



DAN JOHNSON
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING

150 BEAVERCREEK ROAD OREGON CITY, OR 97045

Board of County Commissioners
Clackamas County

Members of the Board:

Approval of a Contract with Stellar J, Corporation for the
South End Road MP 3.8 Project

Purpose/Outcome	The contract will construct a soldier pile retaining wall and soldier pile with tieback retaining wall, make storm sewer modifications, reconstruct pavement section or repair wearing surface, and additional and incidental work as called for the specifications and plans.
Dollar Amount and Fiscal Impact	Contract Value \$3,272,707.25
Funding Source	Federal Emergency Relief funds: \$2,936,600.22 County Road fund match (10.27%): \$336,107.03
Duration	Contract Execution through December 31, 2023
Previous Board Action/Review	01/01/17: BCC Approval of Master Certification Agreement No. 30923 for County implementation of federally funded projects. 08/16/18: BCC Approval of Supplemental Project Agreement No. 32607 for 2017 Emergency Relief Program Project Funding. 05/16/19: BCC Approval of a Contract with David Evans and Associates, Inc. for the South End Road at Milepost 3.8 Project. 11/25/20: BCC Approval of an Intergovernmental Agreement with the Oregon Department of Transportation for Right of Way Services for the South End Road at Milepost 3.8 Project. 12/10/20: BCC Approval of a Resolution Declaring the Public Necessity and Purpose for Acquisition of Rights of Way, Easements, and Fee Property for the South End Road at Milepost 3.8 Project and Authorizing Good Faith Negotiations and Condemnation Actions. 10/21/21: Approval of Amendment No. 1 of a Supplemental Project Agreement No. 32607 with Oregon Department of Transportation for the South End Road at MP 3.8 Project. 10/28/22: Approval of Amendment #4 with David Evans and Associates, Inc. for the South End Road at Milepost 3.8 Project. 03/29/21: Discussion item at issues
Strategic Plan Alignment	-This item supports the DTD Strategic Focus on Safe Roads and Strategic Result of "Travelers on Clackamas County roads will experience roads in good condition." -This item aligns with "Build a Strong Infrastructure" by constructing retaining walls to mitigate slope instability.
Counsel Review	Counsel Date: March 22, 2022 Counsel Initials: AN

Procurement Review	Was this project processed through Procurement? Yes.
Contact Person	Joel Howie, Civil Engineering Supervisor 503-742-4658
Contract No.	5266

Background:

Clackamas County obtained Federal Emergency Relief Program (ERP) funds to stabilize the roadway and slope on South End Road at Milepost 3.8. The road was damaged in March of 2017 as a result of heavy rains that occurred during the spring of 2017. A state emergency declaration, which included Clackamas County, was signed by the governor allowing Clackamas County to be eligible for the ERP funding.

Clackamas County constructed temporary repairs to these areas of roadway prism failure and deterioration in the spring of 2017. A permanent solution to stabilize the road in this location has been designed and the stabilization will consist of a 450-foot long tie back/soldier pile wall and a 318-foot long cantilever wall.

The total cost of the project is \$4,794,927, with \$4,302,488 in funding thru the ERP with a match of \$492,439 by County Road Funds. The construction phase costs are anticipated to be \$3,964,980, which includes construction engineering and inspection services, and the remaining costs were related to design (\$740,079) and right of way (\$89,868). Construction is anticipated to begin in May of 2022 following contract signing and a preconstruction conference. The project is anticipated to take approximately 13 months to substantially complete and another 6 months for plant establishment.

Procurement Process:

This project was advertised in accordance with ORS and LCRB Rules on January 24, 2022. Bids were publicly opened on February 22, 2022. The County received four (4) bid: MEI group, \$3,798,668.00; Kodiak Pacific Construction, \$3,760,067.00; M.L. Houck Construction, \$3,457,037.81; and Stellar J Corporation, \$3,272,707.25. After review of the bids, Stellar J Corporation was determined to be the lowest responsive and responsible bidder.

Recommendation:

Staff respectfully recommends that the Board approve and sign this public improvements contract with Stellar J Corporation for the South End Road MP 3.8 Project.

Sincerely,

Joel Howie

Joel Howie, PE
 Department of Transportation and Development

Placed on the BCC Agenda _____



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

AGREEMENT FORM

Contract #5266

This Public Improvement Contract for the Clackamas County Regional Freight ITS Project (the "Contract"), is made by and between the Clackamas County, a political subdivision of the State of Oregon, hereinafter called "County," and **Stellar J Corporation**, hereinafter called the "Contractor" (collectively the "Parties"), shall become effective on the date this Contract has been signed by all the Parties and all County approvals have been obtained, whichever is later.

Project Name: #2022-09 South End Road MP 3.8 Project

1. Contract Price, Contract Documents and Work.

The Contractor, in consideration of the sum of **three million two hundred seventy-two thousand seven hundred and seven dollars and twenty-five cents (\$3,272,707.25)** (the "Contract Price"), to be paid to the Contractor by County in the manner and at the time hereinafter provided, and subject to the terms and conditions provided for in the Instructions to Bidders and other Contract Documents as defined in Section 12, General Conditions for Construction for (Certified LPA) Clackamas County, all of which are incorporated herein by reference, hereby agrees to perform all Work described and reasonably inferred from the Contract Documents. The Contract Price is the prices 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 (Certified LPA) Clackamas County
- DBE, FHWA and ODOT Forms in Section 13

2. Representatives.

Contractor has named Jake Oullette 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: Jeff Carlsen shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

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

4. Contract Dates.

COMMENCEMENT DATE: Upon Issuance of Notice to Proceed ("NTP")

CONTRACT COMPLETION DATE(S): See Special Provisions that accompany the General Conditions for Construction for Clackamas County Section 00180.50(h) Contract Time for completion dates.

CONTRACT EXPIRATION DATE: June 30, 2024

Time is of the essence for this Contract. It is imperative that the Work in this Contract reach Third Notification by the above specified dates. Time specified in 00180.50(h) of Section 12, Special Provisions that accompany the General Conditions for Construction for Clackamas County and Part 3 of the Bid Proposal Form.

5. Insurance Certificates.

In accordance with Section 00170.70 of Section 12, General Conditions for Construction for (Certified LPA) 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 be emailed to Procurement@clackamas.us.

6. Tax Compliance.

Contractor must, throughout the duration of this Contract and any extensions, comply with all tax laws of this state and all applicable tax laws of any political subdivision of this state. Any violation of this section shall constitute a material breach of this Contract. Further, any violation of Contractor's warranty in this Contract that Contractor has complied with the tax laws of this state and the applicable tax laws of any political subdivision of this state also shall constitute a material breach of this Contract. Any violation shall entitle County 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, at law, or in equity, including but not limited to: (A) Termination of this Contract, in whole or in part; (B) Exercise of the right of setoff, and withholding of amounts otherwise due and owing to Contractor, in an amount equal to County's setoff right, without penalty; and (C) Initiation of an action or proceeding for damages, specific performance, declaratory or injunctive relief. County shall be entitled to recover any and all damages suffered as the result of Contractor's breach of this Contract, including but not limited to direct, indirect, incidental and consequential damages, costs of cure, and costs incurred in securing replacement performance. These remedies are cumulative to the extent the remedies are not inconsistent, and County may pursue any remedy or remedies singly, collectively, successively, or in any order whatsoever.

The Contractor represents and warrants that, for a period of no fewer than six calendar years preceding the effective date of this Contract, has faithfully complied with: (A) All tax laws of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318; (B) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, to Contractor's property, operations, receipts, or income, or to Contractor's performance of or compensation for any work performed by Contractor; (C) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, or to goods, services, or property, whether tangible or intangible, provided by Contractor; and (D) Any rules, regulations, charter provisions, or ordinances that implemented or enforced any of the foregoing tax laws or provisions.

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 County to exercise any rights and remedies available under this Contract including, but not limited to, termination for default.

12. 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).

13. Escrow and Retainage. If retainage is withheld, unless the Contractor requests and the Owner accepts a form of retainage permitted under ORS 279C.560, the Owner will deposit the retainage in an interest-bearing escrow account as required by ORS 279C.570(2). The Contractor shall execute such documentation and instructions respecting the interest-bearing escrow account as the Owner may require to protect its interests, including but not limited to a provision that no funds may be paid from the account to anyone without the Owner's advance written authorization.

14. No Attorney Fees. In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.

In witness whereof, Clackamas County executes this Contract and the Contractor does execute the same as of the day and year first above written.

15. Contractor DATA:

**Stellar J Corporation
1363 Down River Drive
Woodland, Washington 98674**

Contractor CCB #127903 Expiration Date: 2/3/2024
Oregon Business Registry # 607608-82 Entity Type: FBC State of Formation: Texas

Signature page to follow.



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY**

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Section 1

Notice of Public Improvement Contract Opportunity



CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2022-09
South End Road MP 3.8 Project
January 24, 2022

Clackamas County ("County") through its Board of County Commissioners is accepting sealed bids for the **South End Road MP 3.8 Project** until **February 22, 2022, 2:00 PM**, Pacific Time, ("Bid Closing") at the following location:

DELIVER BIDS TO: Clackamas County Procurement Division via email to procurement@clackamas.us.

Bidding Documents can be downloaded from the state of Oregon procurement website ("OregonBuys") at the following address: <https://oregonbuys.gov/bsa/view/login/login.xhtml>, Document No.S-C01010-00001835.

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.

This project includes Federal Funding. The Engineer's estimated range of costs for the Project is between **\$3,300,000** and **\$3,400,000**.

Contact Information

Procurement Process and Technical Questions: Ryan Rice, rrice@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 Bridges and Structures (REIN) to the County by the time of Bid Closing. County will reject Bids from Bidders who are not prequalified for the class of work indicated prior to the Bid Closing.

State Prevailing Wage

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 in Oregon".

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://www.wdol.gov/dba.aspx>.

The BOLI wage rates can be found on the Oregon Bureau of Labor and Industries website at: https://www.oregon.gov/boli/WHD/PWR/pages/pwr_state.aspx.

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, hereby 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 "BUY AMERICA" requirements. The project is subject to the DBE policy statement as cited in 49 CFR 26. DBE Goal for this project is 5.0%. The Reimbursable On-the-job Training requirement is 810 hours.

Clackamas County encourages bids from Service Disabled Veteran, Minority, Women, and Emerging Small Businesses.

Section 2
Instructions to Bidders



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

INSTRUCTIONS TO BIDDERS

Clackamas County Local Contract Review Board Rules (“LCRB Rules”) govern this procurement process. 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 “Owner.”

Article 1. Scope of Work

The work contemplated under this contract with the Owner, 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 Project Manual which includes, but is not necessarily limited to, the Notice of Public Improvement Contract Opportunity, Instructions to Bidders, Supplemental Instructions to Bidders, Bid Form, Bid Bond, Public Improvement Contract Form, Performance Bond, Payment Bond, and Plans, Specifications and Drawings.

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. The Bidder shall also make a careful examination of the Project Manual including the plans, specifications, and drawings and other contract documents, and shall be fully informed as to the quality and quantity of materials and the sources of supply of the materials. Failure to take these steps will not release the successful Bidder from entering into the contract nor excuse the Bidder from performing the work in strict accordance with the terms of the contract at the price established by the Bid.

The Owner will not be responsible for any loss or for any unanticipated costs, which may be suffered by the successful Bidder, as a result of such Bidder's failure to be fully informed in advance with regard to all conditions pertaining to the work and the character of the work required, including site conditions. No statement made by an elected official, officer, agent, or employee of the Owner in relation to the physical or other conditions pertaining to the site of the work will be binding on the Owner, unless covered by the Project Manual or an Addendum.

Article 3. Interpretation of Project Manual 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, specifications or forms of contract documents, or detects discrepancies or omissions, such Bidder may submit to the Architect (read "Engineer" throughout in lieu of Architect as appropriate) a 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 Architect in the Project Manual, the Bidder may submit to the Architect 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 Architect may request.

To establish a basis of quality, certain processes, types of machinery and equipment or kinds of materials may be specified in the Project Manual 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 Project Manual 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 Project Manual. The Owner will not be responsible for any other explanation or interpretation of the Project Manual nor for any other approval of a particular manufacturer's process or item for any Bidder.

When the Architect 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.

