:

00220.02(a) General Requirements - Add the following bullets to the end of the bullet list:

- Before activating a modified traffic signal, revising lane usage, implementing new roadway geometry, or removing a "STOP" sign, protect traffic by installing "NEW TRAFFIC PATTERN AHEAD" (W23-2) signing according to 00222.40. Keep the signs in place for 30 Calendar Days after completing the modifications.

- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.

- When paving operations create an abrupt edge, protect traffic by installing a "DO NOT PASS" (R4-1) sign before the Work Area at sign spacing "A" from the TCD Spacing Table" shown on the Standard Drawings. Alternate "ABRUPT EDGE" (CW21-7) signs with appropriate (CW21-8) rider and "DO NOT PASS" (R4-1) signs at 1/2 mile spacings. Install a "BUMP" (W8-1) sign 100 feet prior to the transverse paving edge.

- Protect pedestrians in pole base excavation areas by placing approved covers over all pole base excavations. Place a minimum of two B(II)LR barricades adjacent to and on either side of the excavated area, facing pedestrian traffic, or place covers and barricades as directed.

00220.02(b) Temporary Pedestrian Accessible Route Plan - Add the following bullet to the end of the bullet list:

- For an active Work Area controlled at each end by flaggers and pilot car, provide transportation for pedestrians and bicyclists through the active Work Area according to Section 00223 and Section 00228.

00220.40(e)(1) Closed Lanes - Replace this subsection, except for the subsection number and title, with the following:

Traffic Lanes may be closed on Johnson Creek Boulevard when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

Single Lane Closures – One Traffic Lane in each direction on SE Johnson Creek Boulevard may be closed during the following times:

- Nightly, Sunday night through Friday morning, between 7:00 p.m. and 5:00 a.m.

One Traffic Lane may be closed on all other adjacent Roadways within the Project Site not listed above, when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

- Daily, Monday through Thursday, between 9:00 a.m. and 4:00 p.m.
- Friday, between 9:00 a.m. and 3:00 p.m.
- Nightly, Sunday night through Friday morning, between 6:00 p.m. and 7:00 a.m.

00220.60(a)(1) Contractor Responsibility - In the paragraph that begins "Do the following at no additional…", add the following bullet to the end of the bullet list:

- During emulsified asphalt chip seal operations, broom the surface being used by bicycles as soon as practicable to keep it free of all dirt, mud, gravel, and other harmful materials. The surface includes bike paths, Bike Lanes, Roadway Shoulders or the outside 6 feet of the Roadway.

SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

Comply with Section 00221 of the Standard Specifications modified as follows:

00221.06 Traffic Control Plan - Replace this subsection with the following subsection:

00221.06 Traffic Control Plan and Tourist-Oriented Directional and Business Logo Signs –

(a) Traffic Control Plan - Submit one of the following, 5 Calendar Days before the preconstruction conference:

(1) Agency Traffic Control Plan - If the Contractor intends to use the Agency TCP without modification, a written notification indicating that the Agency TCP will be used without modification.

(2) Contractor-Modified Traffic Control Plan - The Contractor may request to use a Contractor-modified Agency TCP, or a TCP developed by the Contractor. Do not use a modified TCP, or a TCP developed by the Contractor, unless approved by the Engineer. Use the Agency TCP unless a modified TCP, or a TCP developed by the Contractor is accepted.

The Engineer is not obligated to consider any modified Agency TCP or a TCP developed by the Contractor. The Agency will not be liable to the Contractor for failure to accept or act upon any request for a modified Agency TCP or a TCP developed by the Contractor.

To conserve time and funds, the Contractor may first submit a written request for a preliminary review by the Engineer. The request should contain a description of the proposal together with a rough estimate of anticipated dollar and time impacts. The

Engineer will, within a reasonable time, respond to the Contractor in writing whether or not the request would be considered by the Agency.

If requesting a Contractor-modified Agency TCP, or a TCP developed by the Contractor, at a minimum the request shall meet all requirements of the Contract documents and comply with the Project transportation management plan (TMP). Provide the following information:

- Stamped Working Drawings according to 00150.35 that include the proposed TCP showing all TCM and quantities of TCD.
- A TPAR plan that includes:
  - Details and features used to provide pedestrian accessibility.
  - Pedestrian staging Plans at a scale no smaller than 1 inch = 50 feet.
  - Temporary alternate facilities or detour routes for pedestrian traffic.
- Staging sequences and details for Work affecting vehicular, pedestrian, and bicycle traffic.
- Proposed order and duration of the TCM.
- A detailed temporary striping plan.

If the Contractor's request to use a Contractor-modified Agency TCP, or a TCP developed by the Contractor is approved in whole or in part, acceptance will be made by a Change Order.

The Engineer will establish prices that represent a fair measure of the value of Work to be added, changed, or deleted as a result of any accepted modifications to the Agency TCP or an accepted TCP developed by the Contractor.

Once a TCP has been accepted by the Engineer, any additional modifications must be submitted by the Contractor for Agency review following the procedure described above. The Engineer is not obligated to consider additional modifications to a previously approved TCP.

(b) Tourist-Oriented Directional and Business Logo Signs - Submit one of the following for approval, at least 5 Calendar Days before the preconstruction conference:

(1) No Signs - If there are no tourist-oriented directional (TOD) or business logo signs on the Project, a written notification that no TOD or business logo signs exist within the Project limits or

(2) Signs - Submit one copy of a sketch map of the Project showing all existing TOD and business logo signs and a written narrative describing how these signs will be kept in service and protected throughout all the construction stages. If modifications are necessary, submit updated information to the Engineer for approval at least 21 Calendar Days before the change is needed.

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

Comply with Section 00222 of the Standard Specifications modified as follows:

- At least ten Calendar Days before closing the sidewalk on Johnson Creek Boulevard, place a “SIDEWALK CLOSED, Full Time” (CW11-4) sign in advance of each future closure point. Locate the sign so it is legible from the nearest alternate pedestrian pathway facing incoming pedestrian traffic. The sign may be mounted between the panels of a Type II barricade or on a single-post TSS. Do not place the sign or sign support such that it narrows the pedestrian pathway to a width of less than 4 feet.
- Before opening the TPAR, place TPAR signing and other TCM as shown, or as directed. Maintain the “SIDEWALK CLOSED, Full Time” (CW11-4) signs while the TPAR is open to pedestrian traffic.

- At least ten Calendar Days prior to the start of work, place a “SIDEWALK OPEN” (CW11-3) sign in advance of each end of the Work Area. Locate the sign so it is legible from the nearest alternate pedestrian pathway facing incoming pedestrian traffic. The sign may be mounted between the panels of a Type II barricade, or on a single-post TSS. Do not place the sign or support such that it narrows the pedestrian pathway to a width less than 4 feet.

- Before starting work, place pedestrian-specific TCM as shown in the TCP, or as directed. Maintain “SIDEWALK OPEN” (CW11-3) signs while work is affecting the pedestrian pathway.

- Place a “PEDESTRIANS ON ROADWAY” (CW11-2) sign at the beginning of each end of the Work Area, facing incoming traffic as shown, or as directed.

- Install "ROAD WORK AHEAD" (W20-1-48) signs with a 36 by 24-inch "FINES DOUBLE" (R2-6aP) rider on Johnson Creek Boulevard and the Cascade Highway (OR213), according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans except do not install the "FINES DOUBLE" rider on concrete barrier mounted signs.

- Install beyond each end of the Project, facing outgoing traffic, an "END ROAD WORK" (CG20-2A-24) sign a distance of (A ÷ 2) according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans.

- Install two sign flag boards, as shown on the Standard Drawings, above the following detour and road closed advance warning signs, where applicable:

  - "DETOUR AHEAD", "DETOUR XXXX FT", "DETOUR X/X MILE" (W20-2) signs.
  - "ROAD CLOSED AHEAD", "ROAD CLOSED XXXX FT", "ROAD CLOSED X/X MILE" (W20-3) signs.

- For each leg of the intersection affected by the new traffic signal, install the following warning signs:

- A "Signal Ahead" (W3-3) symbol sign approximately 350 feet in advance of the intersection, shown on the Standard Drawings or as modified by the Plans.
- A "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign approximately 350 feet in advance of the "Signal Ahead" sign. Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after installing the "Signal Ahead" sign.

- For paving operations on non-freeways, place “ABRUPT EDGE” (CW21-9) and “ROAD WORK XX MPH” (CW20-1a) signs as shown. Use an “XX” value equal to 10 mph below the current posted regulatory speed. If a speed is posted for a temporary regulatory speed reduction, that speed is the current posted regulatory speed.
- For all other moving operations that do not create an abrupt edge adjacent to traffic, omit the “ABRUPT EDGE” signs.

- When construction requires bicycles to use the Traffic Lanes, install a "Bicycle ON ROADWAY" (CW11-1) symbol sign on 1/2 mile spacing through the affected area. Keep the signs in place until completion of the Shoulder or bikeway final surface.

SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

Comply with Section 00223 of the Standard Specifications.

SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications.

SECTION 00225 - TEMPORARY PAVEMENT MARKINGS

Comply with Section 00225 of the Standard Specifications.