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 Owner, 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. The successful Bidder's check or Bid bond will be retained until the Bidder has entered into a contract satisfactory to Owner and furnished a one hundred percent (100%) performance bond and one hundred percent (100%) payment bond. The Owner 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 Owner, 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 Owner. The date of the acceptance of the Bid and the award of the contract as contemplated by the Project Manual 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 Owner.
- 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 Form

Each Bid shall be made in accordance with: (i) the sample Bid Form 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 Form relates to Bids on a specific Project Manual. Only the amounts and information asked for on the Bid Form furnished will be considered as the Bid. Each Bidder shall Bid upon the work exactly as specified and provided in the Bid Form. The Bidder shall include in the Bid a sum to cover the cost of all items contemplated by the Contract. The Bidder shall Bid upon all alternates that may be indicated on the Bid Form. When Bidding on an alternate for which there is no charge, the Bidder shall write the words "No Charge" in the space provided on the Bid Form. If one or more alternates are shown on the Bid Form, the Bidder shall indicate whether each is "add" or "deduct."

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 form or other portions of the Project Manual, may be rejected in Owner's sole and absolute discretion.

Article 8. Submission of Bid

Each Bid shall be sealed in an envelope, properly addressed to the Owner, showing on the outside of the envelope the name of the Bidder and the name of the project. Bids will be received at the time and place stated in the Notice of Public Improvement Contract Opportunity.

Article 9. Bid Closing and Opening of Bids

All Bids must be received by the Owner at the place and time set for the Bid Closing. Any Bids 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.

Generally, Bid results will be posted to the Procurement Website within a couple hours of the opening.

Article 10. Acceptance or Rejection of Bids by Owner

Unless all Bids are rejected, the Owner will award a contract based on the lowest responsive Bid from a responsible Bidder. If that Bidder does not execute the contract, it will be awarded to the next lowest responsible Bidder or Bidders in succession.

The Owner 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 Owner 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 opening 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.

In determining the lowest Bidder, the Owner reserves the right to take into consideration any or all authorized base Bids as well as alternates or combinations indicated in the Bid Form.

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. Withdrawal of Bid

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

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 Owner will provide the successful Bidder with contract forms 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 seven (7) calendar days after receipt of the contract forms. The contract forms shall be delivered to the Owner in the number called for and to the location as instructed by the Owner.

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 five (5) business days prior to the Bid Closing Date.

Article 15. Protest of Intent to Award

Owner 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 Clackamas County Procurement Website of 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 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

Within two (2) working hours after the Bid Closing, all Bidders shall submit to the County a disclosure form identifying any first-tier subcontractors (those entities that would be contracting directly with the prime contractor) that will be furnishing labor and materials on the contract, if awarded, whose subcontract value would be equal to or greater than: (a) Five percent (5%) of the total contract price, but at least \$15,000; or (b) \$350,000, regardless of the percentage of the total contract price.

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

Section 3

Supplemental Instructions to Bidders



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project Name: # 2022-09 South End Road MP 3.8 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. **Prequalification:** To be eligible for award under this Invitation to Bid, bidders (prime contractors) must submit a proof of ODOT prequalification 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 Bridges and Structures (REIN).** (See 00120.00)
2. **Email of Bids** - The County is requiring all bids for this project be electronically submitted. Complete Bids (including all attachments) must be received by the closing time and date 2:00 p.m. Pacific Time, February 22, 2022. The Bid must be emailed to the following address: Procurement@clackamas.us. **The email subject line must read “Bid for #2022-09 South End Road MP 3.8 Project”** Upon receiving of the bid, the County will send bidders an email confirmation acknowledging receipt. Bids delayed or lost by email system filtering or failures may be considered at Clackamas County’s sole and absolute discretion. 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:

Join Zoom Meeting

<https://clackamascounty.zoom.us/j/83372465302>

Meeting ID: 833 7246 5302

One tap mobile

+14086380968,,83372465302# US (San Jose)

+16699006833,,83372465302# US (San Jose)

Dial by your location

+1 408 638 0968 US (San Jose)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 646 876 9923 US (New York)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

Meeting ID: 833 7246 5302

Find your local number: <https://clackamascounty.zoom.us/j/kCFFw96SE>

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

Section 4

Bid Bond



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID BOND

Project Name: #2022-09 South End Road MP 3.8 Project

We, Stellar J Corporation, as "Principal,"
(Name of Principal)

and Liberty Mutual Insurance Company, an Massachusetts 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 unto Clackamas County ("Obligee") the sum of (\$ 10%)

Ten Percent (10%) of the Total Amount of the Bid--- dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its proposal or bid to an agency of the Obligee in response to Obligee's procurement document (No.2022-09) for the project identified above which proposal or bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to the procurement document.

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this 22nd day of February, 2022.

Principal: Stellar J Corporation

Surety: Liberty Mutual Insurance Company

By: [Signature]
Signature

By: Attorney-In-Fact [Signature]
Deanna M. French

Jeff Carlson, Vice President
Official Capacity

Deanna M. French
Name

Attest: [Signature]
Corporation Secretary Sheryl Trumbower

2233 112th Ave NE
Address

Bellevue WA 98004
City State Zip

(425) 709-3600 (425) 709-7467
Phone Fax



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8207061-023001

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Andrew Kerslake; Andrew P. Larsen; Charla M. Boadle; Deanna M. French; Derek Sabo; Elizabeth R. Hahn; Guy Armfield; Jana M. Roy; John Claeys; Katelyn Cooper; Mindee L. Rankin; Nicholas Fredrickson; Roger Kaltenbach; Ronald J. Lange; Scott Fisher; Scott Garcia; Scott McGilvray; Susan B. Larson

all of the city of Bellevue state of WA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 4th day of January, 2022.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 4th day of January, 2022 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 22nd day of February, 2022.



By: Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Section 5

Bid Proposal Form and Bid Schedule of Prices



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID PROPOSAL FORM

PROJECT #: 2022-09
PROJECT NAME: South End Road MP 3.8 Project
BID CLOSING: February 22, 2022, 2:00 PM, Pacific Time
BID OPENING: February 22, 2022, 2:05 PM, Pacific Time

FROM: Stellar J Corporation
Bidder's Name (must be full legal name, not ABN/DBA)

TO: Clackamas County
Procurement Division - procurement@clackamas.us

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
c. A corporation organized under the laws of the State of Texas
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:

Handwritten bid amount: Three Million Two Hundred Seventy two Thousand Seven Hundred Seven Dollars and 25/100. Dollars (\$ 3,272,707.25)

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 (Certified LPA) 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 (Certified LPA) 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 (Certified LPA) Clackamas County.

3. The work shall be completed within the time stipulated and specified in Section 00180.50(h) of Section 12, Special Provisions that accompany the 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:

Liberty Mutual Surety | Parker Smith Feek

(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 127903. As a condition to submitting a bid, 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 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 Woodruff-Sawyer of Oregon, Inc, Policy No. 523915, and that Contractor shall submit Certificates of Insurance as required.

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

Project Executive: Jeff Carlsen, Cell Phone: 360.518.3295,
Project Manager: Jake Oullette, Cell Phone: 360.836.9350,
Job Superintendent: Justin Sieberg, Cell Phone: 360.448.8140,
Project Engineer: Scott Parker, Cell Phone: 360.518.1841.

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 Stellar J Corporation
ADDRESS 1363 Down River Drive
Woodland, WA 98674
TELEPHONE NO 360-225-7996
EMAIL jake@stellarj.com
SIGNATURE 1) _____
Sole Individual
or 2) _____
Partner
or 3) _____
Authorized Officer of Corporation Jeff Carlsen/Vice President

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

BID SCHEDULE

SOUTH END ROAD AT MP 3.8

2022-09

Clackamas County

ITEM NUMBER	SP NUMBER	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES						
1	00100	TRAINING	HOUR	810	5.00	4,050.00
2	00210	MOBILIZATION	LS	1	325,000.-	325,000.-
3	00221	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	1	170,000.-	170,000.-
4	00280	EROSION CONTROL	LS	1	20,000.-	20,000.-
5	00280	PLASTIC SHEETING	SQYD	200	2.00	400.-
6	00280	CONSTRUCTION ENTRANCE, TYPE 2	EACH	2	1,000.00	2,000.-
7	00280	INLET PROTECTION, TYPE 3	EACH	9	180.00	1,620.-
8	00280	INLET PROTECTION, TYPE 4	EACH	1	250.00	250.-
9	00280	INLET PROTECTION, TYPE 7	EACH	1	125.00	125.-
10	00280	SEDIMENT BARRIER, TYPE 3	LF	375	5.00	1,875.-
11	00280	SEDIMENT FENCE	LF	1,305	5.00	6,525.-
12	00280	CHECK DAM, TYPE 3	EACH	13	700.00	9,100.-
13	00280	COMPOST EROSION BLANKET	SQYD	1,668	4.00	6,672.-
14	00280	STRAW BALE	EACH	3	20.00	60.-
15	00290	POLLUTION CONTROL PLAN	LS	1	1,500.00	1,500.-
16	00294	CONTAMINATED SOIL DISPOSAL	TON	270	80.00	21,600.-
PART 00300 - ROADWORK						
17	00305	CONSTRUCTION SURVEY WORK	LS	1	30,000.00	30,000.-
18	00310	REMOVAL OF SURFACINGS	SQYD	3,400	20.00	68,000.-
19	00310	ASPHALT PAVEMENT SAW CUTTING	FOOT	1,500	8.00	12,000.-
20	00320	CLEARING AND GRUBBING	ACRE	0.30	150,000.00	45,000.-
21	00330	GENERAL EXCAVATION	CUYD	2,100	60.00	126,000.-
22	00331	24 INCH SUBGRADE STABILIZATION	SQYD	240	50.00	12,000.-
23	00350	SUBGRADE GEOTEXTILE	SQYD	1,100	2.00	2,200.-
24	00350	PAVEMENT OVERLAY GEOTEXTILE	SQYD	600	2.50	1,500.-
25	00390	LOOSE RIPRAP, CLASS 50	CY	15	70.00	1,050.-
26	00390	RIPRAP BASINS	EACH	3	1,500.00	4,500.-
PART 00400 - DRAINAGE AND SEWERS						
27	00445	12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	242	175.00	42,350.-
28	00470	CONCRETE INLETS, TYPE G-1	EACH	5	2,200.00	11,000.-
29	00470	CONCRETE INLETS, TYPE D	EACH	1	2,200.00	2,200.-
30	00470	CONCRETE STORM SEWER MANHOLES	EACH	1	3,500.00	3,500.-
31	00480	DRAINAGE CURBS	FOOT	162	25.00	4,050.-
32	00490	CONNECTION TO EXISTING STRUCTURES	EACH	2	1,500.00	3,000.-
33	00490	EXTRA FOR MANHOLES OVER EXISTING SEWERS	EACH	1	2,500.00	2,500.-
PART 00500 - BRIDGES						
34	00587	3 TUBE STEEL RAIL	FOOT	766	350.250.00	268,300.-
35	00596D	MOMENT SLAB	FOOT	1,094	100.350.00	368,300.-
36	00596D	SOLDIER PILE RETAINING WALL	SF	1,094	500.00	525,500.-
37	00596D	SOLDIER PILE WITH TIEBACK RETAINING WALL	SF	2,334	420.420.00	980,280.-
PART 00600 - BASES						
38	00620	COLD PLANE PAVEMENT REMOVAL, 2 1/2 INCHES DEEP	SQYD	1,300	7.00	9,100.-
39	00620	COLD PLANE PAVEMENT REMOVAL, 5 INCHES DEEP	SQYD	600	15.00	9,000.-
40	00640	AGGREGATE BASE	TON	960	45.00	43,200.-
PART 00700 - WEARING SURFACES						
41	00744	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	1,100	100.00	110,000.-
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES						
42	00810	GUARDRAIL, TYPE 2A	FOOT	225	37.00	8,325.-

90
 26,000-
 90
 800
 307,200-
 90

BID SCHEDULE

SOUTH END ROAD AT MP 3.8

Clackamas County

12/17/2021

ITEM NUMBER	SP NUMBER	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
43	00810	GUARDRAIL, TYPE 3	FOOT	25	92.00	2,300.-
44	00810	GUARDRAIL TRANSITION	EACH	2	4,100.00	8,200.-
45	00810	GUARDRAIL TERMINALS, NON-FLARED	EACH	2	4,100.00	8,200.-
46	00810	EXTRA FOR 8 FOOT POSTS	EACH	66	30.00	1,980.-
47	00840	DELINEATORS, TYPE 2	EACH	6	85.00	510.-
48	00840	DELINEATORS, TYPE 4 ALTERNATE 2	EACH	30	47.00	1,410.-
49	00855	BI-DIRECTIONAL YELLOW TYPE 1 MARKERS	EACH	40	15.00	600.-
50	00865	THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED	FOOT	5,515	1.35	7,445.25
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS						
51	00905	REMOVE EXISTING SIGNS	LS	1	500.00	500.-
52	00920	SIGN SUPPORT FOOTINGS	LS	1	100.00	100.-
53	00930	PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS	LS	1	300.00	300.-
54	00930	PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	1	1,200.00	1,200.-
55	00940	SIGNS, STANDARD SHEETING, SHEET ALUMINUM	SQFT	22	25.00	550.-
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL						
56	01012	WATER QUALITY SWALE, Sta. 12+10 to Sta. 14+00	LS	1	15,000.00	15,000.-
57	01030	SEEDING MOBILIZATION	EACH	2	500.00	1,000.-
58	01030	PERMANENT SEEDING, MIX NO. 1	ACRE	0.29	50,000.00	14,500.-
59	01030	WATER QUALITY SEEDING, MIX NO. 2	ACRE	0.05	30,000.00	1,500.-
60	01040	CONIFER TREES, 6 FT HEIGHT	EACH	3.00	300.00	900.-
61	01040	DECIDUOUS TREES, 1 INCH CALIPER	EACH	7.00	400.00	2,800.-
62	01040	SHRUBS, #1 CONTAINER	EACH	24.00	20.00	480.-
63	01040	WOOD CHIP MULCH	CUYD	0.50	400.00	200.-

PROPOSED COST BID SCHEDULE

3,272,707.25

(Numerically)

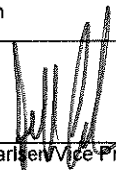
PROPOSED COST BID SCHEDULE

Three Million, Two Hundred Seventy two thousand
Seven Hundred Seven Dollars and
and 25/100

(Written in Words)

COMPANY NAME Stellar J Corporation

AUTHORIZED SIGNATURE


Jeff Carlier, Vice President

Section 6

First Tier Subcontractors Disclosure Form

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: #2022-09
South End Road MP 3.8 Project

BID OPENING: February 22, 2022, 2:00 PM, Pacific Time

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

INSTRUCTIONS:

This First-Tier Subcontractor Disclosure Form (“Form”) must be submitted and received at the location specified in the Notice of Public Improvement Contract Opportunity on the advertised Bid Closing, and 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 in the same envelope or email at the Bid Closing date and time. Subcontractor lists **MUST** be submitted within **two (2) hours** of the Bid Closing date and time.

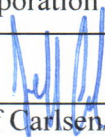
List below the name of each subcontractor that will be furnishing labor, or labor and materials, for which disclosure is required, the category of work that the subcontractor will be performing, and the dollar value of the subcontract. Enter **“NONE”** if the value of the project bid is less than \$100,000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

	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1.	<u>Condon Johnson Company</u>	<u>\$1,049,940</u>	<u>Soldier Pile Wall & Tiebacks</u>
2.	_____	_____	_____
3.	_____	_____	_____
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: Stellar J Corporation

Bidder Signature:  Phone # 360-225-7996
 Jeff Carlsen/Vice President

Section 7

Affidavit of Non-Collusion and Congressional Lobbying Certificate

AFFIDAVIT OF NON-COLLUSION

STATE OF Washington

COUNTY OF Cowlitz

I state that I am Vice President (title) of Stellar J Corporation (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) Stellar J Corporation (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.

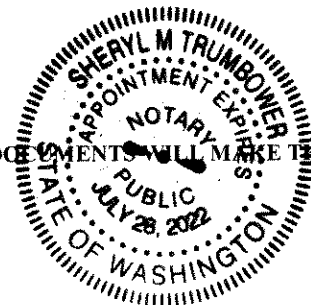
I state that Stellar J Corporation (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by Clackamas County in awarding the contract(s) for which this Offer is submitted. I understand and my firm understands that any misstatement 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.

Jeff Carlsen
(Authorized Signature)

Stellar J Corporation/Vice President
(Name of Company/Position)

Sworn to and subscribed before me this 22 day of February, 2022, 2021.

Sheryl Trumbower
Notary Public for Oregon Washington
My Commission Expires: July 28, 2022



FAILURE TO SUBMIT THIS EXECUTED STATEMENT AS PART OF THE BIDDING 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.

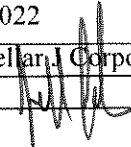
If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with THIS Federal contract, 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, Stellar J Corporation, 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: February 22, 2022
Company Name: Stellar J Corporation
Signature: 
Name: Jeff Carlsen
(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 BIDDING DOCUMENTS WILL MAKE THE BID NON-RESPONSIVE AND NOT ELIGIBLE FOR AWARD CONSIDERATION.

Section 8

Certificate Regarding Ineligible Contractors and
Conflict of Interest Disclosure Form Reference

CERTIFICATE REGARDING INELIGIBLE CONTRACTORS

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

Jeff Carlsen

Vice President

(Name of Certifying Officer)

(Title of Certifying Officer)

Hereby certify that: Stellar J Corporation
(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 statutes 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.

Stellar J Corporation

Name of Bidder

1363 Down River Drive

Street Address

Woodland Washington 98674

City State Zip

Jeff Carlsen/Vice President

360-225-7996

Signature of Certifying Officer

Telephone Number of Bidder

FAILURE TO SUBMIT THIS EXECUTED STATEMENT AS PART OF THE BIDDING 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: <https://www.oregon.gov/odot/business/procurement/docspsk/coiguideines.pdf> (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.

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 for Procurements & Contracts ("COI Guidelines") available on the Internet at: <https://www.oregon.gov/ODOT/Business/Procurement/DocsPSK/coiguideelines.pdf>. The definitions of terms used in this COI Disclosure Form shall be those provided in the COI Guidelines (note that "Public Official" includes all Agency employees).

This COI Disclosure Form is submitted in response to (check only one):

- Agency RFP# _____ [or] ITB# 2022-09
- Contract # _____
- Price Agreement # _____ WOC# _____ [or] PO# _____
- Changes to COI Disclosure Form previously submitted for (RFP # _____, ITB # _____, Price Agreement # _____, WOC # _____, Contract # _____)

This COI Disclosure Form must be signed in ink by a principal of the Firm to certify that it is correct. A Firm's certification that its disclosure form is correct includes the disclosure by its Associates and Subcontractors.

My signature certifies that as disclosed on or attached to the present form:

- (a) the Firm's disclosures are complete, accurate, and not misleading.
- (b) the Firm has provided the ODOT COI Guidelines to all Associates and Subcontractors (if any) and the present form includes or has attached any required COI disclosures from those sources.

I hereby certify that I am authorized to sign this COI Disclosure Form as a Representative for the Firm identified below:

Complete Legal Name of Firm: Stellar J Corporation

Address: 1363 Down River Drive, Woodland, WA. 98674

Telephone: 360.225.7996

Fax No: 360.225.8007

Authorized Representative's Name (printed): Jeff Carlsen / Vice President

Signature: _____ Date: 2/22/2022

Please answer all questions "Yes", "No" or "N/A" (if uncertain answer "Yes.") If the answer to any of the questions is "Yes," then use the applicable "Comments" fields to:

- (a) furnish all relevant facts that are necessary to make the response complete, accurate, and not misleading; and
 - (b) identify any actions that must be taken to avoid, neutralize, or mitigate such conflict of interest (e.g. communications barriers, restraint or restriction upon future contracting activities, or other precaution)
1. a) Is any Associate of the Firm a former employee of Agency within the last two years that had or will have involvement (on Agency's or Firm's behalf) with this Procurement, Contract, subcontract, or the prospective Project? **No Yes**
 - b) Is any Associate of the Firm a Relative or Member of the Household of a current Agency employee that had or will have any involvement with this Procurement or Contract Authorization? **No Yes**
- If the answer to either of the above questions is "Yes", complete the attached "Relatives and Former Agency Employees" table (Part A and/or Part B, as applicable).**
2. Does the Firm or any Associate of the Firm have an Actual, Apparent or Potential Conflict Of Interest ("Individual" or "Organizational") with regard to any known member of the Agency evaluation or selection team for the Procurement? **No Yes Comments:**

3. Did the Firm or any Associate of the Firm conduct prior work on the Project described in the Procurement, or participate in preparing any part of the Procurement or any documents or reports related to the Procurement or to which the Procurement refers? **No** **Yes** **Comments:**

4. Does the Firm or any Associate of the Firm have any past, present or currently planned personal or financial interests which are an Actual, Apparent or Potential Conflict of Interest ("Individual" or "Organizational"), with respect to the Procurement or award of this Contract or performing the work for Agency or acquisition of any real property for the Project? **No** **Yes** **Comments:**

5. Has the Firm or an Associate of the Firm offered to a Public Official, or is the Firm aware of any Public Official that has solicited or received, directly or indirectly, any pledge or promise of employment or other benefit based on the understanding that the Public Official's vote, official action or judgment would be influenced thereby? **No** **Yes** **Comments:**

6. Has (or will) the Firm or an Associate of the Firm provided a direct beneficial financial interest to any person within two years after the person ceased to hold a position as a Public Official who was involved in the Procurement or Authorization for the Contract, or is the Firm aware of any such person or Public Official who has or will receive a direct beneficial financial interest within the two year period? **No** **Yes** **Comments:**

7. Is the Firm aware of any current or former Public Official that has an Actual, Apparent or Potential Conflict Of Interest with respect to the Procurement or award of this Contract or performing the work for Agency? **No** **Yes** **Comments:**

8. Does the prospective Contract/WOC include development of an Environmental Assessment (EA) or Environmental Impact Statement (EIS)? **No** **Yes** **Comments:**

If yes, in accordance with the disclosure statement requirements of Council on Environmental Quality Regulation, 40 C.F.R 1506.5(c), does the Firm have any financial or other interest in the outcome of this Project; and/or does the Firm have any agreement, enforceable promise, or guarantee to provide any future work on this Project? **No** **Yes** **Comments:**

9. Have Subcontractors or other Associates furnished COI Disclosure Forms, separate from the present form, which included conflicts or potential conflicts of interest? (If yes, attach the disclosures.) **No** **Yes** **N/A** **Comments:**

10. If the prospective Contract/WOC includes personal services for the purpose of administering, managing, monitoring, inspecting, evaluating compliance with or otherwise overseeing a public contract, is the Firm or an Associate or an Affiliate of the Firm a party to the subject public contract? **No** **Yes** **N/A** **Comments:**

11. Has the Firm or any Associate of the Firm entered into personal services contract(s) with Agency for the purpose of advising or assisting in developing specifications, a scope or statement of work, an invitation to bid, a request for proposals or other solicitation documents and materials related to this procurement? **No** **Yes** **Comments:**

12. If the prospective Contract/WOC includes, or is advertised to potentially include via later amendment, personal services related to Project construction, do any of the criteria set forth in COI Guidelines, section (4) - "COI Considerations Related to Consultant Services Provided During Project Construction" apply? **No** **Yes** **N/A**

If yes, provide comments to describe the potential conflict. Include or attach a mitigation plan if applicable (or if required) to address the criteria in section (4) of the COI Guidelines. **Comments:**

Relatives and Former Agency Employees

For each employee of the Firm that was employed by Agency within the last two years and that had or will have involvement (on Agency's or Firm's behalf) with this Procurement, Contract, subcontract, or the prospective Project, provide information in Part A below as applicable.

Use Part B for Firm Associates with Relatives or Members of the Household working for Agency that had or will have involvement with this Procurement or Contract.

Part A: Employees that left Agency in the last two years and that had or will have involvement with this Procurement, Contract, subcontract, or the prospective Project.			
Instructions: If applicable, enter employee name(s) and the date(s) they left the Agency. For each employee identified, enter employee role information in Column C or D or both C and D, as applicable.			
Column A Employee Name	Column B Date employee left Agency	Column C Role performed on behalf of Agency related to this procurement or prospective Project	Column D Proposed Role on behalf of Firm in current Procurement, Contract, subcontract or Project
None			
Part B: Identify Associates of the Firm that are Relatives or Members of the Household of Agency employees currently working for Agency, if the Agency employee had or will have any involvement with this Procurement or Contract.			
Firm Associate's Name	Name and Relationship of Relative or Member of Household Employed at Agency	Role at Agency	Agency employee's Role with this Procurement
None			

(Make copies of this form as needed to list additional employees.)