SECTION 00228 - TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING

Comply with Section 00228 of the Standard Specifications.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications modified as follows:

00280.00 Scope - Replace the paragraph that begins "This Work also consists of providing temporary …" with the following paragraph:

This Work also consists of providing temporary erosion and sediment control (ESC) measures and furnishing, installing, moving, operating, maintaining, inspecting, and removing ESC throughout the Project area according to the Standard Drawings, the erosion and sediment control plan (ESCP), the Specifications, or as directed, until the site is permanently stabilized. Included also is the monitoring of weather, of stormwater and receiving waters, the reporting of monitoring observations, the reporting of corrective actions (when necessary) and the updates and revisions of the ESCP, including ESCP cover sheet, necessary to keep it representative of current site conditions and compliant with the 1200-CA permit if applicable.

Delete the paragraph that begins “When contaminants, pollutants or hazardous materials…”.

Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA permit is applicable to the Project.

00280.41(f) Hauling Material – Replace this subsection, except for the subsection number and title, with the following:

Cover loads carrying soil or sediment which may generate dust. Haul saturated loads in water tight beds or drain saturated loads prior to leaving the Project Site.

00280.41(g) Underground Injection Controls (UIC) – Replace this subsection, except for the subsection number and title, with the following:

Do not allow storm water from work area to enter Underground Injection Control (UIC) inlets, UIC catch basins or UIC wells.

00280.48 Emergency Materials - Add the following paragraphs after the paragraph that begins "Provide, stockpile, and protect...":

Provide and stockpile the following emergency Materials on the Project site:

Item	Quantity
Sediment Fence	30

When emergency materials are used, restock emergency materials within 48 hours of use.

00280.62 Inspecting and Monitoring – Delete the paragraph that begins “Inspect the Project Site…”.

00280.62(a) Inspection - Replace the paragraph that begins "Perform site inspection, complete…**"** with the following paragraph:

Inspect the Project Site and all ESC devices for Effective Function and potential erosion or sediment movement and complete all applicable parts of the ODOT Erosion Control Monitoring Form, and submit the form to the Agency as follows:

SECTION 00290 - ENVIRONMENTAL PROTECTION

Comply with Section 00290 of the Standard Specifications modified as follows:

00290.20(c)(2) Clean Fill - Add the following paragraph to the end of this subsection:

Manage all excavated soil that does not meet the definition of clean fill according to Section 00294.

00290.32 Noise Control - Add the following paragraphs to the end of this subsection:
Review Clackamas County Code Chapter 6.05 Noise Control which describes noise control regulations https://www.clackamas.us/codeenforcement/noise-variance. Obtain and be responsible for necessary permits described in Clackamas County Code 6.05.070 Variances. Comply with the applicable noise control requirements for Project Work.

SECTION 00294 - CONTAMINATED MEDIA

Section 00294, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00294.00 Scope - In addition to the requirements of Section 00290 and the Specifications, this Work consists of the following:

- Excavate, segregate, stockpile, transport, and dispose of Contaminated Soils , Shoulder Soils, and contaminated grubbing materials, as defined by 00294.01, from the following locations:

Contaminated Soil Location Table 00294-1

From Location/Station to Location/Station	Depth below grade (feet)	Approximate Quantity (cy)	Known Contaminants
6+38 to 6+40 (SS-1-5)	0-0.5	1	Lead, cadmium, copper, lead, zinc, and benzo(a)pyrene
6+38 to 6+40 (SS-1-5)	0.5-1.0	1	Lead and zinc, and benzo(a)pyrene
6+38 to 9+00 (SS-2-5 through SS-4-5, 5 feet from edge of pavement)	0 – 0.5	25	Copper, lead, and benzo(a)pyrene
6+38 to 9+00 (SS-2-5 through SS-4-5, 5 feet from edge of pavement)	0.5-1.0	25	Lead and benzo(a)pyrene
6+38 to 9+00 (SS-2-10 through SS-4-10, 10 feet from edge of pavement)	0 – 0.5	25	Lead and benzo(a)pyrene
6+38 to 9+00 (SS-2-10 through SS-4-10, 10 feet from edge of pavement)	0.5-1.0	25	Lead and benzo(a)pyrene
Approximate Total Quantity		102	cy
Quantity to be reused on Project		0	cy
Quantity to be disposed at landfill		138	Tons

- In areas where excavation is not required, leave contaminated Material , Shoulder Soils, and clearing and grubbing Material in place.

The Shannon & Wilson Reports, titled Phase II Environmental Site Assessment, 7920 SE Johnson Creek Boulevard Portland, Oregon, Shoulder Material Investigation SE Johnson Creek Boulevard: SE 79th Place – 82nd Avenue Clackamas, Oregon, and Preliminary Site Investigation II, SE Johnson Creek Boulevard: SE 79th Place – 82nd Avenue, Clackamas, Oregon documenting the contaminated media identified within the Project, is available from the Engineer.

00294.01 Definitions:

Contaminated Soil - Soil that does not meet the DEQ definition of "Clean Fill", as defined by OAR 340-093-0030(18). This Contaminated Soil is a regulated waste, subject to OAR 340-093-0005 through OAR 340-093-0290. If the grubbing Material has been determined to be contaminated, it will be considered and treated as Contaminated Soil for the purposes of this Section.

Shoulder Soil - Soil outside of the existing Highway Pavement and within Highway Right-of-Way generated during Highway maintenance or construction activities. This definition applies to excess Soil generated to a maximum depth of 1.5 feet below ground surface. This definition does not apply to Soil that is covered by existing impervious surfaces, including but not limited to curbs, sidewalks and parking lots constructed of asphalt or concrete.

ODOT Beneficial Use Determination (ODOT BUD) - The statewide ODOT Beneficial Use Determination (ODOT BUD), approved by DEQ (No. BUD-20181204), outlines a series of pre-approved non-residential reuse options for excess Soil Materials that do not meet DEQ's Clean Fill Standards in some circumstances. These options may vary based on project scope and location, and documentation may vary, as directed by the Engineer.

00294.02 Testing of Contaminated Soil , Shoulder Soil, and Groundwater - When additional testing of Contaminated Soil or groundwater is required to characterize the Material for reuse, recycle, or disposal, conduct the tests according to 00290.20(c).

Use analytical methods meeting DEQ's Clean Fill Guidance Screening Levels for each analyte. Contaminated Soil , Shoulder Soil, and groundwater sampling must be conducted by an Oregon Registered Geologist or Professional Engineer who has experience characterizing contaminated media.

00294.03 Submittals - Submit the following documents:

- A site specific HASP at least 10 Calendar Days before the pre-construction conference.

Submit all modifications to the HASP that are requested by the Engineer or the qualified health and safety professional within 7 Calendar Days of the request.

- Current employee training certificates and medical surveillance information before beginning Work within the contaminated areas.

Submit the following documents within 48 hours of removal of contaminated media:

- Permits, permit applications, and documentation of compliance.
- All reuse, recycled, and disposal receipts.
- Final quantities of Soil reused, recycled, and disposed and their final location.
- All analytical test results.

Labor

00294.30 Personnel Qualifications - Provide employees meeting the following requirements:

- For removal of Contaminated Soil and Shoulder Soil, provide employees trained in:
  - Lead awareness according to 29 CFR 1926.62(l).
  - Cadmium according to 29 CFR 1926.1127(m)(4).

Construction

00294.40 Contaminated Soil Excavation and Shoulder Soil - Excavate and handle Contaminated Soil or Shoulder Soil from Project excavations according to the following:

- Notify the Engineer 3 Calendar Days before beginning excavation activities within contaminated areas.
- Allow the Agency to collect Soil samples during excavation activities.
- Load Contaminated Soil or Shoulder Soil directly into trucks and transport directly to the recycling or disposal facility, or on-site reuse areas or, when approved by the Engineer, temporarily store Contaminated Soil or Shoulder Soil on-site.

00294.41 Contaminated and Shoulder Soil Soil Management - Dispose of Contaminated Soil and Shoulder Soil according to any of the following:

(a) Landfill Disposal:

- Obtain the Engineer's approval of the disposal facility before disposing of the Contaminated Soil.
- Transport the Contaminated Soil or Shoulder Soil to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal. Dispose of temporarily stored Contaminated Soils or Shoulder Soil within 30 Days of beginning excavation work or before Second Notification, whichever occurs first.
- Complete and sign all manifests and bill-of-lading forms for handling, loading, transporting, and disposing of the Contaminated Soil and Shoulder Soil.
- Pay all filing and permit fees.

Measurement

00294.80 Measurement - Work performed under this Section will be measured according to the following:

No measurement of quantities will be made for the following:

- Lead compliance plan.

The quantities of Contaminated Soil or Shoulder Soil disposed will be measured on the weight basis, based on weigh tickets from the recycling or disposal facility.

Payment

00294.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(b) Lead Compliance Plan	Lump Sum
(e) Contaminated Soil Disposal	Ton

Item (e) includes all costs involved with the disposal of Contaminated Soil or Shoulder Soil at a recycling or disposal facility.

No separate or additional payment will be made for the excavation or reuse of Contaminated Soil or contaminated Shoulder Soil. Payment will be included in payment made for the appropriate items under which the excavation or reuse of Contaminated Soils or contaminated Shoulder Soil is required.

Clearing and grubbing will be paid for according to 00320.90.

Payment will be payment in full for removing and disposing of all Materials, and for furnishing all Equipment, labor, Plans, test results, and Incidentals necessary to complete the Work as specified.

SECTION 00295 - ASBESTOS MATERIALS

Section 00295, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00295.00 Scope - In addition to the requirements of Section 00290, remove asbestos according to the following Specifications.

Remove asbestos from the following locations in Table 00295-1:

Table 00295-1

Location/Address	Material Description	Quantity (ft. or sq.ft.)	Percent Asbestos	Friable or Non-Friable
Surfacing wall downstairs	surfacing	2,750 sq. ft.	0.5 to 0.8 % Chrysotile	Non-Friable
Tan thermal tape on heating duct in basement	Miscellaneous	3-5 ft.	48 % Chrysotile	Friable
Popcorn ceiling texturing in living area	surfacing	220 sq. ft.	2% Chrysotile	Non-Friable
White drywall surfacing on ceiling in entryway	Surfacing	250 sq. ft.	1.3% Chrysotile	Non-Friable

The Shannon & Wilson report, titled Hazardous Building Materials Survey, 7920 Johnson Creek Boulevard Portland, Oregon documenting the asbestos identified within the Project is available from the Engineer. Maintain a copy of this report and all additional asbestos survey results on site at all times and readily available to employees and inspectors during demolition and repair activities.

00295.01 Definitions:

Asbestos Containing Material (ACM) - Any material containing more than 1% asbestos.

00295.03 Submittals - The following forms and reports are required:

- Asbestos survey report documenting sample locations and analytical results according to Oregon Administrative Rule (OAR) 340-248-0270 (3)(d).
- Completed and signed DEQ Project Notification Form and an abatement plan to Agency and DEQ at least 10 Calendar Days before beginning friable asbestos removal.
- Completed and signed DEQ Notice for Removal of Non-Friable Asbestos to Agency and DEQ at least 5 Calendar Days before beginning non-friable asbestos removal.
- Completed and signed DEQ Waste Shipment Report Form according to the following:
    - Send the form along with the asbestos waste to the disposal facility.
    - Provide a copy of the form to the Engineer within 48 hours of transportation of the asbestos waste.
    - Obtain the final signed form from the disposal facility along with the disposal receipts and submit them to the Engineer within 3 Calendar Days after receiving them from the waste disposal facility.
- Completed and signed DEQ Air Clearance Sample Results form to the Agency and DEQ within 30 Calendar Days after completing the asbestos removal.
- Disposal receipts within 72 hours of receipt from the waste disposal facility.

Labor

00295.30 Personnel Qualifications - Provide employees meeting the following requirements:

- A current Oregon DEQ Asbestos Abatement Contractor license.
- A current Oregon DEQ Certified Supervisor meeting the requirements of OAR 340-248-0130.
- Current Oregon DEQ Certified asbestos workers meeting the requirements of OAR 340-248-0130
- A current Oregon DEQ Certified Supervisor meeting the requirements of OAR 340-248-0130.

Ensure the DEQ Certified Supervisor is on site and overseeing work whenever asbestos containing materials are disturbed or removed.

- Workers trained according to 29 CFR 1926.1101.

When a DEQ Certified Supervisor is required, ensure the supervisor is on site and overseeing the work whenever asbestos materials are disturbed or removed.

Materials Testing

00295.35 Testing of Suspect Asbestos Containing Material - When additional testing is needed for suspected ACM listed in Table 00295-2, complete the following with an Asbestos Hazard Emergency Response Act (AHERA) Inspector prior to removal of material listed in the Table 00295-2:

- Collect at least 2 samples of each material listed in the Table 00295-2 to determine if asbestos is present.
- Submit samples to a National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory for analysis by polarized light microscopy (PLM) following EPA Method 600/R-93/116.
- Submit the laboratory test results to Engineer for review.

If asbestos is detected in any material sample then all similar material are considered asbestos containing material and all similar materials are to be removed according to 00295.40.

Construction

00295.40 Asbestos Removal - Comply with 29 CFR 1910, 29 CFR 1926.1101, 40 CFR 61, 40 CFR 763, OAR 340-248, ORS 468A and the following:

- Before beginning asbestos removal work, sign and submit all notifications and pay all fees to DEQ. Provide copies to the Engineer.
- Complete and sign all manifests and bill-of-lading forms for transporting and disposing the ACM.
- Maintain the ACM in an undamaged and non-friable condition by keeping the material wet during demolition or by using methods approved by DEQ.
- Keep material sealed during transport to the disposal facility. Transport and dispose of all ACM according to OAR 340-248-280 and OAR 340-248-290.
- Conduct final clearance air monitoring according to OAR 340-248-0270(13), with a contractor that is National Institute of Occupational Safety and Health (NIOSH) 582 certified and is financially independent from the abatement contractor.
- Remove and dispose of the materials identified as having less than 1% asbestos according to 29 CFR 1926.1101, where that regulation refers to "asbestos" rather than "asbestos containing material" or "ACM".

Measurement

00295.80 Measurement - The quantities of removing asbestos containing materials will be measured on either the length basis or the area basis.

No measurement of quantities will be made for bulk asbestos sampling, analytical testing, and reporting.

Materials containing 1% or less asbestos will not be measured.

Materials containing asbestos that cover less than 3 square feet will not be measured.

Payment

00295.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following item(s):

Pay Item	Unit of Measurement
(a) Remove Asbestos Material, _____	Foot
(b) Remove Asbestos Material, _____	Square Foot

In item (a) and (b), the type of Material will be inserted in the blank.

Payment will be payment in full for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for materials containing 1% or less asbestos.

SECTION 00296 - PAINT AND PAINTED MATERIALS

Section 00296, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00296.00 Scope - In addition to the requirements of Section 00290, remove lead, chromium, and cadmium based paints, and materials coated with lead, chromium, and cadmium based paints, according to the following Specifications.

Leadbased paints coat the wood on the exterior trim on the residence as 7920 SE Johnson Creek Boulevard. Analysis of paint samples collected from this structure detected the concentrations of total lead, cadmium, and chromium in the wood paint indicated in Table 00296-4 below:

Table 00296-4

Sample Location and Material	Total Lead (mg/kg)	Total Chromium (mg/kg)	Total Cadmium (mg/kg)
White paint on trim/siding of residence	<0.5 mg/kg (TCLP)	ND	NA

ND = not detected above the laboratory detection limit.

The Shannon & Wilson report, titled Hazardous Building Materials Survey, 7920 Johnson Creek Boulevard Portland, Oregon documenting these analyses, is available from the Engineer.

Unless otherwise tested, assume that all coatings contain lead, chromium, and cadmium and handle paint and painted materials accordingly during demolition.

00296.03 Submittals - Submit the following documents:

- A job specific written compliance program, according to 29 CFR 1926.62(e)(2), at least 10 Calendar Days before the pre-construction conference. When applicable, include compliance procedures for cadmium and chromium VI, according to 29 CFR 1926.1127 and 29 CFR 1926.1126.
- Modifications to the written compliance program within 7 Calendar Days of the modifications.
- Current employee training certificates and medical surveillance information before beginning work that disturbs paint containing lead, cadmium or chromium.
- Within 48 hours of completing or receiving them:
    - Disposal and recycling facility permits.
    - Transport manifests and bill-of-ladings.
    - All reuse, recycling, and disposal receipts.
    - All analytical test results.

00296.04 Documentation - Include paint and painted materials management and planned reuse, recycling, and disposal information in the pollution control plan. Obtain Engineer approval for the specific reuse, recycling, and disposal methods for all materials before beginning demolition work.

Complete, sign and pay all required fees for all required permits, manifests, and bill-of-lading forms for transport and disposal of the paint and painted materials.

Labor

00296.30 Personnel Qualifications - Provide employees trained in lead awareness, according to 29 CFR 1926.62(l), and also trained according to 29 CFR 1926.1126(j)(2) for chromium and 29 CFR 1926.1127(m)(4) for cadmium, during demolition of painted portions of the Structures.

Construction

00296.40 Handling - Minimize employee exposure to the metals contained in the paint. Provide containment that prevents release of paint chips to the environment. Do not remove or separate paint from painted substrates, unless required to accomplish repair activities.

00296.42 Painted Concrete Debris Management - Reuse, recycle, or dispose of painted concrete debris according to any of the following:

- **Recycle or Dispose of at Landfill** - Recycle at a permitted municipal solid waste landfill or a permitted construction and demolition landfill as aggregate material for roads or other infrastructures within the landfill area or dispose of at a permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal.

00296.44 Painted Wood Management - Dispose of painted wood at a permitted municipal solid waste landfill or a permitted construction and demolition landfill, according to the DEQ "Hazardous Waste/Toxics Reduction Policy Clarification: Management of Building Demolition Waste" Policy 1997-PO-002A.

00296.45 Non-Hazardous Waste Paint Management - When non-hazardous paint is separated from its substrate, contain all the paint waste and dispose of it at a permitted municipal solid waste landfill.

00296.46 Hazardous Waste Paint Management - When hazardous waste paint is separated from its substrate, store all the separated paint waste in labeled, sealed, watertight containers and handle the hazardous waste according to 00290.20(d).

Measurement

00296.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

Payment

00296.90 Payment - No separate or additional payment will be made for Work performed under this Section. Payment will be included in payment made for the appropriate items under which this Work is required.

Attachment A
Lead, Chromium, and Cadmium Based Paint Acknowledgement Form

[Contractor] _____
[Bridge Identification] _____
[Description of Scrap Metal] _____

_____ [Recipient] acknowledges that they are aware that metal and materials received from _____ [Contractor] on _____ [Date(s)] may contain lead, chromium, or cadmium based paint. Recipient further acknowledges that it is aware of the risk to human health and the environment posed by exposure to lead, chromium and cadmium based paint. All storage, use, sale, and disposal of materials containing lead, chromium or cadmium based paint and any removal of lead, chromium, or cadmium based paint from the materials by Recipient will be conducted in compliance with all applicable Federal and State statutes and regulations, including but not limited to 40 CFR 262 through 265 and OAR Chapter 340, Divisions 100 through 106. Recipient acknowledges that they are solely responsible for any liability or damages resulting from the storage, use, sale, and disposal of the materials and removal of lead, chromium or cadmium based paint by Recipient and Recipient will indemnify and hold harmless the Contractor and the Oregon Department of Transportation from any such claims of liability or damages.