SECTION 9

Performance Bond



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: 023221926
Solicitation: #2022-09
Project Name: South End Road MP 3.8 Project t

Liberty Mutual Insurance Company (Surety #1) Bond Amount No. 1: \$3,272,707.25
N/A (Surety #2)* Bond Amount No. 2:* \$N/A
* If using multiple sureties Total Penal Sum of Bond: \$3,272,707.25

We, Stellar J Corporation 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 sum of (Total Penal Sum of Bond) Three Million, Two Hundred Seventy-Two Thousand, Seven Hundred Seven & 25/100ths (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, together with 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 defend, indemnify, and save harmless Clackamas County and its 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.

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 21st day of March, 2022.

PRINCIPAL: Stellar J Corporation

By: _____

Signature

Jeff Carlsen / Vice President

Official Capacity

Attest: Sheryl Trumbower

Assistant Corporation Secretary

Sheryl Trumbower

SURETY: Liberty Mutual Insurance Company
[Add signatures for each if using multiple bonds]

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

Nicholas Fredrickson

Name

Nicholas Fredrickson

Signature

2233 112th Avenue NE

Address

Bellevue WA 98004

City State Zip

(425) 709-3600 (425) 709-7460

Phone Fax



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8207313-023001

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alec Gumpfer; Andrew Kerslake; Andrew P. Larsen; Charla M. Boadle; Deanna M. French; Derek Sabo; Elizabeth R. Hahn; Guy Armfield; Jana M. Roy; John Claeys; Katelyn Cooper; Mindee L. Rankin; Nicholas Fredrickson; Roger Kaltenbach; Ronald J. Lange; Scott Fisher; Scott Garcia; Scott McGilvray; Susan B. Larson

all of the city of Bellevue state of WA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 9th day of February, 2022.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: [Signature]
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 9th day of February, 2022 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: [Signature]
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 21st day of March, 2022.



By: [Signature]
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

SECTION 10

Payment Bond



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: 023221926
Solicitation: #2022-09
Project Name: South End Road MP 3.8 Project

Table with 2 columns: Surety Name and Bond Amount. Liberty Mutual Insurance Company (Surety #1) \$3,272,707.25; N/A (Surety #2)* \$N/A; Total Penal Sum of Bond: \$3,272,707.25

We, Stellar J Corporation, 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 sum of (Total Penal Sum of Bond) Three Million, Two Hundred Seventy-Two Thousand, Seven Hundred Seven & 25/100ths (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 defend, indemnify, and save harmless Clackamas County and its 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.

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 21st day of March, 2022.

PRINCIPAL: Stellar J Corporation

By: [Signature]

Signature

Jeff Carlsen / Vice President

Official Capacity

Attest: [Signature]

Assistant Corporation Secretary

Sheryl Trumbower

SURETY: Liberty Mutual Insurance Company
[Add signatures for each if using multiple bonds]

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

Nicholas Fredrickson

Name

[Signature]

Signature

2233 112th Avenue NE

Address

Bellevue WA 98004

City State Zip

(425) 709-3600 (425) 709-7460

Phone Fax



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8207313-023001

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alec Gumpfer; Andrew Kerslake; Andrew P. Larsen; Charla M. Boadle; Deanna M. French; Derek Sabo; Elizabeth R. Hahn; Guy Armfield; Jana M. Roy; John Claeys; Katelyn Cooper; Mindee L. Rankin; Nicholas Fredrickson; Roger Kaltenbach; Ronald J. Lange; Scott Fisher; Scott Garcia; Scott McGilvray; Susan B. Larson

all of the city of Bellevue state of WA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 9th day of February, 2022.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 9th day of February, 2022 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 21st day of March, 2022.



By: Renee C. Llewellyn, Assistant Secretary

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

SECTION 12

Project Information, Plans, General Conditions for
Construction for Clackamas County and Special Provisions



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
PROJECT INFORMATION, PLANS, SPECIFICATIONS AND DRAWINGS

PROJECT: #2022-09 South End Road at MP 3.8

Project Scope: The Clackamas County Department of Transportation and Development is requesting bids to construct slope stability improvements to South End Road. The improvements include, but are not limited to grading, drainage, retaining wall structures, paving and performing additional and incidental work as called by the specifications and plans.

Estimated Cost Range: \$3,30,000 - \$3,40,000

The project is anticipated to take approximately 2 years including plant establishment.

This Work must be completed by the completion date as specified in the Special Provisions that accompany the General Conditions for Construction for Clackamas County, Section 00180.50(h) Contract Time.

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

- Geotechnical and Pavement Design Report, South End Road MP 3.8 Project by Shannon & Wilson, Inc. dated May 2021
- Level 2 Preliminary Site Investigation Report, South End Road at Milepost 3.8 Project by Shannon & Wilson dated September 1, 2021
- General Conditions for Construction for Clackamas County

**SPECIAL PROVISIONS
FOR CONSTRUCTION**

**DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT
CLACKAMAS COUNTY, OREGON**

STRUCTURES, PAVING, STORM SEWER, AND GRADING

SOUTH END ROAD AT MP 3.8

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CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT

SPECIAL PROVISIONS

FOR

Structures, Paving, Storm Sewer, and Grading
South End Road At MP 3.8
South End Road
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Monica Leal)</p> 	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Temporary Traffic Control, Signing, and Striping. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00220, 00221, 00222, 00223, 00224, 00225, 00840, 00850, 00855, 00865, 00905, 00920, 00930, 00940</p>
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST


CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT

SPECIAL PROVISIONS

FOR

Structures, Paving, Storm Sewer, and Grading
South End Road At MP 3.8
South End Road
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Peter Shingledecker)</p>  <p>EXPIRATION DATE: 05/19/2009 <i>2022</i></p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for _Hazardous Material. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00294</p>
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST


CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT

SPECIAL PROVISIONS

FOR

Structures, Paving, Storm Sewer, and Grading
South End Road At MP 3.8
South End Road
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Conor Costigan)</p>  <p>DIGITALLY SIGNED 2021.08.27 10:32:54-07'00'</p> <p>OREGON SEPT. 11, 2018 CONOR R. COSTIGAN</p> <p>EXPIRES: 12/31/2021</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Roadway. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00305, 00310, 00320, 00330, 00331, 00620, 00641, 00730, 00744, 00810</p>
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

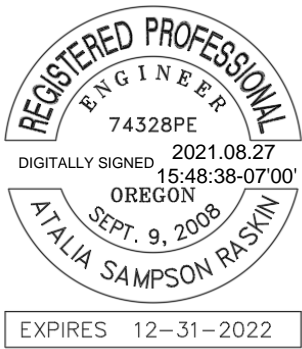
CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT

SPECIAL PROVISIONS

FOR

Structures, Paving, Storm Sewer, and Grading
South End Road At MP 3.8
South End Road
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Atalia Raskin)</p>  <p>REGISTERED PROFESSIONAL ENGINEER 74328PE DIGITALLY SIGNED 2021.08.27 15:48:38-07'00" OREGON SEPT. 9, 2008 ATALIA SAMPSON RASKIN EXPIRES 12-31-2022</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Drainage and Water Quality . Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00350, 00390, 00430, 00440, 00442, 00445, 00470, 00480, 00490, 00842, 01012</p>
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST


CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT

SPECIAL PROVISIONS

FOR

Structures, Paving, Storm Sewer, and Grading
South End Road At MP 3.8
South End Road
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Guido Portier)</p>  <p>RENEWS: 12/31/2022</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Structural Items. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00587, 00596D, 02001</p>
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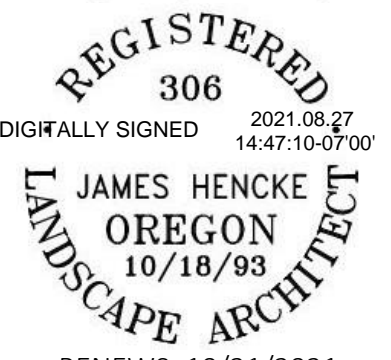
CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT

SPECIAL PROVISIONS

FOR

Structures, Paving, Storm Sewer, and Grading
South End Road At MP 3.8
South End Road
Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Jim Hencke)</p>  <p>DIGITALLY SIGNED 2021.08.27 14:47:10-07'00'</p> <p>JAMES HENCKE OREGON 10/18/93</p> <p>RENEWS: 10/31/2021</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Erosion Control, Seeding and Planting. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00280, 01030, 01040</p>
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

**South End Road at MP 3.8
Structures, Paving, Storm Sewer, and Grading**

SPECIAL PROVISIONS

WORK TO BE DONE

The Work to be done under this Contract consists of the following on South End Road in Clackamas County:

1. Construct Soldier Pile Retaining wall and Soldier Pile with Tieback Retaining Wall.
2. Construct storm sewer modifications.
3. Reconstruct pavement section or repair wearing surface.
4. 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 2021 "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>
- 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
- Oregon Legislative Counsel
www.oregonlegislature.gov/lc
- ORPIN
Orpin.oregon.gov
- 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

South End Road At MP 3.8

- Oregon Secretary of State: State Archives
sos.oregon.gov/archives/Pages/default.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

SECTION 00120 – BIDDING REQUIREMENTS AND PROCEDURES

Comply with Section 00120 of the General Conditions for Construction for Clackamas County modified as follows:

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.

South End Road At MP 3.8

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the General Conditions for Construction for Clackamas County.,

South End Road At MP 3.8

SECTION 00140 - SCOPE OF WORK

Comply with Section 00140 of the General Conditions for Construction for Clackamas County.

South End Road At MP 3.8

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.

00150.50(c) Contractor Responsibilities – Add the following bullet to the end of the bulleted list:

- Hold a Utility scheduling meeting and monthly Utility coordination meetings (see also 00180.42)

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
Oregon City Sanitary	John Lewis 625 Center Street, Oregon City, OR 97045 jmlewis@orcitey.org 503-496-1545

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.

South End Road At MP 3.8

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
00150.50(g)(1)	NW Natural	Richard L. Girard 220 NW 2nd Ave, Portland, OR 97209 Richard.Girard@nwnatural.com (503) 226-4211 x2967	2/28/22
00150.50(g)(2)	Portland General Electric	Daniel Sapp 121 SW Salmon St. Suite 1WTC0506 Portland, Oregon, 97204 Daniel.Sapp@pgn.com 503.736.5624	4/30/22
00150.50(g)(3)	Comcast	Brent Christiansen 7900 NE Killingsworth St, Portland, Oregon 97218 Brent_Christiansen@comcast.com 503-813-0483	4/15/22

The Contractor shall contact the Engineer to view the approved Utility Relocation Plans.

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.

(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.

- Northwest Natural Gas 1-800-882-3377

(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, 21 Calendar Days before the Contractor is scheduled to begin performing _drilling for soldier pile #34 at wall station 42+48.48, #35 at wall station 42+54.50 and #36 at wall station 42+60.50 where transmission line crosses road at approximately Station "S" 11+38. After the Power Supplier receives the notification, the Contractor shall then coordinate with Power Supplier to schedule transmission line deflection before the Contractor begins performing drilling.

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.

South End Road At MP 3.8

(3) (Comcast) - "Telecommunication Utility":

00150.91 Post-Construction Review - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall attend a Post-Construction Review meeting to be held by the Agency prior to issuance of Third Notification but not earlier than 45 Days following the date of Second Notification. The time and place of this meeting will be announced by the Engineer 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. The Contractor's attendance at the Post-Construction Review meeting is mandatory.

SECTION 00160 - SOURCE OF MATERIALS

Comply with Section 00160 of the General Conditions for Construction for Clackamas County modified as follows:

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 of the General Conditions for Construction for Clackamas County.

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications modified as follows:

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.

00170.65(e) Additional Requirements When Federal Funds are Involved - Replace this subsection, except for the subsection number and title, with the following:

For this Federal-Aid Project, the Contractor shall comply with 00170.65(a) through 00170.65(d) and the provisions of FHWA Form 1273, "Required Contract Provisions Federal-Aid Construction Contracts", except Section IV of FHWA Form 1273 does not apply.

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	\$1,000,000	\$2,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)
Pollution Liability	\$1,000,000	\$2,000,000
Commercial Automobile Liability with Pollution Coverage	\$1,000,000	(aggregate limit not required)

00170.70(d) Additional Insured - 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
- Oregon Department of Transportation and its officers, employees and agents
- David Evans and Associates, Inc.
- Shannon & Wilson, Inc.

00170.72 Indemnity/Hold Harmless - Add the following paragraph and bullets to the end of this subsection:

South End Road At MP 3.8

Extend indemnity, defense and hold harmless to the Agency and the following:

- Clackamas County and its officers, agents, and employees
- Oregon Department of Transportation and its officers, employees, and agents
- David Evans and Associates, Inc.
- Shannon & Wilson, Inc.