_____ [Signature]
_____ [Title]
_____ [Date]

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications.

SECTION 00330 - EARTHWORK

Comply with Section 00330 of the Standard Specifications modified as follows:

00330.03 Basis of Performance - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section on the excavation basis. The estimated amount of embankment is 20 cubic yards.

00330.41(a)(9) Excavation Below Grade - Delete subsection 00330.41(a)(9)(c).

00330.91(d) General Excavation - Delete the bullet that begins "Includes Unsuitable Material…".

SECTION 00331 - SUBGRADE STABILIZATION

Comply with Section 00331 of the Standard Specifications.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications.

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications modified as follows:

00390.12 Grouted Riprap - Replace this subsection, except for the subsection number and title, with the following:

(a) Rock - Furnish Rock for Grouted Riprap that is dense, sound and free from cracks, seams and other defects conducive to accelerated weathering. The rock shall be subangular to sub-rounded in shape with the greatest dimension not greater than 2 times the least dimension.

It shall be free from dirt, clay, sand, rock fines, and other material not meeting the required gradation limits. Rock density shall be 165 pounds per cubic foot or greater.

Rock size in inches shall be a maximum of 6 inches, minimum 4 inches with an average of 5 inches. Only rock that has been approved by the Engineer shall be used.

(b) Grout - Furnish Grout for Grouted Riprap that is sand cement grout composed of one-part Cement to four parts sand, measured by volume, mixed thoroughly with sufficient water to make a grout of such consistency that it will flow into and completely fill the voids.

Cement shall be Type I Portland Cement conforming to ASTM C 150.

Sand shall be cleaned, hard, natural siliceous sand conforming to the requirements of ASTM C 33.

00390.44(d) Grouted Riprap - Replace this subsection, except for the subsection number and title, with the following:

Riprap geotextile Fabric shall be placed immediately prior to placement of riprap. Compaction of the fabric is not required except where called for on the Drawings.

Grouted rock riprap shall be constructed upon the prepared foundation using hand placement and the stone shall be set or placed are close together as is practicable in order to reduce the voids to a minimum.

When rock riprap is constructed in layers, the layers shall be thoroughly tied together with large stones protruding from one layer into the other.

The standard depth of rock riprap shall be 4 inches, unless otherwise indicated or directed, and in no instance shall be less than 2 inches in depth. Rock riprap shall have an average depth for each 25 square feet of not less than the depth indicated on the Drawings or as directed by the Engineer.

Each stone shall be bedded with the depth perpendicular to the surface upon which it is set. The length shall be placed as directed by the Engineer and each main stone shall be placed against the adjoining stones with sides and ends in contact. The stone shall be placed in such a manner as to stagger all joints as far as it is possible.

The surface of the completed rock riprap shall not vary from the theoretical surface required by more than 1/2 inch at any point when tested with a 2-foot straightedge.

The voids between the stones shall be completely filled with grout. Care shall be taken to prevent earth or sand from filling the spaces between the stones before the grout is poured.

This grout shall be mixed either in a one-bag mixer or larger, for not less than 1-1/2 minutes, or it may be mixed by hand in a watertight box of sufficient capacity to accommodate a batch of at least one bag of cement.

The grout shall be carefully poured into the voids between the stones sufficiently slow to prevent the grout from flowing over the surface. During the pouring operations fiber brooms shall be used to maintain a uniform distribution over the entire surface. The grouting

operations shall continue until such a time as all the voids have been completely filled and the grout has set even with the surface of the riprap.

00390.80 Measurement – Replace this subsection, except for the subsection number and title, with the following:

(a) Grouted Riprap – Grouted Riprap will be measured on the area basis of the finished surface, limited to the Neat Lines shown or directed.

00390.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Grouted Riprap	Square Foot

Item (a) includes the grout and riprap geotextile.

Payment will be payment in full for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications.

SECTION 00415 - VIDEO PIPE INSPECTION

Comply with Section 00415 of the Standard Specifications modified as follows:

Add the following subsection:

00415.02 Definitions:

Flexible Pipe - Pipes constructed of corrugated metal are considered Flexible Pipes.

Rigid Pipe - Pipes constructed of concrete and ductile iron are considered Rigid Pipes.

Thermoplastic Pipe - Pipes constructed of polyvinyl chloride, polyethylene, and polypropylene are considered Thermoplastic Pipe.

00415.20(b) Transporter - Replace the paragraph that begins “Use an all-wheel…” with the following paragraph:

Use an all-wheel drive or track mounted transporter capable of inspecting pipes ranging in size from 12 to 60 inches in diameter. Provide a transporter with an adjustable operating speed while recording not to exceed 30 feet per minute.

00415.41 Pre-Installation Video Inspection - Replace the paragraph that begins "Perform a pre-installation video inspection…" with the following paragraph:

Perform a pre-installation video inspection at least 5 Calendar Days before beginning Work. Begin Inspection at one end of the pipe and proceed through the entire pipe length at a speed not greater than 30 feet per minute. Move the camera through the pipe, along the approximate center of the pipe, and provide a continuous 360 degree pan of each pipe joint. Stop and record all cracks, deformities, and defects to document the pipe condition, including the location of all lateral connections to the mainline.

00415.42 Post Installation Video Inspection - Replace the paragraph that begins "Perform post construction video inspection…" with the following paragraph:

Perform post construction video inspection according to 00415.40 and 00415.41. Video inspect the pipe interior no sooner than 30 Days after the trench backfill and compaction have been completed, and before any paving is performed. If the Contract duration does not permit a 30-Day waiting period, the Engineer may allow the inspection when the compacted backfill reaches a minimum of 2 feet above the pipe crown.

00415.42(a) Deflection Testing for Flexible Pipe - Replace this subsection with the following subsection:

00415.42(a) Post Installation Deflection Testing - Perform post construction deflection testing for all Flexible Pipe and Thermoplastic Pipe as described.

- Flexible Pipe for new pipe installations and extensions greater than 15 feet in length.
- Thermoplastic Pipe for new pipe installations and extensions greater than 10 feet in length.

If any portion of the new pipe interior is not accessible for a visual inspection, then perform deflection testing for the entire installation of new pipe or extension regardless of pipe length.

Use one of the approved following methods:

00415.42(a)(1) Remote Video Inspection with Laser Profiler – Replace the paragraph that begins "Calibrate and perform…" with the following paragraph:

For pipe 48 inches or less in diameter, calibrate, and perform deflection inspection according to ASTM F3080. Use video inspection equipment meeting the requirements of 00415.22.

00415.42(a)(2) Manual Deflection Test - Replace the paragraph that begins "Use equipment meeting…" with the following paragraph:

For pipes larger than 48 inches and when the entire length of the pipe is accessible, use equipment meeting the requirements of 00415.23.

00415.71 Corrections to Deficiencies in Work - Replace the paragraph that begins "Where the pipe deflection…" with the following paragraph:

Where the pipe deflection is greater than 5 percent and less than 7.5 percent of the nominal diameter, submit a remediation plan to the Engineer. The remediation plan must be a stamped Working Drawing according to 00150.35. Replace pipe where the deflection exceeds 7.5 percent of the nominal diameter at no additional cost to Agency.

SECTION 00430 - SUBSURFACE DRAINS

Comply with Section 00430 of the Standard Specifications.

SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications modified as follows:

00445.80 Measurement - Add the following bullet to the end of the bullet list:

(k) Cleanouts - The quantities of cleanouts will be measured on the unit basis.

00445.91 Payment - Add the following Pay Item to the Pay Item list:

(n) 6 Inch Storm Sewer Cleanout ..... Each

Item (n) includes cast iron frame and cover, concrete pad, riser pipe, pipe wyes, and fittings required to construct cleanout.

SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications.

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL

Comply with Section 00620 of the Standard Specifications modified as follows:

00620.43 Maintenance Under Traffic - Replace this subsection, except for the subsection number and title, with the following:

Traffic will be allowed on the cold planed surface up to 2 Calendar Days after removing the existing surface. Sweep and clean the cold planed surface before opening to traffic.

Before beginning paving operations, make repairs to the existing cold planed surface as directed. Payment for the repairs will be made according to 00195.20.

SECTION 00640 - AGGREGATE BASE AND SHOULDERS

Comply with Section 00640 of the Standard Specifications.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications.

00730.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for Emulsified Asphalt tack coat. Approximately 3 Tons of Emulsified Asphalt in tack coat will be required on this Project.

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

Comply with Section 00744 of the Standard Specifications modified as follows:

00744.11(a) Asphalt Cement - Add the following to the end of this subsection:

Provide 70-22 ER grade asphalt cement for this Project.

Add the following subsection:

00744.51 Opening Sections to Traffic - Schedule work so that, during the same shift, the surfaces being paved are paved full width and length through the wearing Course before opening to traffic.

SECTION 00748 - ASPHALT CONCRETE PAVEMENT REPAIR

Comply with Section 00748 of the Standard Specifications.

SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

Comply with Section 00749 of the Standard Specifications modified as follows:

00749.14 Concrete - Delete this subsection.

SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications.

SECTION 00842 - FACILITY IDENTIFICATION MARKERS

Comply with Section 00842 of the Standard Specifications.

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications.

SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications.

SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 00865 of the Standard Specifications.

SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications.

SECTION 00868 - COLORED LANE MARKINGS

Section 00868, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00868.00 Scope - In addition to the requirements of Section 00850, install colored lane markings according to the following Specifications.

Labor

00868.30 Manufacturer's Representative - Provide a manufacturer's representative according to 00850.30.

00868.31 Manufacturer-Certified Installers - Provide certified installers according to 00850.31.

Construction

00868.45 Installation - Place markings only when the manufacturer's representative determines that the Pavement is ready for the Pavement marking material.

Apply the material to the Pavement according to the manufacturer's installation instructions to the full width shown in the Plans. Joints will be allowed with no overlap or gap allowed at the joint.

Do not install reflective elements.

Install the Pavement marking material surface according to the manufacturer's installation instructions to achieve a uniform initial skid resistance greater than or equal to 50 British Pendulum Number (BPN) when tested according to ASTM E303.

Apply one or more of the following marking material types:

- **Preformed, Fused Thermoplastic Film High Skid** - Install preformed, fused thermoplastic film high skid that has factory installed crushed glass or Aggregate on the surface.

- **Methyl Methacrylate** - Apply methyl methacrylate to the Pavement to the full width shown in a single application. Colored lane markings shall be 90 mils to 120 mils in thickness, exclusive of projecting surface-applied friction elements, with a continuous and uniform cross sectional configuration.

00868.75 Manufacturer's Warranty - Furnish a manufacturer warranty that unconditionally warrants to the Agency the product(s) and installation under this Section against failure , according to this subsection and 00170.85(c)(1). Use Agency-supplied warranty forms, available from the Engineer.

"Unconditionally warrant" means that the warranty covers all failures, regardless of the source or cause of the failure, including, without limitation, whether the source or cause is or may be related to workmanship, inspection, or choice of materials.

The Agency inspection of any portion of the Work during the Contract and during the product installation, the Agency acceptance of the Work, corrections under the warranty, or expiration of the warranty shall not relieve the obligations under this warranty.

(a) Warranty Period - The warranty period shall be for 18 months.

(b) Failure - For purposes of this warranty, failure is defined as one or more of the following:

- **Insufficient Color Stability:**

  - Green markings fail to meet the requirements of the Federal Highway Administration Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14) tested according to ASTM D6628.

- **Loss of Adhesion** - Markings show 5 percent or greater loss of marking material due to non-adhesion.

- **Skid Resistance** - Markings fail to maintain an average skid resistance greater than or equal to 50 British Pendulum Number (BPN) when tested in an equal number of test locations in both wheel path and non-wheel path locations according to ASTM E303.

(c) Remedy - Upon notification by the Engineer of a failure, provide the following remedy at no additional cost to the Agency:

- Repair or replace, at the discretion of the Engineer, all failed Pavement markings within 6 months of the Agency's request to do so.
- Use Materials and procedures meeting the Specifications.
- Match repairs to adjoining Work.
- Coordinate timing of repair Work with the Engineer.

(d) Agency's Right to Make Repairs - If, in the opinion of the Engineer, a failure causes or may cause a hazard, the failure may be temporarily corrected by Agency or other forces at no additional cost to the Agency. Replace temporary repairs with permanent repairs at no additional cost to the Agency and according to the Specifications and within the time specified in 00868.75(c).

Measurement

00868.80 Measurement - The quantities of colored lane markings will be measured on the area basis.

Payment

00868.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Green Bicycle Lane, Preformed Thermoplastic Film	Square Foot

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Payment for Work under this Section will be limited to 75 percent of the amount due until the Agency has received the signed warranty.

SECTION 00902 - CROSSWALK CLOSURE SUPPORTS

Section 00902, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00902.00 Scope - This Work consists of constructing crosswalk closure supports and associated signs as shown.

Materials

00902.10 Materials - Furnish Materials meeting the following requirements:

Commercial Grade Concrete..... 00440
Steel ..... 01070.10 and 01070.12
Signs..... 00940

Construction

00902.40 General - Install crosswalk closure supports and associated signs as shown or directed.

Measurement

00902.80 Measurement - The quantities of crosswalk closure supports will be measured on the unit basis. No separate measurement will be made for signs attached to crosswalk closure supports.

Payment

00902.90 Payment - The accepted quantities of Work done under this Section will be paid for at the Contract unit price, per each, for the item "Crosswalk Closure Supports".

Payment will be payment in full for furnishing and placing all Materials, including signs, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications modified as follows:

00905.40 General - Add the following:

Protect existing signs and posts that are designated for "removal only". Deliver removed signs and posts to Clackamas County at 19246 Wacheno Parkway, Oregon City, OR 97045. Contact the Clackamas County Inspector, 48 hours prior to removal.

SECTION 00920 - SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications modified as follows:

00920.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of concrete for minor sign supports are:

Support Type	Quantity
Perforated Steel Square Tube Slip Base Sign Supports	0.36 cu. yd.
Perforated Steel Square Tube Anchor Sign Supports	0.18 cu. yd.

SECTION 00930 - METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications modified as follows:

00930.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Item	Estimated Quantity (Pound)
Minor Sign Supports	
Perforated Steel Square Tube Slip Base Sign Supports	430
Perforated Steel Square Tube Anchor Sign Supports	130

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications.

SECTION 00960 - COMMON PROVISIONS FOR ELECTRICAL SYSTEMS

Comply with Section 00960 of the Standard Specifications modified as follows:

00960.02 Equipment List and Drawing Submittals – Replace this subsection with the following subsection:

00960.02 Equipment List and Drawing Submittals – Within 30 Calendar Days after execution of the Contract, submit electronic PDF copies of the Blue Sheets (see 00160.00

and 001607.07) and the Green Sheets (see 00160.00 and 00160.07) according to 00150.37 for all materials the Contractor proposes to install. Refer to 00990 for exemptions to the Blue Sheets and Green Sheets on Clackamas County operated traffic signals.

Within 14 Calendar Days after receipt of submittals, the Engineer will review the submittals and designate them in writing as "review" or "reviewed with comments". Then within the follow 7 Calendar Days after the Engineer review, Clackamas County Traffic Staff will review the submittals and designate them in writing "approved", "approved as noted", or "revise and resubmit". Do not proceed with the Work before receiving written approval of the submittals from the Engineer or Clackamas County.

00960.10 Materials – Add the following to the end of this subsection:

Use only Schedule 80 PVC conduits and fittings for all underground conduits.

Add the following subsection:

00960.42(c) Connecting Non-Metallic Conduit to Metallic Conduit - Use a nonmetallic female threaded connector to connect nonmetallic conduit to metallic conduit.

00960.43 Foundations – Add the following to the end of this subsection.

Separate the aluminum from the concrete with one layer of 30 pound nonperforated, asphalt-saturated felt. Neatly trim the felt pad to the size and shape of the base contact surface.

00960.46 Service Cabinet and Electrical Energy - Replace this subsection, except for the subsection number and title, with the following:

Install service cabinet and associated equipment, then arrange for the Utility providing power to have the service cabinet inspected and make the electrical hook-up prior to field testing. Field test according to 00990.70(g) for traffic signals, or according to 00970.70 for illumination.

Table 00960-1 contains Utility contact information to arrange for the Utility to make electrical hookups:

Table 00960-1

Location	PGE Contact Person's Name, Email and Phone Number	PGE Job Number
Johnson Creek Blvd – Street Lighting	Rico Torres Solis, Rodrigo.Solis@pgn.com,	M3227753
Johnson Creek Blvd / 79th Ave – Traffic Signal Metered Service Cabinet	Jim McLean, Jim.McLean@pgn.com, (503) 736-5437	M3234359

Furnish and install a meter base approved by the serving Utility (with cover by the Utility), where shown.

SECTION 00962 - METAL ILLUMINATION AND TRAFFIC SIGNAL SUPPORTS

Comply with Section 00962 of the Standard Specifications modified as follows:

00962.05(a) Traffic Signal Mast Arm Supports – Replace subsection with the following:

00962.05(a) Traffic Signal Mast Arm Supports – Design non-standard poles and foundations according to the AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals 4th Edition" with 2001, 2002, and 2003 interim revisions. Design factors include:

Basic wind speed (3 second gust)	100 mph
Gust factor (G)	1.14
Importance Factor (Ir)	1.0 (50 year recurrence interval)
Fatigue Category	II
Galloping	No
Truck speed	55 mph

The following standard pole drawings are prequalified for use on the Project:

Ameron Pole Products	Dwg. CKOR14TR1 (Rev. 5/19/15)
Valmont Industries	Dwg. DB00824 (Rev C 02/02/15)

All pole drawings regardless of prequalification status shall be submitted for the review of the Engineer as specified in section 00960.02 and according to section 00150.35.

00962.05(c) Illumination Supports - Add the following to the end of this subsection:

Provide lighting equipment as specified in the Special Provisions, the project plans or from the PGE Approved Street Lighting Equipment List in effect on the date the Project is advertised.

00962.43 Foundations – Add the following at the end of subsection:

Foundations shall be in conformance with drawing number NWS4710. Good cohesionless soil shall be compact and well graded sand or sand and gravel with an angle of internal friction, ø=35^{O} and the effective unit weight of soil, g=120 pcf. Good cohesive soil shall be hard clay with a shear strength of cohesive soil, c=1800 psf. Average cohesionless soil shall be compact and fine sand, well drained sandy silt, loose coarse sand and gravel with an angle of internal friction, ø=25^{O} and the effective unit weight of soil, g=100 pcf. Average cohesive soil shall be hard or medium clay with a shear strength of cohesive soil, c=1000 psf and the effective unit weight of soil, g=100 pcf.