SECTION 00180 - PROSECUTION AND PROGRESS

Comply with Section 00180 of the General Conditions for Construction for Clackamas County 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
On-Site Work	00180.40(b)
Contract Time	00180.50(h)
Right-of-Way and Access Delays	00180.65
Closed Lanes	00220.40(e)(1)
Limited Duration Road Closure	00220.40(f)
Regulated Work Areas	00290.34(a)
Noise Control	00290.32
Vibration and Displacement Monitoring.....	00596D.49
Opening Sections to Traffic.....	00744.51

The Contractor shall not begin grading, drainage improvements, or land disturbance Work before May 1, 2022, unless approved by the Engineer.

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 "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:

- Videotape of private properties affected by construction per 00150.70.

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.

Before beginning On-Site Work and before the preconstruction conference, the Contractor shall conduct a Utility scheduling meeting with representatives from the Utilities involved with this Project and with the Engineer. The Contractor shall incorporate the time needs of the Utilities into the Contractor's schedule submitted at the preconstruction conference.

South End Road At MP 3.8

The Contractor shall submit a written Utility Coordination Report to the Engineer not later than seven Calendar Days after the Utility scheduling meeting. The Utility Coordination Report shall:

- Identify each specific Utility;
- Identify Utility contact names and numbers;
- Identify dates for Utility scheduling for the entire Project;
- Contain documents showing that the Contractor has accomplished Utility locates; and
- Contain documents showing that Utility locates, along with applicable construction activities, have been reviewed and discussed on-site with Utility representatives.

The Contractor shall hold monthly Utility coordination meetings with Utilities and the Engineer to coordinate Project activities with Utilities and on-going Utility relocation work. The Contractor shall hold monthly Utility coordination meetings in the office or in the field, as appropriate. The Utility coordination meetings shall include, but not be limited to:

- Detailed discussions of existing and abandoned Utilities,
- Detailed discussions of de-energizing and re-energizing service lines,
- Detailed discussions of critical locations for potholing of Utilities,
- Detailed discussions of Project activities, and
- Detailed discussions of on-going Utility relocations in upcoming Project activity areas.

During the monthly Utility coordination meetings, the Utilities will provide Utility drawings and discuss the scope, extent, locations, and significance of all Utility facilities before the Contractor begins work in a new activity area. The Contractor shall incorporate this information into the Project schedules and furnish the Utilities copies of the updated Project schedules.

The Contractor shall plan and schedule all Utility adjustment operations well in advance of On-Site Work. When the Contractor becomes aware of Utility conflicts not previously identified, the Contractor shall notify the applicable Utilities in writing the same Calendar Day. The Contractor shall allow Utilities at least 2 weeks 14 Calendar Days to relocate (adjust) the Utility conflicts not previously identified.

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 to be done under the Contract, except for final lift paving, permanent striping, seed establishment and plant establishment, not later than November 24, 2022.

(2) The Contractor shall complete all Work to be done under the Contract, except for plant establishment, not later than June 2, 2023.

00180.70(b) Contractor's Responsibility during and after Suspension - Replace the paragraph that begins "During periods of suspension of the Work ..." with the following paragraph:

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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.

00180.85(b) Liquidated Damages - Add the following to the end of this subsection:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$1,000 per Calendar Day *.

* Calendar Day amounts are applicable when the Contract time is expressed on the Calendar Day or fixed date basis.

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) or 00220.40(f). 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) or 00220.40(f). In addition to the liquidated damages, all added cost for traffic control measures, including flagging, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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(d) Rolling Slowdown Closures - Rolling slowdown 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 by the Rolling Slowdown Method. 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, per lane, for any lane closure beyond the 20-minute limit listed in 00220.40(g). In addition to the liquidated damages, any added cost for traffic control measures, including flagging or pilot cars, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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), but not in addition to 00180.85(c) for closures of the same lanes.

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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. In addition to the liquidated damages, any added cost for traffic control measures, including flagging, required to stop or hold traffic beyond the 20-minute time limit, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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(f)(2) Scale Without Automatic Printer - Add the following paragraph after the paragraph that begins " If the scales require manual entry...":

Pay costs for the weigh witness at \$35.00 per hour.

00190.20(g) Agency-Provided Weigh Technician - Add the following paragraph to the end of this subsection:

Pay costs for the weigh technician at \$35.00 per hour.

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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.

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SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the General Conditions for Construction for Clackamas County.

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SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the General Conditions for Construction for Clackamas County.

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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:

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.

00220.40(e)(1) Closed Lanes - Replace this subsection, except for the subsection number and title, with the following:

One Traffic Lane may be closed on South End Road when allowed, shown, or directed during the following periods of time:

- 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 p.m.

Add the following subsection:

00220.40(f) Limited Duration Road Closure - The Contractor will be permitted to close all Traffic Lanes on South End Road from Baker Avenue to Sunset Street/5th Avenue for up to 215 consecutive days in duration during construction. Full roadway closures will not be allowed until the area and the detour route are signed according to the TCP.

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SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

Comply with Section 00221 of the Standard Specifications modified as follows:

00221.88 Measurement, Method "B" - Add the following to the end of this subsection:

The estimated hours of flagging are 480.

00221.90(b) Temporary Protection and Direction of Traffic - Delete the bullet that begins "Moving temporary barrier to and from Contractor's stockpile areas".

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

Comply with Section 00222 of the Standard Specifications modified as follows:

00222.40(e) Temporary Sign Placement - Add the following to the end of the bullet list:

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 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.

SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

Comply with Section 00223 of the Standard Specifications modified as follows:

00223.31(b) Traffic Control Inspection Without TCS - Replace the bullet that begins "Prepares and signs a daily "Traffic Control Inspection Report"..." with the following bullet:

Prepares and signs a "Traffic Control Inspection Report" (Form No. 734-2474) upon the initial installation of TCM and each working day when any modification, removal, or reinstallation of TCM are made, or as directed by the Engineer. Submit completed reports to the Engineer no later than the end of the next working day.

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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 modified as follows:

00225.42 Temporary Pavement Markings – Add the following before the paragraph that begins “Temporary pavement markers may be place.....”.

During winter shutdown, apply temporary pavement markings according to this Section. Apply temporary pavement markings per pavement marking layout shown in Signing and Striping Plans. Remove any existing pavement markings that conflicts with temporary pavement markings.

00225.42(b) Wearing Course - Replace the bullet that begins “For left hand solid lines...” with the following bullet:

- For left hand solid lines and skip lines striping, use temporary removable tape or pavement markers.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

00280.00 Scope - Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA Permit is applicable to the Project.

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
Plastic Sheeting.....	100 SY
Straw Bale	3 EA
Sediment Barrier, Type 3	200 LF

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.

Add the following subsection:

00290.30(a)(7) Water Quality:

Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, or water contained within a work area isolation, directly into any waters of the State or U.S. until it has been satisfactorily treated (using a best management practice such as a filter, settlement pond, bio-bag, dirt-bag, or pumping to a vegetated upland location).

Do not use permanent stormwater quality treatment facilities to treat construction runoff unless prescribed by an ESCP approved under Section 00280.

If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.

Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cure water, silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the State or U.S.

Implement containment measures adequate to prevent flowing stream water from coming into contact with concrete or grout within the first 24 hours after placement.

The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.

If Work activities violate permit conditions or any requirement of this subsection, stop all in-water work activities and notify the Engineer.

Do not cause a visible sediment plume in waters of the State or U.S.

00290.32 Noise Control - Add the following paragraphs to the end of this subsection:

Review Oregon City Code which describes noise control regulations. Comply with the applicable noise control requirements of the permit for Project Work.

Copies of the noise variance permit for this Project are available from the Engineer.

00290.34 Protection of Fish and Fish Habitat - Add the following paragraph:

Meet with the Agency Biologist, Resource Representative, Engineer, and inspector on site, before moving equipment on-site or beginning any work, to ensure that all parties understand

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the locations of sensitive biological sites and the measures that are required to be taken to protect them.

00290.34(b) Prohibited Operations - Add the following to the end of this subsection:

Allow entry within the regulated work area of the stream channel.

00290.36(a) Migratory Birds - Add the following to the end of this subsection:

00290.36(a) Migratory Birds - Add the following paragraphs to the end of this subsection: Bird management activities to comply with the Migratory Bird Treaty Act (16 U.S.C. 703 712) will be performed by Clackamas County and its permitted agents, as documented in the Clackamas County MBTA permit, Section J. Ensure that the County and its permitted agents have access to the project area, including existing work platforms, as needed to prevent migratory bird nesting. Nesting prevention may include daily bird harassment and the installation and maintenance of devices that exclude birds.

Do not disturb migratory bird nesting habitat (shrubs, trees, and structures), or clear vegetation from March 1 to September 1 of each year without prior written approval from the Engineer. Notify the Engineer, in writing, a minimum of 10 calendar days prior to starting activities that could harm nesting birds.

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, 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
11+00 to 11+60	2-20	180	Residual-range petroleum hydrocarbons, Benzo(a)pyrene
Approximate Total Quantity		180	cy
Quantity to be reused on Project		0	cy
Quantity to be disposed at landfill		270	tons

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In areas where excavation is not required, leave contaminated material and clearing and grubbing material in place.

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 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 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:

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.

Construction

00294.40 Contaminated Soil Excavation - Excavate and handle contaminated 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.

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- Load contaminated 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 on-site.
- Remove contaminated media from the exterior of all vehicles before they leave the Project Site
- Cover trucks transporting contaminated materials to prevent spillage during transit to the disposal facility according to OAR 340-093-0220.
- Where over excavation is required, backfill the excavation according to 00330.42.

00294.41 Contaminated Soil Management - Reuse, recycle, or dispose of contaminated 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 to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal. Dispose of temporarily stored contaminated Soils 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.
- 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:

The quantities of contaminated Soil disposed will be measured on the weight basis, based on weigh tickets from the recycling or disposal facility.

Clearing and grubbing will be measured according to 00320.80.

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
(e) Contaminated Soil Disposal.....	Ton

Item (e) includes all costs involved with the disposal of contaminated Soil at a recycling or disposal facility.

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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.

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SECTION 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications.

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SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications modified as follows:

00310.90 Payment - Add the following to the end of this subsection:

No separate or additional payment will be made for removal or disposal Work included in Section 00330 according to 00310.02.

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications.

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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.

00330.14 Selected Granular Backfill - Delete the sentence that begins "Reclaimed glass meeting the requirements of Section 02695..."

00330.15 Selected Stone Backfill - Delete the sentence that begins "Reclaimed glass meeting the requirements of Section 02695..."

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..."

00330.94 Embankment Basis Payment - Delete the paragraph that begins "Excavation of unstable..."

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.

SECTION 00430 - SUBSURFACE DRAINS

Comply with Section 00430 of the Standard Specifications.

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications.

SECTION 00442 - CONTROLLED LOW STRENGTH MATERIALS

Comply with Section 00442 of the Standard Specifications.

SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications.

SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications modified as follows:

00470.41(c) Grates, Frames, Covers and Fittings - Replace this subsection, except for the subsection number and title, with the following:

Set metal frames for manholes on full non-shrink grout beds to prevent infiltration of surface water or groundwater between the frame and the concrete of the manhole section. If concrete is to be poured around the frames, coat the portion of the frame that will contact the concrete with hot asphalt before placing the concrete. Set frames, covers and grates true to the locations and grades established. Clean bearing surfaces and provide uniform contact. The use of a bolt adjustment system for frames from the QPL is allowed. Secure all fastenings. Construct all mortared, sanitary sewer manhole necks and all riser ring joints made with non-shrink grout using an approved commercial concrete bonding agent applied to all cured concrete surfaces being grouted.

00470.42 Precast Concrete Catch Basins and Inlets - Add the following sentence to the end of this subsection:

Grade adjustments using a bolt system from the QPL is allowed.

SECTION 00480 - DRAINAGE CURBS

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Comply with Section 00480 of the Standard Specifications.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications.

SECTION 00587 - BRIDGE RAILS

Comply with Section 00587 of the Standard Specifications modified as follows:

00587.80 Measurement - Add the following to the end of this subsection:

The estimated quantity of bridge rail is:

Structure	Rail Type	Quantity (Foot)
Wall 1	3-Tube Steel Rail	768

SECTION 00596D – SOLDIER PILE/TIEBACK RETAINING WALLS

Section 00596D, which is not in the Standard Specifications, is included in this Project by Special Provision.