Poor soil conditions shall be conditions of soft clay, silt, and poorly compacted sands or containing large amounts of silt or organic material. A soil investigation and special design shall be required for poor soil conditions.

The following mast arm foundation standard drawing is prequalified for use on the Project:

Northwest Signal Supply Dwg. NWS 4710 (Rev. 03/14/12)

00962.46 Steel Illumination and Signal Poles – Add the following at the end of first paragraph:

Metal poles shall be placed on the job site in a manner which allows the Agency Engineer to inspect luminaire arm connections, recessed terminal compartments, base plates, and tenons without moving the poles. The Contractor shall notify the Agency Engineer when the poles are ready for inspection.

If any shafts, arms, or luminaire arms do not meet Clackamas County specifications, they will be rejected. If the shafts, arms, or luminaire arms are rejected, the Contractor will have a maximum of 30 calendar days from the date of rejection to deliver replacement shaft(s), arm(s), or luminaire arm(s) to the job site which meet the Clackamas County specifications. The Contractor shall provide written documentation that the pole manufacturer is able to supply replacement poles to the job site within 30 calendar days following a rejection. If within one business day after pole rejection, the Contractor has not notified the Clackamas County that new poles are able to be delivered within 30 days, the Clackamas County reserves the right to immediately purchase new poles at the Contractor's expense. If after 30 calendar days following the rejection, the Contractor has not notified the Clackamas County in writing that new poles have been delivered to the job site, the Clackamas County reserves the right to purchase new poles at the contractor's expense and deduct the entire cost of the poles from the money due or to become due the Contractor on the contract.

00962.46(a) Design – Replace this subsection with the following:

00962.46(a) Design – All poles shall be either round, 8 sided, 12 sided, or 16 sided in cross section unless otherwise specified by the engineer. Alternative cross section shapes shall be considered special design poles and require submission of pole design calculations per the above criteria.

Submit detail drawings of poles for approval prior to fabrication. Dual mast arm poles and/or mast arm poles with an arm greater the 60' long shall be considered special design and require drawings and calculations approved by the project engineer prior to fabrication. Calculations shall conform to the latest Clackamas County design criteria. Foundations for special design poles shall be contractor designed and must have drawings and calculations approved by the project engineer prior to construction.

Pole assembly dimensions and thickness shall be as shown in the plans. All tube thicknesses shall consist of a single ply of steel, no multi-ply shafts shall be utilized. No slip fit connections shall be allowed. No alternate sizes will be accepted. The mast arm poles and the length of mast arms shall be as indicated on the plans. All pole assemblies shall be galvanized according to ASTM A123 & A153.

00962.46(j)(2)(a) Anchor Rods for Signal Supports and Fixed Base Luminaire Supports - Replace the paragraph that begins "Mark the position of each turned element…" with the following paragraph:

Mark position of each anchor rod and an outside ridge of each first nut above the base plate with a felt tip pen or similar marker to verify subsequent nut rotation. Rotate all first nuts above

the base plate past snug tight an additional amount shown in 00962.46(j)(2)(d) in two passes. "Cheater" bars or slugging wrenches are allowed if required for large diameter anchor rods. After final tightening of the first nut above the base plate, tighten the second nut to a snug tight condition for assemblies with two nuts above the base plate.

00962.46(g) Welding – Add the following after the first sentence:

Workmanship and finish shall be equal to the best general practice of a metal fabrication shop. Exposed welds, except fillet and fatigue resistant welds and welds on top of mast arms, shall be ground flush with the base metal. Exposed edges of the plates which make up the base assembly and flange connections shall be finished smooth and exposed corners of plates shall be neatly rounded unless otherwise shown on the plans.

00962.48 Coating - Replace this subsection, except for the subsection number and title, with the following:

Prepare and powder coat supports according to the applicable portions of Section 00593 or prepare and coat supports according to the applicable portions of Section 00594. Provide coating materials for field application, repairing damaged coatings, and coating hardware after installation, according to Section 00593 or 00594. Do not coat:

- Slip plate or arm connection surfaces.
- Slip base bolting hardware.
- Anchor rods, anchor rod washers, and anchor rod nuts.

SECTION 00963 - SIGNAL SUPPORT DRILLED SHAFTS

Comply with Section 00963 of the Standard Specifications modified as follows:

00963.90 Payment – Replace this subsection with the following:

00963.90 Payment – Mast arm pole and strain pole foundations will be paid for according to 00990.90.

SECTION 00970 - HIGHWAY ILLUMINATION

Comply with Section 00970 of the Standard Specifications modified as follows:

00970.00 Scope - Add the following:

This Work includes furnishing and installing Clackamas County approved materials, providing a roadway illumination system on signal poles and separate illumination poles, and meeting the requirements and standards of Portland General Electric (PGE) Schedule 32 or Schedule 95 Option A as shown on the plans. If there is a conflict between PGE standards and these specifications, the more stringent standard shall control.

Provide lighting equipment as specified in the Special Provisions, the project plans or from the PGE Approved Street Lighting Equipment List in effect on the date the Project is advertised.

Add the following subsection:

00970.01 Definitions:

Qualified Worker - A qualified worker means one who is knowledgeable about the construction and operation of the electrical power generation, transmission, and distribution equipment as it relates to his or her work, along with the associated hazards, as demonstrated by satisfying the qualifying requirements for a "qualified person" or "qualified employee" with regard to the work in questions as described in 29 CFR 1910.269 effective January 31, 1994, as it may be amended from time to time. In this case, a Qualified Worker is a journeyman lineman, or someone who has the equivalent training, expertise and experience to perform journeyman lineman work.

Add the following subsections:

00970.04 Required Submittals - In additional to the requirements of Section 00960, submit installation details for the following equipment:

- Light fixture including LED board and driver
- Photoelectric control

Add the following subsection:

00970.15 LED Luminaires on Traffic Signal Supports - Furnish one of the following approved models or an approved equal:

LEOTEK GCM2-40H-MV-WW-2R-GY-700

00970.30 Qualified Worker - In addition to the requirements of 00960.30, provide a qualified worker meeting the requirements defined in 00970.02 for performing work under this Section.

00970.43 Photocontrol Electronic Relay – Replace this subsection with the following:

Install photoelectronic control relay in the base mounted service cabinet as shown on the plans.

00970.50 Grounding and Bonding - Delete the paragraph beginning with "On the inside of…".
Add the following paragraph:

Ground the LED fixture to the pole per the street light manufacturer’s instructions. Bonding of street lights on distribution poles shall meet utility requirements.

00970.55 PGE Trench and Installation Requirements:

A. Trench Excavation

- The contractor is responsible for all trench excavation and backfilling, compaction, road crossings, conduits, elbows, vaults, junction boxes, landscape restoration, associated permits and any other requirements to complete the construction for streetlight service.
- PGE requires the contractor to install the concrete footing for the streetlight pole while their trench is open. PGE will provide the pole footing for Option A streetlights, they are to be installed with ¾ minus gravel tamped around the base.
- Concrete footings for streetlight poles are to be installed flush with grade
- Trenches are to be 48 inches deep when shared with other utilities, and otherwise at least 36 inches in depth.
- An on-site preconstruction meeting is required for all projects with the PGE's Field Construction Inspector.
- Finished grade must be established prior to trench excavation to ensure that minimum cover requirements for cables and conduits are attained. Minimum cover requirements for cables are measured from the trench surface to the top of the cable or conduit.

B. Conduits and Elbows

- All conduit routes must be approved by PGE prior to installation by the Customer, customer-installed conduit must be inspected by PGE before backfill.
- All conductors are to be installed in conduit. Conduits are to be sized for the required conductor, as determined by PGE.
- Three-inch diameter conduit is required for all runs over 100 feet and for all runs serving more than one light.
- One-inch diameter conduits may be used for runs not exceeding 100 feet in length and serving only one light
- HDPE duct may be used for horizontal directional boring applications. The duct must meet the requirements of PGE specification L22501 (available upon request of your PGE project manager).
- For safety reasons, the duct must be black with three equally spaced extruded red stripes, which is a specification requirement. Aluminum couplings with barbed threads on both ends must be used to join HDPE duct sections, and straight couplings with barbed threads on one end and NPT on the other end must be used for connecting to PVC duct.
- All conduits must be gray electrical grade schedule 40 PVC, flex conduit is not allowed.
- All conduits are to contain a 500-pound test non-conductive pull string with 6 feet of pull string extending beyond each end of the conduit.
- Bends are to be rigid steel or PGE approved fiberglass as noted in PGE's Electrical Service Requirements book: For conduit runs longer than 151 feet, or for any length run with more than 180 degrees in bends. No more than 3-90 degree elbows or a total of 270 degrees of bends in any conduit run;
- 36-inch radius elbows are required for all conduit runs longer than 6 feet. 24-inch radius elbows are allowed for 1-inch Sch 40, PVC conduit runs of 6 feet or less, while still maintaining a 36-in minimum depth with prior PGE approval.

- For three-inch and two-inch conduit, sweeps must be separated by a minimum 5-foot straight section. There must be a 3-foot minimum straight section from a vault.
- All elbow bends must be factory made and all conduit and elbow ends shall be smooth and free of burrs and rough edges.
- If the power source is at a utility pole, the terminal elbow is to be installed eight inches from the pole, and attached to a PGE installed standoff bracket, at the quadrant specified by PGE.
- When a new conduit and/or pull line will be entering an existing PGE secondary vault or transformer, the installer is required to contact PGE prior to installation. A PGE crew will be scheduled to meet the installer at the site to assist with the installation. **To schedule a PGE stand-by crew, please call PGE Service Coordinators at (503) 323-6700 or toll-free (800) 542-8818. Oregon Utility Notification Center at, (800) 332-2344, 811, or online at www.callbeforeyoudig.org, must be called to locate any underground facilities at least two business days (48 business hours) prior to any digging.**
- The contractor is responsible for duct proofing all ducts installed for PGE jobs before the job is completed and before the installation of PGE conductors.

C. Junction Boxes

- All junction boxes are to be PGE-approved (available upon request of your PGE project manager), the lid must be secured with five sided Penta-head bolts.
- Minimum 6 inches of 3/4-inch minus well-compacted backfill under and around the outside of the junction box
- Customer to install a PGE-provided ground rod inside the junction box, a maximum of 3 inches of ground rod must be showing inside the junction box.
- Junction box must be set 2 inches above final grade or on the highside of the slope. Junction boxes set on a sidewalk must be set to grade. Junction boxes cannot be covered by landscape materials. If PGE locates a hidden junction box within 6 months of PGE taking ownership, PGE will bill the contractor for the cost to locate and make any additional repairs to bring the junction box to grade.
- Junction boxes are required at each streetlight location where:
  - conduit runs serve more than one light, or
  - conduit runs exceed 100 feet in length, or
  - conduit sizes are greater than one-inch diameter.
- A minimum of twelve inches working space is to be provided between the top of elbows and the junction box lid to allow bending wire without damage to the wire.
- The elbows are to be clustered at one end of the junction box.
- Where multiple lights are served from a run of wire, three-inch conduit and junction boxes are always required.

D. Pole Placements

- Where there is a planter strip, streetlights are to be placed a minimum of 2 feet

from face-of-pole to face-of-curb.

- Where sidewalk is directly behind curb, streetlight placement is 6 inches behind walk.
- Conduit and junction boxes are to be placed in the Public Utility Easement (PUE).
- All other locations must be approved by a PGE Lighting Project Manager.
- All metal poles must be grounded per NESC 215.C and NESC Section 9, using a 5/8" x 8' galvanized rod, connected to the grounding lug inside the pole using solid #6 Cu BSD wire (stranded wire is not acceptable). PGE will provide the ground rod and copper wire for grounding the metal streetlight pole. Ground rods will be installed a minimum of 6 inches behind the concrete footing and a minimum of 2 inches below grade. The copper wire is to be coiled at both ends for PGE, copper wire will be pulled through one of the flutes in the concrete footing during the footing installation and the other end placed adjacent to the ground rod.

SECTION 00987 - TELECOMMUNICATIONS

Section 00987, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00987.00 Scope - This Work consists of furnishing and installing fiber optic cabling for the telecommunications of signalized intersection devices.

00987.01 Regulations, Standards, and Codes - Comply with the following standards where applicable:

- Telecommunications Industry Association (TIA/EIA)
  - EIA-455-3A (FOTP-3) Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components
  - TIA-455-8 (FOTP-8) Measurement of Splice or Connector Loss and Reflectance Using an OTDR
  - TIA-526-7 (OFSTP-7) Measurement of Optical Power Loss of Installed Single-Mode Fiber Cable Plant
  - EIA-455-25 (FOTP-25) Impact Testing of Optical Fiber Cables
  - EIA-455-33 (FOTP-33) Fiber Optic Cable Tensile Loading and Bending Test
  - EIA-455-41 (FOTP-41) Compressive Loading Resistance of Fiber Optic Cables
  - EIA-455-81 (FOTP-81) Compound Flow (Drip) Test for Filled Fiber Optic Cable
  - EIA-455-82 (FOTP-82) Fluid Penetration Test for Fluid Blocked Fiber Optic Cable
  - EIA-455-104 (FOTP-104) Fiber Optic Cable Cyclic Flexing Test
  - EIA-455-171 (FOTP-171) Attenuation by Substitution Measurement for Short-Length Multimode Graded-Index and Single Mode Optical Fiber Cable Assemblies
  - EIA/TIA-568-B.3 Optical Fiber Cabling Components
  - EIA/TIA-758 Customer Owned Outside Plant Telecommunications Cabling
  - EIA-598-B Optical Fiber Cable Color Coding

- American National Standards Institute/Insulated Cable Engineers Association (ANSI/ICEA)
  - ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable
- International Telecommunication Union - Telecommunication Standardization Sector (ITU-T)
  - G.652 (11/09) Characteristics of a single-mode optical fiber and cable Telecommunications Industry Association (TIA)
  - G.652 (11/16) Characteristics of a single-mode optical fiber and cable

00987.02 Submittals - Within 30 Calendar Days after the execution of the Contract, submit the following:

- Disruption Request according to 00987.04
- Fiber Optics Installer or Fiber Optics Technician Certification according to 00987.30.
- OSP cable installation procedure according to 00987.40(a)
- Fiber optic cable test plan according to 00987.41(a)
- Factory testing according to 00987.41(b)
- Arrival on-site testing according to 00987.41(c)
- Fiber optic cable testing according to 00987.41(d) and (f)

Include the manufacturer's name, model numbers, catalog sheets and other descriptive literature of proposed materials. Provide the catalog sheets and literature including technical data, physical properties and operational description in sufficient detail to demonstrate the Equipment meets these specifications.

Materials

00987.11 Fiber Optic Jumpers/Patch Cable - Furnish a minimum of 2 duplex or 4 simplex jumper cables in each cabinet that has new or modified fiber optic cable installation. Use jumpers of simplex or duplex design. Use duplex jumpers of duplex round cable construction. Use jumpers that are at least 6 feet in length, sufficient to avoid stress and allow orderly routing. Use an outer jacket of duplex jumpers that is yellow in color. Use the two inner simplex jackets that are contrasting colors to provide easy visual identification of polarity. Store jumpers within the cabinets. The Agency will connect at the time of commissioning.

Use connectors that are ceramic ferrule for single mode fiber with ultra-physical contact (UPC) polishing, type as shown. Furnish connector body housing that is glass-reinforced polymer. The associated coupler is to be of the same material as the connector housing. Each connector is not to exceed 0.75 dB loss as specified by EIA/TIA-568-B.3.

00987.14 Warning Tags - Furnish warning tags with a long life material, orange in color, and marked in a permanent and consistent manner with black lettering.

Include the text "CAUTION FIBER OPTIC CABLE" on all warning tags and show the cable fiber count.

Attach warning tags to fiber optic cables using UV-resistant zip ties according to the manufacturer's recommendations. Do not affix in a manner that causes damage to the fiber.

Attach warning tags to the cables in at least two locations in junction boxes and handholes, and at least one location in cabinets.

00987.15 Labels - Use labels to identify cables and jumpers and patch cords at all termination points, junction boxes, handholes, and cabinets. Use labels to identify all communications equipment and devices in junction boxes, handholes, and cabinets. Use yellow or white colored labels with permanent black lettering. Mechanically imprint labels, do not use handwritten labels.

Use tubular plastic labels on cables and jumpers and patch cords. Label duplex jumpers to provide a visual distinction between the two fibers. Provide labels with the following information:

- Owner
- Number of fibers
- Fiber number
- Cable origin
- Cable destination

Labor

00987.30 Fiber Optic Work - Individuals performing fiber optic installation are to possess either a Fiber Optics Installer or Fiber Optics Technician Certification recognized by the Electronics Technicians Association (ETA) or a Fiber Optics for ITS certificate from the International Municipal Signal Association (IMSA). Submit a copy of certification to the Engineer prior to performing any work.

Construction

00987.40 Fiber Optic Cable Installation and Setup:

(a) OSP Cable Installation - Submit a fiber optic cable installation plan including the manufacturer's recommended procedures for pulling fiber optic cable for review 30 Calendar Days of execution of the Contract. Use mechanical aids to install cable. Place tension measuring device or breakaway swivel between ends of cable grip and pull rope to ensure tension does not exceed 80 percent of recommended tension or 500 pounds, whichever is less. Use cable grips with a ball bearing swivel for installing fiber optic cable to prevent cable from twisting during installation.

During installation, maintain a minimum bend radius of 20 times the outside diameter of the cable per EIA/TIA-568-B.3. Do not stress the cable beyond the minimum bend radius. Install fiber optic cable using cable pulling lubricant as recommended by the manufacturer. Use a non-abrasive pull tape. Station personnel at each splice vault and hand hole to lubricate the cable and prevent kinking or other damage. Install fiber optic cable without splices, except as specifically allowed for on the plans, as described herein, or as directed. Divide slack equally on each side of splice closures. Following installation of cable in

conduit, seal all entrances in cabinets, junction boxes and vaults with duct sealing compound to keep out moisture, foreign materials, and rodents.

Measurement

00987.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

Payment

00987.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Telecommunications, Material	Lump Sum
(b) Telecommunications, Installation	Lump Sum

Item (a) includes furnishing outside plant fiber optic cable, fiber optic jumpers, fiber optic patch cable, splice closures, splice trays, and all other Incidental items necessary to complete the Work.

Item (b) includes installation and testing of all materials as shown or specified.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for required submittals and documentation.

No separate or additional payment will be made for replacement of disturbed earthwork, base, and surfacing.