Description

00596D.00 Scope

This work consists of complete installation of permanent soldier pile and soldier pile with tieback retaining walls at the location shown on the plans. The work includes furnishing all labor, equipment, soldier piles, tieback anchors, timber lagging, cast-in-place concrete fascia, wall drainage system and all other items required for installation in accordance with the plans, Standard Specifications, and these special provisions.

The Contractor shall select the type of tieback anchor used and the required tieback anchor length and diameter, and grout hole diameter. The tieback anchor system shall include all necessary drilling, grouting, prestressing steel, wedges, centralizers, plates, nuts, Class I corrosion protection, and ancillary equipment necessary to furnish, install, and test the tieback anchors. The tieback anchors shall develop the loads indicated on the plans and shall be verified by tests specified in these special provisions.

00596D.01 Definitions:

Anchorage - A system consisting of anchor head, bearing plate, trumpet, and corrosion protection that is capable of transmitting the prestressing force from the prestressing steel to the surface of the ground or the supporting structure.

Bearing Plate - A steel plate under the anchor head that distributes the prestressing force to the anchored structure.

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Bond Length - The length of the tendon that is bonded to the primary grout and capable of transmitting the applied load to the surrounding soil or rock.

Free Stressing (Unbonded) Length – The designed length of the tendon that is not bonded to the surrounding ground or grout during stressing.

Tendon – The complete anchor assembly, consisting of prestressing steel, corrosion protection, sheathings, and coating when required, as well as centralizers and spacers, but excluding grout.

For additional definitions see “Recommendations for Prestressed Rock and Soil Anchors” by the Post-Tensioning Institute and “Ground Anchors and Anchored Systems, GEC4” by the Federal Highway Administration (Report No. FHWA-IF-99-015).

00596D.02 Subsurface Information – The boring logs and final geotechnical report for the project are available for review through the Project Manager’s office. The data shown for each boring applies only to that particular boring. Subsurface conditions may vary between borings and may not be evident until construction.

The Contractor is strongly encouraged to review the final geotechnical report and boring logs during the bid preparation to further evaluate the impact of site conditions on selected excavation methods, drilling equipment, grouting methods, and other aspects of the work.

00596D.03 Submittals:

(a) Contractor Qualifications - Prior to the preconstruction conference, submit the following to the Engineer for approval:

- Documentation showing that the Contractor performing the work of this Section has successfully completed at least five permanent tieback wall projects installed in the last 5 years.
- The name of the Contractor's designated Supervising Engineer. The Supervising Engineer shall be registered as a civil engineer in Oregon, and shall have at least 3 years' experience in the design and construction of permanent tieback soldier pile walls.
- Documentation showing the experience and qualifications of drilling operators and foremen The drilling operator and foreman shall have experience installing permanent tieback soldier pile walls on at least 3 projects over the past 3 years.
- Descriptions of five projects involving permanent tieback retaining walls completed within the last five years. For each project, include:
 - Name of client contact, address and telephone number;
 - Location of project;
 - Contract value;
 - Scheduled and actual completion dates;
 - Anchor design loads; and

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- Type(s) of terrain.
- Prepare and submit proposed welding procedures to the Engineer for approval at least seven calendar days prior to any welding.

Do not use consultants or manufacturer's representatives in order to meet the requirements of this Section. The Engineer will approve or reject the Contractor's qualifications and personnel within 15 working days after receipt of the submission. Do not begin work on any anchored wall system, or order materials, until the Contractor's qualification submittals have been approved by the Engineer. The Engineer may suspend the work if unqualified personnel are substituted for approved personnel during construction. If work is suspended due to the substitution of unqualified personnel, the Contractor will be fully liable for additional costs resulting from suspension of work and no adjustment in contract time resulting from the suspension of work will be allowed.

(b) Shop Drawings - Prior to fabrication and construction of each wall, submit stamped drawings and calculations according to 00150.35, showing all Contractor-designed items, tendon type, size, corrosion protection and construction approach/sequence. Provide supporting calculations for proposed bond lengths. Design the tieback bond length in accordance with AASHTO LRFD Bridge Design Specifications and requirements of the 2018 ODOT Geotechnical Design Manual.

Include all shop assembly and erection details, including profile views with all soldier pile and tieback locations shown and numbered. Include details of all members and connections for any portion of the system not shown on Agency Plans. Indicate all welds by standard welding symbols of the AWS A2.4. Indicate methods for providing temporary ground support.

Include the Contractor's design of the bond-zone portion of the anchor tendon, based on Agency-provided information on subsurface conditions.

Clearly indicate, by flagging and clouding, any changes, additions or alterations to working drawings that are deviations from the Contract documents or changes to previously approved portions of working drawings. Provide a written explanation of each change accompanying each submittal.

The Engineer shall approve or reject the Contractors shop drawings and design submission within 21 Calendar Days after receipt of the submission. Approval of the design submittal does not relieve the Contractor of the responsibility for successful completion of the work.

(c) Certificates of Compliance - Submit Certificates of Compliance for the following materials, if used. The certificate is to state that the material or assemblies to be provided fully comply with the requirements of the Contract.

- Prestressing steel, strand or bar
- Portland cement
- Prestressing hardware
- Bearing plates

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- Corrosion protection materials

(d) Mill Test Certifications - Submit to the Engineer for approval certified mill test results for all steel, including the prestressing steel and bearing plate steel and piling members. Include typical stress-strain curves, specified minimum tensile strength, yield strength, elongation and composition. The Engineer may require the Contractor to provide samples of any ground anchor material intended for use on the Project. The Engineer will approve or reject any materials within 10 working days after receipt of the test reports. Do not incorporate material in the work without the Engineer's approval.

(e) Soldier Pile and Tieback Installation Plan - Prepare and submit to the Engineer for approval at least 21 working days prior to beginning the work, a detailed description of the soldier pile and tieback installation, and tieback testing procedures. :

- Proposed soldier pile and tieback drilling equipment
- Proposed concrete and grout placement equipment
-
- Detailed description of soldier pile and tieback construction including drilling, spoils disposal, insertion of piles and prestressing steel, and placement concrete and grout.
- Method of protecting tendons during storage and handling
- Methods of ensuring that the grout will be placed as indicated and as specified
- Proposed welding procedures
- Calibration data for each load cell, test jack, pressure gauge and primary pressure gauge to be used, along with testing procedure for proof and performance tests. Calibration tests shall have been performed by an independent testing laboratory within 60 calendar days of the date of submittal. The Engineer will approve or reject the calibration data within 5 working days after receipt of the data. Do not commence testing until the Engineer has approved the load cell, test jack, pressure gauge, and master pressure gauge calibrations.
- Calibration data for the stroke counter on the grout pump
- Alternative pile anchorage systems will be considered including a waler system upon approval by the Owner's Engineer. The Contractor shall submit full details and calculations of the entire system and load path stamped by a registered Oregon Engineer.

Do not begin work until the submittal of this subsection (e) has been approved in writing by the Engineer.

00596D.04 Reference Publications - The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. "Latest version" shall be interpreted to mean the version of the publication current at the time the Project was advertised.

- Ground Anchor Inspectors Manual, from "In-Situ Soil Improvement Techniques". American Association of State Highway and Transportation Officials- Associated

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Contractors of America- American Road and Transportation Builders Association (AASHTO-AGC-ARTBA), Task Force 27 Report, 1990.

- “Geotechnical Design Manual, March 2018”, Oregon Department of Transportation (ODOT GDM)
- 8th Edition of American Association of State Highway and Transportation Officials (AASHTO), “LRFD Bridge Design Specifications for Highway Bridges”
- Latest version of American Association of State Highway and Transportation Officials (AASHTO) and American Society for Testing and Materials (ASTM) standards:
 1. AASHTO 85, Portland Cement
 2. AASHTO 183, Structural Steel
 3. AASHTO 203 (ASTM A416) Uncoated Seven-Wire Stress Relieved Steel Strand
 4. AASHTO 275 (ASTM A 722) Uncoated High Strength Steel Bar
 5. ASTM A 572 Standard Specification for A572 High-Strength Low-Alloy Columbium-Vanadium Structural Steel
 6. ASTM A 779 Standard Specification for Steel Strand, Seven-Wire, Uncoated, Compacted, Stress-relieved for Prestressed Concrete
 7. ASTM A 500 – Cold-Formed, Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
 8. AASHTO M 169 – Standard Specifications for Steel Bars, Carbon, and Alloy, Cold-Finished (ASTM A 108)
- Latest version of Post-Tensioning Institutes (PTI) standards:
 1. PTI, “Post Tensioning Manual”
 2. PTI, “Specification for Unbonded Single Strand Tendons”
 3. PTI, "Recommendations for Prestressed Rock and Soil Anchors"
- “Ground Anchors and Anchor Systems”, Geotechnical Engineering Circular No. 4 (GEC4), 1999, publication no. FHWA-IF-99-015.
- OSHA Publication 29 CFR 1926 Construction Industry Standards, Subpart P-Excavations

Materials

00596D.10 Soldier Pile Wall:

(a) General - Provide materials meeting the requirements in the following sections. The Contractor shall not deliver materials to the site until the Engineer has approved the submittals outlined in 00596.02. The designated storage location or locations shall be protected by the Contractor from theft, vandalism, passage of vehicles, and other sources of

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damage to materials delivered to the site. The Contractor shall protect the materials from the elements by appropriate means. All steel components shall be protected from the elements at all times.

(b) Steel Soldier Beams and Plate -The steel soldier beams shall conform to ASTM A 992, Grade 50. Steel used to fabricate steel studs and other devices shall conform to AASHTO M 169.

(c) Structural Concrete – Structural concrete for soldier piles shall be Class 3300, structural concrete for cast-in-place fascia wall shall be Class 3300 conforming to Section 00540 of the Standard Specifications.

(d) Controlled Low Strength Material (CLSM) – Provide CLSM in pre-bored holes. The CLSM shall conform to Section 00442 of the Standard Specifications.

(e) Timber Lagging – Timber lagging shall be construction grade, pressure treated, rough cut Douglas Fir and shall be a minimum of 4 in thick. Furnish a certificate of compliance for the preservative used.

(f) Reinforcing Steel – Reinforcing steel shall conform to Section 00530 of the Standard Specifications.

(g) Prefabricated Drainage Composite – Furnish prefabricated drainage composite fabric Mirafi G200N, Amerdrain 500 or similar as approved by the Engineer.

00596D.11 Tieback Anchors:

(a) Tieback Anchor Tendons - Furnish Class I encapsulated tendons complying with FHWA-IF-99-015, and PTI - “Recommendations for Prestressed Rock and Soil Anchors”.

(b) Anchorage Devices – Furnish a combination of either a steel bearing plate with wedge plate and wedges, or a steel bearing plate with a threaded anchor nut. The steel bearing and wedge plate may also be combined into a single element. Anchorage devices shall be capable of developing 95 percent of the specified minimum ultimate tensile strength (SMTS or Fpu) of the prestressing steel tendon. Anchorage devices are to conform to the static strength requirements of Section 3.1.6 (1) and 3.1.8 (1) and (2) of the PTI “Guide Specification for Post-Tensioning Materials”.

(1) Bearing Plate - Fabricate the bearing plate from steel conforming to AASHTO M 183 or M222, or equivalent, or a ductile iron casting conforming to ASTM A 536.

(2) Trumpet - Fabricate the trumpet from a steel pipe or tube. Steel pipe or tube to conform to the requirements of ASTM A 53 for pipe or ASTM A 500 for tubing. Steel trumpets to have a minimum wall thickness of 1/8 inch for diameters up to 4 inches and 0.25 inch for larger diameters.

(3) Anchorage Covers - Fabricate anchorage covers from steel or plastic with a minimum thickness of 1/8 inch. The joint between the cover and the bearing plate is to be watertight.

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(4) Wedges - Use wedges designed to preclude premature failure of the prestressing steel due to notch or pinching effects under static and dynamic strength requirements of Section 3.1.6 (1) and Sections 3.1.8 (1) and (2) of the PTI "Post Tensioning Manual". Do not reuse wedges.

Use wedges for epoxy coated strand that are designed to be capable of biting through the epoxy coating and into the strand. Do not remove the epoxy coating from the strand to allow the use of standard wedges. Anchor nuts and other threadable hardware for epoxy-coated bars shall be designed to thread over the epoxy-coated bar and still comply with the requirements for carrying capacity.

(c) Bond Breaker – Fabricate the bond breaker from a smooth plastic tube or pipe having the following properties:

- Resistant to chemical attack from aggressive environments, grout, or corrosion inhibiting compound.
- Resistant to aging by ultraviolet light.
- Fabricated from material non-detrimental to the tendon.
- Capable of withstanding abrasion, impact, and bending during handling and installation.
- Enables the tendon to elongate during testing and stressing.
- Allows the tendon to remain unbonded after lock-off.

(d) Cement Grout – Furnish Type I, II or III Portland cement conforming to AASHTO M 85 for grout. Use grout that is a pumpable neat mixture of cement and water and stable (bleed less than 2 percent), fluid, and provides a minimum 28-day compressive strength of at least 3,000 psi measured in accordance with ASTM C 109 at time of stressing.

Admixtures to control bleed, improve flowability, reduce water content and retard set may be used in the grout subject to the approval of the Engineer. Admixtures, if used, are to be compatible with prestressing steels and mixed in accordance with the manufacturer's recommendations. Expansive admixtures may only be used for filling sealed encapsulations, trumpet, and anchorage covers. Do not use accelerators. Submit flow test procedure for approval before beginning grout placement.

(e) Centralizers - Fabricate centralizers from plastic (Schedule 40 PVC pipe), steel, or other material that is non-detrimental to the prestressed steel. Do not use wood. Use centralizers capable of supporting the tendon in position in the drill hole so a minimum of 0.5 inch of grout cover is provided, and grout can flow freely around the tendon and up the drill hole.

(f) Corrosion Inhibiting Compound – Furnish a corrosion-inhibiting compound, to be placed in the free length of the tendon, meeting the requirements of section 3.2.5 of the PTI "Specification for Unbonded Single Strand Tendons". Furnish an organic compound (i.e., wax or grease) with appropriate polar moisture-displacing, corrosion-inhibiting additives and self-healing properties. Provide a compound that retains viscosity and is chemically stable and non-reactive with the prestressing steel, sheathing material, and anchor grout.

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(g) Grout Tubes – Furnish grout tubes having an adequate inside diameter to enable the grout to be pumped to the bottom of the drill hole. Provide grout tubes capable of withstanding a minimum grouting pressure of 150 psi or the Contractor's maximum anticipated grout pressure. Provide post-grout tubes capable of withstanding post-grouting pressures.

(h) Heat Shrinkable Sleeves – Fabricate heat-shrinkable sleeves from a radiation-cross-linked polyolefin tube internally coated with an adhesive sealant. Prior to shrinking, the tube shall have a nominal wall thickness of 0.25 in. The adhesive sealant inside the heat shrinkable tube shall have a nominal thickness of 0.2 inch.

(i) Prestressing Steel - Fabricate tieback tendons from single or multiple elements of the following:

- Continuously-threaded steel bars conforming to AASHTO M 275 (ASTM A 722)
- Seven-wire, low-relaxation strands conforming to AASHTO M 203 (ASTM A 416)
- “Compact” seven-wire, low-relaxation strands conforming to ASTM A 779
- Epoxy coated steel bars conforming to ASTM A 775

Hollow-core, self-drilling bar tendons are not acceptable.
Assume the tieback anchors will use strand tendons.

(j) Prestressing Couplers – Furnish prestressing steel bar couplers capable of developing 100 percent of the minimum specified ultimate tensile strength of the prestressing steel bar. Steel strands used for soil or rock anchors shall be continuous with no splices or couplers.

(k) Sheath – As part of the corrosion protection system for the unbonded length portion of the tendon, furnish a sheath fabricated from one of the following:

- A polyethylene tube pulled or pushed over the prestressing steel. The polyethylene to be Type II, III, or IV as defined by ASTM D 1248 (or approved equal). Use tubing with a minimum wall thickness of 0.06 inch.
- A hot-melt extruded polypropylene tube. The polypropylene to be cell classification B55542-11 as defined by ASTM D 4101 (or approved equal). Use tubing with a minimum wall thickness of 0.06 inch.
- A hot-melt extruded polyethylene tube. The polyethylene to be a high density Type III as defined by ASTM D 1248 (or approved equal). Use tubing with a minimum wall thickness of 0.06 inch.
- Steel tubing conforming to ASTM A 500, Grade B ($F_y = 46$ ksi for square sections, and $F_y = 42$ ksi for round sections). Use tubing with a minimum wall thickness of 0.25 inch.
- Steel pipe conforming to ASTM A 53, Grade B. Use pipe with a minimum wall thickness of 0.25 inch.

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- Plastic pipe or tube of PVC conforming to ASTM D 1784 Class 13464-B. Use Schedule 40 pipe or tube at a minimum.
- A corrugated tube conforming to the requirements of the tendon bond length encapsulation 00596D.14(m).

(l) Spacers – To separate the elements of a multi element tendon, furnish spacers that permit grout to flow freely around the tendon and up the drill hole. Fabricate spacers from plastic (Schedule 40 PVC pipe), steel, or other material non-detrimental to the prestressing steel. Do not use wood.

(m) Tendon Bond Length Encapsulation – If the plans require the tendon bond length to be encapsulated to provide additional corrosion protection, fabricate the encapsulation from one of the following:

- High density corrugated polyethylene tubing conforming to the requirements of AASHTO M 252 and having a minimum wall thickness of 0.16 inch except pre-grouted tendons which may have a minimum wall thickness of 0.04 inch.
- Deformed steel tubing or pipes conforming to ASTM A53 Grade B or ASTM A500 Grade B ($F_y = 46$ ksi for square sections, and $F_y = 42$ ksi for round sections") with a minimum wall thickness of 0.04 inch.
- Corrugated, polyvinyl chloride tubes manufactured from rigid PVC compounds conforming to ASTM D 1784, Class 13464-B.
- Fusion-bonded epoxy conforming to the requirements of AASHTO M 284.

00596D.12 Timber Lagging – Timber wall lagging shall be rough sawn Douglas fir No 1 or better, pressure treated according to Section 02190 to a retention conforming to Western Wood Preservers Institute Use Category 4A.

00596D.13 Miscellaneous Materials – Furnish materials meeting the requirements of the specifications indicated below:

Commercial Grade Concrete	Section 00440
Structural Concrete.....	Section 02001
PVC Drain Pipe	Section 02410
Reinforcing Steel	Section 02510
Traffic Loop Sealant	Section 00990

Corrosion Protection

00596D.20 Corrosion Protection - All tieback anchors installed on this project shall have Class I, Encapsulated Tendons (double corrosion protection), which shall comply with FHWA-IF-99-015 and the ODOT GDM

(a) Anchorage Protection – Provide a grout-filled cover for all non-restressable stressing anchorages permanently exposed to the atmosphere. For restressable anchorages permanently exposed to the atmosphere, use a corrosion inhibiting compound. Stressing anchorages encased in concrete at least 2 in thick do not require a cover.

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Seal the trumpet to the bearing plate and overlap the unbonded length corrosion protection by at least 4 inches. Provide a trumpet of sufficient length to accommodate movements of the structure and the tendon during stressing and testing. For strand tendons, use a trumpet of sufficient length to make a transition from the diameter of the tendon along the unbonded length to the diameter of the tendon at the wedge plate without damaging the encapsulation.

For non-restressable anchorages, completely fill the trumpet with grout following lock-off. For restressable anchorages, use corrosion-inhibiting compounds. Compounds may be placed any time during construction. Compound-filled trumpets shall have a permanent seal between the trumpet and the unbonded length corrosion protection. Place grout after the ground anchor has been tested and stressed to the lock-off load. Provide a temporary seal between the trumpet and the unbonded length corrosion protection on trumpets filled with grout, or fit the trumpet tightly over the unbonded length corrosion protection for a minimum of 4 inches.

(b) Unbonded Length Protection – Provide corrosion protection of the unbonded length by a combination of sheaths, sheath filled with corrosion-inhibiting compound or grout, or a heat-shrinkable tube internally coated with a mastic compound, depending on the tendon class. Completely coat the tendon elements with corrosion-inhibiting compound to fill the void between them and the sheath and fill the interstices between the wires of 7-wire strands. Retain the compound within the sheath.

Provide a corrosion-protective sheath surrounding the unbonded length of the tendon of sufficient length to extend into the trumpet, but not so long as to come into contact with the stressing anchorage during testing. Trim off any excessive protection length.

For pre-grouted encapsulations and all Class I tendons, provide a separate bond breaker or common sheath for supplemental corrosion protection and to prevent the tendon from bonding to the grout surrounding the unbonded length.

(c) Unbonded Length/ Bond Length Transition – Design and fabricate the transition between the corrosion protection for the bonded and unbonded lengths to ensure continuous protection from corrosion attack.

(d) Tendon Bond Length Protection for Encapsulated Tendons – Use a grout-filled plastic encapsulation or a grout-filled, deformed steel tube to protect the tendon bond length of encapsulated tendons. The prestressing steel can be grouted inside the encapsulation prior to inserting the tendon into the drill hole or after the tendon has been placed.

Use centralizers or grouting techniques that ensure a minimum of 0.5 inches of grout cover over the encapsulation.

(e) Coupler Protection – On encapsulated bar tendons (Class I), cover the coupler and any adjacent exposed bar section with a corrosion-proof compound or wax-impregnated cloth tape. Cover the coupler area with Schedule 40 PVC tube, overlapping the adjacent sheathed tendon by at least 1 inch. Seal the two joints with a coated heat-shrink sleeve of at least 6 inches in length, or approved equal. Completely fill the space inside the cover tube with the corrosion-proof compound.

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Do not use strand couplers.

Construction

00596D.40 General – The following describes the requirements for construction of the soldier pile tieback wall.

00596D.41 Drilled Soldier Pile Holes - Drill holes for soldier piles as nearly as practicable to the dimensions, depth and location shown. The Contractor may propose to increase the diameter of the hole at no cost to the Agency. Position the center of the drilled hole at the top and bottom within 3 inches of that shown. During excavation for the drilled holes, frequently check for plumbness, alignment, and dimensions of the shafts. Immediately correct any deviations exceeding the allowable tolerances. Remove all loose material existing at the bottom of the hole after the specified depth is reached. Dispose of materials removed from the shaft excavations according to 00330.41(a-5). Measure hole depth after final cleanout.

Where caving conditions are encountered or where excessive water enters the excavation, install an approved, temporary, protective casing to prevent caving of the soil and to control groundwater. Seal the casing into a stratum of soil that will not cave or admit groundwater flow. Withdraw the temporary casing during grout placement according to 00596D.44.

Complete the drilling excavation in a continuous operation. Place steel pile and concrete immediately after completion of excavation. In no case allow a drilled hole to remain open overnight without the approval of the Engineer.

Remove any natural or manmade object encountered that was not revealed by the Agency's site investigation, and that would cause a significant decrease in the rate of advancement if removed using the techniques and equipment used successfully to excavate the shaft. The Engineer will be the sole judge of the significance of any reduced rate of shaft advancement and the classification of any unexpected obstructions. Removal of unexpected obstructions from the shaft excavation will be paid as Extra Work.

On completion of the drilled pile excavation, clean the bottom of the excavation so that no more than 4 inches of loose material is present. Use appropriate means, such as a cleanout bucket, pump or air lift, to clean the bottom of the drilled shaft excavations.

The Engineer will inspect all excavations before placement of soldier piles and concrete. Immediately upon completion of each soldier pile excavation, notify the Engineer that the excavation is ready for inspection. Following inspection and with the approval of the Engineer, proceed with installation of the soldier pile.

Have available at all times a suitable light for inspection of the excavation throughout its entire length. Also have available at all times a plumb weight and tape to check the vertical alignment and depth of each excavated hole. Correct or replace any excavation not within the specified tolerance at no cost to the Agency. Extend the drilled hole if the Engineer determines that the subsurface materials encountered are not capable of providing the required bearing resistance or differ from those anticipated in the design of the soldier piles.

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00596D.42 Soldier Pile Installation –The Contractor shall ensure that the soldier piles have been fabricated as shown in the plans with plates and holes in correct locations. The Contractor shall ensure that each soldier pile is plumb and in correct horizontal and vertical alignment before pouring concrete. The prefabricated soldier piles shall be placed in the holes and aligned without contact to soil along the sides of the boring prior to general placement of concrete. The contractor may place up to 2 ft of concrete in the bottom of the hole to assist in aligning the soldier pile. The soldier piles shall be blocked or clamped in place at the ground surface prior to placement of concrete.