SECTION 00990 - TRAFFIC SIGNALS

Comply with Section 00990 of the Standard Specifications modified as follows:

Add the following subsection:

00990.10 Materials - Furnish Materials meeting the following requirements:

Crosswalk Closure Support..... 00902.10

Furnish the following Materials from the QPL:

- Hot-Melt Loop Sealant

Add the following subsections:

00990.13 Power Service Cabinet - Service cabinets shall be the following or an approved equal:

Fouch Drwg #0600-0074-00 (NEMA 3-R Metered Base Mount Service Cabinet Clackamas County).

00990.14 Fire Preemption Equipment – Fire Preemption systems for installation at traffic signals shall be as follows:

Fire Preemption system shall be GTT Opticom. See plan set for additional details. The following components make up the fire preemption system.

(a) Fire Preemption Phase Selector (P/N: Opticom 762) - Interface device for installation in the cabinet.

(b) Fire Preemption Detector Unit (P/N: Opticom 721) - Field detector for fire preemption system.

(b) Fire Preemption Detector Feeder Cable (P/N: Opticom 138) – For installation between the cabinet and the field detector at the location shown in the plan set.

00990.15 Pedestrian Push Buttons and Mount - Pedestrian pushbuttons for installation at traffic signals shall be as follows:

Pedestrian push button system shall be a Polara iNavigator 2-Wire (iNS2) Push Button Station (P/N: iNS2-3-T-N-0-B) or approved equal. See the Contract Plans for additional details. The following components make up the push button system:

(a) Push Button Station (P/N: iNS2 PBS) - The main body with pushbutton for installation on the signal or pedestrian pole using 2-Wire push button wired as a 3-Wire system.

(b) Ped Head Control Unit (P/N: iPHCU3W) - Interface device for installation in pedestrian signal head. One per Push Button Station.

(c) Pedestrian Push Button Decal - The pedestrian push button sign shall be a Polara option T (Hi-Intensity Retroreflective MUTCD R10-3e) 9”x15” sign.

(d) Interconnect Cables (iN3-CABLE-X) - Pre-cut lengths (12’, 25’, or 50’) of interconnect cable from Push Button Station to Ped Head Control Unit.

(e) iNav Bluetooth Dongle (iN-DGL) - Bluetooth dongle to communicate from personal computer with Polar iN3 Push Button Station.

00990.17 Traffic Signal Circuits

All high-voltage wiring smaller than #10 AWG shall be IMSA 19-1 cable.

The #14 AWG, multi-conductor cables ran for traffic signal circuits will conform to IMSA Specification 19-1. Color coding of the conductors will be as follows:

Traffic Signal Color Code
Clackamas County, Oregon
#14 AWG IMSA 19-1 Traffic Signal Cable
Mast Arms Only

	Function (Phase)	20 Conductor [Feed]	10 Conductor [Branch]	7 Conductor [Branch]	5 Conductor [Branch]	4 Conductor [Branch]
Main Street	Phase Red	Red	Red	Red	Red	Red
	Phase Yellow	Orange	Orange	Orange	Orange	Orange
	Phase Green	Green	Green	Green	Green	Green
Side Street	Phase Red	Red/Black	Red/Black	Red	Red	Red
	Phase Yellow	Orange/Black	Orange	Orange	Orange	Black
	Phase Green	Green/Black	Green/Black	Green	Green	Green
Left Turn	Phase Red	Red/Black	White/Black	White/Black	Red	Red
	Phase Yellow	White/Red	Black	Black	Orange	Black
	Phase Green	Black/White	Blue	Green	Green	Green
Overlap	Phase Red	Red/Green	White/Black	White/Black	Red	Red
	Yellow/Flashing Yellow Arrow	Orange/Red	Black	Black	Orange	Black
	Phase Green	Blue/Red	Blue	Blue	Green	Green
Main Street	Phase Don't Walk	Red/White	Red	Red	Red	-
	Phase Walk	Green/White	Green	Green	Green	
Side Street	Phase Don't Walk	Black	Red/Black	Red	Red	-
	Phase Walk	Blue/White	Green/Black	Green	Green	-
Push-Button	Common	White/Black	White/Black	White/Black	Orange	-
	Main Street Phase	Blue	Blue	Blue	Black	-
	Side Street Phase	Blue/Black	Black	Black	Black	-
Spare		White	-	-	-	-
AC Common (Branch Only)		-	Spare	White		

Crosswalk closure supports will be paid for according to 00902.90.

Remove the sentence that reads “Mast arm pole and strain pole foundations will be paid for according to 00963.90.”

SECTION 01011 - STORMWATER CONTROL, PONDS

Section 01011, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01011.00 Scope - This Work consists of furnishing and installing stormwater ponds as shown.

Materials

01011.10 Materials - Furnish Material meeting the following requirements:

Concrete	00440
Drainage Geotextile, Type 1	02320
Granular Drain Backfill	00430.11
Riprap	00390.11
Riprap Geotextile, Type 1	02320
Subsurface Drain Pipe	00430.10

01011.12 Water Quality Mixture - Furnish medium compost meeting the requirements of Section 03020. Furnish soil meeting the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
1 Inch	100
No. 4	85 - 100
No 10	50 - 100
No. 40	20 - 60
No. 100	10 - 40
No. 200	10 - 20

Sample soil according to AASHTO R 90. Determine sieve analysis according to AASHTO T 27 and AASHTO T 11.

Blend the medium compost and soil so that the mixture:

- Is composed of between 20 percent and 25 percent medium compost material and between 75 percent and 80 percent soil material.
- Has a pH between 5.5 and 8.0.
- Does not have clumps greater than 3 inches in any direction.

Construction

01011.40 General - Construct storage facility as shown. Perform excavation and fine grading work only when the facility area is dry and only from the top of the pond area. Do not stockpile material in the facility area.

01011.41 Storage Pond - Scarify the subsoil area a minimum 12 inches deep. After scarification, place the water quality mixture in maximum 12 inch Lifts. Compact each Lift with a water filled landscape roller.

01011.42 Bioretention Pond:

(a) Scarify - Scarify the subsoil area a minimum 12 inches deep.

(b) Laying Pipe - Lay the pipe according to Section 00445. Place pipe with perforations down unless otherwise directed.

(c) Joining Pipe - Fasten pipes together with coupling fittings or bands as specified for the type of pipe used. Cap the upstream end of the pipe.

(d) Inspection and Repair - Place Type 2 water quality mixture only after all the pipe is laid, joined, and inspected. Remove and reinstall or replace all pipe that is out of alignment, has settled, or is damaged at no additional cost to the Agency.

(e) Placement of Water Quality Mixture - Place water quality mixture in maximum 12 inch Lifts. Compact each Lift by using a water filled roller.

(f) Seeding - Seed according to 01030.13.

01011.43 Facility Field Markers - Install field markers as shown and according to Section 00842.

Maintenance

01011.70 Cleaning - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

Measurement

01011.80 Measurement - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Bioretention Pond, Water Quality Facility Quantities:

Item	Quantity
Excavation	528 Cu. Yd.
Drainage Geotextile, Type 1	502 Sq. Yd.
Riprap Geotextile, Type 1	9 Sq. Yd.
Loose Riprap, Class 50	3 Cu. Yd.
Granular Drain Backfill	193 Cu. Yd.
Water Quality Mixture	112 Cu. Yd.
6 Inch Subsurface Drain Pipe	48 Feet

Payment

01011.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item:

Pay Item	Unit of Measurement
(a) Bioretention Pond, Water Quality Facility	Lump Sum

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.13(f) Types of Seed Mixes - Add the following to the end of this subsection:

Provide the following seed mix formulas:

- **Permanent Seeding:** Protime 310 (or approved equal)

01030.45 Soil Testing - Replace this subsection, except for the subsection number and title, with the following:

When the Contract Schedule of Items include items for “soil testing”, test soil according to 01040.13.

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

01040.80(c) Soil Conditioners - Replace this subsection with the following subsection:

01040.80(c) Soil Conditioners and Hydraulically Applied Soil Conditioner - Soil conditioners and hydraulically applied soil conditioners will be measured according to one of the following:

- **Area Basis** - Hydraulically applied soil conditioners and other surface applied soil conditioners will be measured on the area basis, along the ground surface.
- **Volume Basis** - Soil conditioners will be measured on the volume basis in the hauling vehicle or in containers delivered to the Project Site.

01040.90(c) Soil Conditioners - Replace this subsection with the following subsection:

01040.90(c) Soil Conditioners and Hydraulically Applied Soil Conditioner - Soil conditioners will be paid for at the Contract unit price, per cubic yard, for the item "Soil Conditioner".

Hydraulically applied soil conditioners will be paid for at the Contract unit price, per acre or square yard, for the item “Hydraulically Applied Soil Conditioner”.

SECTION 01050 - FENCES

Comply with Section 01050 of the Standard Specifications.

SECTION 01070 - MAILBOX SUPPORTS

Comply with Section 01070 of the Standard Specifications modified as follows:

01070.00 Scope - Add the following paragraph to the end of this subsection:

This Work includes removing, maintaining, and reinstalling existing mailboxes and existing supports.

01070.80 Measurement - Add the following paragraph to the end of this subsection:

The quantities of mailboxes and supports removed, maintained, and reinstalled will be measured on the unit basis, regardless of type, installed in permanent locations.

01070.90 Payment - Add the following Pay Item to the Pay Item list:

(d) Remove and Reinstall Mailbox Supports ..... Each

Item (d) includes removing mailboxes and supports, maintaining them at temporary locations, and reinstalling them at their permanent locations.

SECTION 01170 - POTABLE WATER SERVICE CONNECTIONS, 2 INCH AND SMALLER

Comply with Section 01170 of the Standard Specifications.