Soldier piles shall be placed at the locations shown on the plans and shall not deviate by more than 3 in. along the horizontal alignment of the wall. The wall shall not deviate from the vertical alignment shown on the plans by more than 3 in. in each plane. The soldier pile tip shall be installed to within 6 in. of the specified elevation shown in the plans. The Contractor shall provide corrective measures for any wall element that does not meet the tolerance requirements described in this specification. Any proposed corrective measure must be approved by the Engineer in writing.

Splicing of soldier piles shall not be permitted, unless approved by the Engineer. All structural welding of steel and steel reinforcement shall be performed by certified welders qualified to perform the type of welding shown in the plans. All soldier piles shall be cut off to a true plane at the elevation shown in the plans. All cutoff lengths shall remain the property of the Contractor and be properly disposed of.

00596D.43 Soldier Pile CLSM Placement - The Contractor shall be responsible for ensuring that CLSM or concrete fills the area between the webs of soldier beams. Structural concrete may extend above the bottom elevation of the wall lagging with no additional compensation for removal during subsequent construction. Place CLSM from the top of structural concrete to the top of the pile or to the ground surface.

In dry holes where piles are constructed without casing or drilling muds, CLSM and concrete may be placed by free falling from the ground surface down the shaft and around the soldier beam. If casing is used, placement of CLSM or concrete shall begin prior to casing removal. Remove casing, if used in drilling operations, as CLSM or concrete is placed and is still workable.

For piles constructed with slurry or with a water depth greater than 6 in., concrete shall be placed using the tremie method from the bottom of the shaft. Tremie pipes shall be withdrawn slowly as the level of the concrete rises in the hole and the level of the tremie pipe outlet shall never exceed the level of concrete already placed in the boring. Maintain the bottom of the casing at least 5 ft below the top of the concrete during placement operations, unless otherwise permitted by the Engineer.

00596D.44 Lagging – Construct and install timber lagging as shown. Maintain a 1/2 inch gap between adjacent lagging units for drainage.

00596D.45 Special Excavation Requirements - Complete all excavation to the lines and grades shown or as directed.

(a) Do not excavate more than 3 ft below the elevation of any tieback anchor prior to completing the tieback installation including all stressing, testing, and acceptance. The maximum height of any open excavation shall be 5 ft unless otherwise approved by the

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Engineer. The Contractor is responsible for maintaining a stable excavation and safe working conditions.

(b) Do not, under any circumstances, excavate lower than the intended grades or bottom of excavation as shown on the drawings unless approved in writing by the Engineer. The stability of the retaining wall is dependent upon the embedment as shown and it shall not be reduced.

(c) Provide positive drainage of any ground or surface water away from the wall and work area.

(d) Do not place large spoils piles above or below the wall or on adjacent steep slopes, which may cause slope instability. Placement of temporary spoils on slopes is subject to approval of the Engineer.

00596D.46 Tieback Anchor Installation:

(a) **Installation** - Use casing or other methods to prevent loss of ground and collapse of the hole during and after installation where necessary. Place tieback anchors as shown and to the following tolerances:

Tieback Anchor Placement Tolerances

Tieback Inclination Angle ± 3 degrees.
Tieback Orientation ≤ 2 inches in 10 feet.

(b) **Tendon Storage and Handling** - Handle and store tendons so as to avoid damage or corrosion. Use padding under banding for prefabricated tendons to avoid damage to the tendon corrosion protection. Store and handle tendons so as to avoid mechanical damage, corrosion and contamination with dirt or deleterious substances. Store materials delivered prior to time required in a dry, clean, ventilated place, heated if necessary, to prevent accumulation of moisture on the materials or in the wrapping. Do not store on the ground or expose to weather. Rusting sufficient to cause excessive surface roughness, pitting visible to the naked eye, or unevenness, will be cause for rejection. Bent bars and bars/tendons that have surface damage or have been subject to excessive rusting will be rejected. Do not weld tendon components. Protect tendons from any nearby welding operations to avoid touching the tendon with the electrode and to avoid electrical circuits that may cause resistance heating from passing through the tendons. Lift pre-grouted tendons so as to avoid excessive bending, which can debond the prestressing steel from the surrounding grout. Do not expose prestressing steel to excessive heat.

The Engineer will examine each tendon for damage to the encapsulation and the sheathing prior to its insertion into the hole. If the encapsulation is damaged, repair the encapsulation according to the tendon supplier's recommendations. If the sheathing has been damaged, repair it with ultra-high-molecular-weight polyethylene (PE) tape. Wind the tape spirally around the tendon so as to completely seal the damaged area. Make the pitch of the spiral such that it provides a double thick covering.

(c) **Grouting Equipment** - Use grouting equipment that produces a grout free of lumps and undispersed cement. Use a positive displacement pump equipped with a pressure gauge to monitor grout pressures. The pressure gauge shall be capable of measuring

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pressures of at least 150 psi or twice the actual grout pressures used, whichever is greater. Furnish equipment of a size capable of pumping the grout in one continuous operation. Furnish a mixer capable of continuously agitating the grout.

(d) Drilling Anchor Holes - Drill anchor holes at locations, and to the length, inclination and diameter shown on the approved shop drawings. Use a bit or casing no more than 0.125 inch smaller than the hole diameter shown on the approved shop drawings. Locate holes within 3 inches of the location shown on the approved shop drawings. Determine the bond length necessary to develop the lock-off load shown. Refer to project geotechnical reports and boring logs for material descriptions in the bond zone. Clean the holes of loose debris. Utilize a drilling method that establishes a stable hole of adequate dimensions within the tolerances specified. Drilling methods may involve, amongst others, rotary, percussion, rotary/percussive or auger drilling; or percussive- or vibratory-driven casing. Use of hollow-core, self-drilling tendons is not allowed. Case the drilled anchor holes as necessary to prevent sloughing or caving of material into the hole. Locate holes so the longitudinal axis of the drill hole is parallel to the longitudinal axis of the tendon. Alignment tolerance is a maximum of 3 degrees from the locations indicated. Any significant change of drilling equipment, tools or technique requires repeating of performance testing at the Contractor's expense.

Thoroughly clean, or re-drill if necessary, any anchor hole that caves, sloughs, or otherwise does not provide a suitable anchorage as required.

(e) Insertion of Anchors - Place tendons as shown and according to the recommendations of the tendon manufacturer. Insert the tendon into the drill hole to the desired depth without forcing or driving. Control the rate of placement of the tendon into the hole such that the sheathing, coating, and grout tubes are not damaged during installation of the tendon. Do not subject anchor tendons to sharp bends. The bottom end of the tendon may be fitted with a cap or bullnose to aid its insertion into the hole, casing or sheathing.

If the tendon cannot be completely inserted without forcing or driving, remove the tendon from the drill hole and clean or re-drill the hole to permit insertion.

Place centralizers at maximum intervals of 10 feet, with the deepest centralizer located 1 foot from the end of the anchor and the upper centralizer for the bond zone located no more than 5 feet from the top of the tendon bond length. Provide spacers at maximum intervals of 10 feet and may be combined with centralizers.

Use spacers to separate individual steel strands at maximum intervals of 10 feet. A combination centralizer-spacer may be used.

Repair damage to the corrosion protection system that occurs during insertion or, if not repairable, replace the tendon. Reconnect loose spacers or centralizers to prevent shifting during insertion. Patch damaged fusion-bonded epoxy coatings according to the manufacturer's recommendations. If the patch is not allowed to cure prior to inserting the tendon in the drill hole, protect the patched area with tape or other suitable means.

(f) Grouting – Inject grout from the lowest point of the drill hole, before or after insertion of the tendon. Grout may be pumped through grout tubes, casing, hollow-stem augers,

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or drill rods. Record the quantity of the grout and grout pressures. Control the grout pressures and grout quantity to prevent excessive heave or fracturing.

After the tendon is installed, the drill hole may be filled in one continuous grouting operation. Do not use pressure grouting in the free length zone. At the Contractor's discretion, the tendon may be grouted in two stages, with the second stage above the top of the bond length after the ground anchor has been tested and stressed. The grout at the top of the drill hole shall not contact the back of the structure or the bottom of the trumpet.

If the ground anchor is installed in fine-grained soil using drill holes larger than 6 inches in diameter, place the grout above the top of the bond length by tremie after the ground anchor has been tested and stressed. The entire drill hole may be grouted at the same time if the Contractor can demonstrate that the ground anchor system does not derive a significant portion of its load carrying capacity from the material in the unbonded length portion of the ground anchor.

The grout tube may remain in the hole on completion of grouting if the tube is filled with grout.

After grouting, do not load the tendon for a minimum of 3 days.

(f) Anchorage Device Installation – Install the anchor bearing plate and the anchor head or nut perpendicular to the tendon, within ± 3 degrees and centered on the bearing plate, without bending or kinking the prestressing elements. Ensure that wedge holes and wedges are free of rust, grout, and dirt.

Clean and protect the stressing tail and protect from damage until final testing and lock-off. After the anchor has been accepted, cut the stress tail to its final length according to the tendon manufacturer's recommendations.

Extend the corrosion protection surrounding the unbonded length of the tendon up beyond the bottom seal of the trumpet or 4 inches into the trumpet if no trumpet seal is provided. If the protection does not extend beyond the seal or sufficiently far enough into the trumpet, extend the corrosion protection or lengthen the trumpet.

Do not allow the corrosion protection surrounding the unbonded length of the tendon to contact the bearing plate or the anchor head during testing and stressing. If the protection is too long, trim the corrosion protection to prevent contact.

00596D.47 Wall Drainage System – Handle the prefabricated drainage composite according to the manufacturer's recommendations and in such a manner as to ensure the composite is not damaged in any way. Take care during placement of the composite not to trap dirt or excessive dust in the composite that could cause clogging of the drainage system.

Install drainage composite between each pair of soldier piles as shown. Secure the drainage composite tightly against the lagging with the fabric facing the concrete facing. Do not allow concrete of the cast-in-place facing to clog the composite drainage strips.

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Make seams and overlaps of adjacent drainage composite strips according to the manufacturer's recommendations and these specifications. Make splices in the composite with a 6-inch minimum overlap, such that the flow of water is not impeded. Perform repairs according to the manufacturer's recommendations.

Install PVC or other approved drain pipes at the bottom of the wall as shown.

00596D.48 Reinforced Concrete Facing - Construct reinforced concrete wall facing according to Sections 00530 and 00540. Architectural treatment is a fractured fin finish.

00596D.49 Vibration and Displacement Monitoring – Prior to soldier pile and soldier pile with tieback wall construction, the Engineer will be performing a pre-construction (baseline) vertical survey and recording photo and video documentation for the visual condition of the property and associated residential structures for tax lots 32E06BB01102, 32E06BB01300 and 32E06BB01301.

During soldier pile and soldier pile with tieback retaining wall construction, the Engineer will be performing vibration monitoring on these residential structures. The proposed construction vibration monitoring program will include background (base line) readings prior to construction and continuously reading during construction of the soldier pile and soldier pile with tieback retaining wall. Detected vibration readings in excess of 0.3 inches per second will require the contractor to cease operations until construction methods can proceed with vibration levels of 0.3 inches per second or less.

After soldier pile and soldier pile with tieback wall construction is complete, the Engineer will perform a post-construction vertical survey and recording of photo and video documentation for comparison to pre-construction documentation.

Anchor Stressing, Load Testing, and Acceptance

00596D.70 Anchor Stressing - Test each anchor. Do not apply a load greater than 10 percent of the lock-off load to the ground anchor prior to testing. The maximum test load shall be no less than 1.0 times the factored design load (FDL) and shall not exceed 80% of the SMTS (Fpu) of the tendon. Apply the test load simultaneously to the entire tendon. Do not separately stress single elements of multi-element tendons.

Performance-test the first three production anchors installed , and 2% of the remaining production anchors. The Engineer will select locations of the performance test anchors. Proof-test all anchors not performance-tested.

For each test:

- AL is the Alignment Load for the stressing unit.
- FDL is the Factored Design Load. It incorporates the load factor for the critical load combination. See the plans for the specified Factored Design Load, FDL.
- Lock-off Load = FDL = Factored Design Load.
- Test load is 1.0 times the Factored Design Load = $1.0 \times \text{FDL}$.
- At each increment of load, record the movement of the tieback to the nearest 0.001 inches. Take movement measurements at the Alignment Load and at each load increment.

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- Hold the load at each increment just long enough to obtain the movement reading, but not more than 1 minute. Hold the test load for 10 minutes. Record total movements with respect to a fixed reference point at 1, 2, 3, 4, 5, 6, and 10 minutes. If the movement between 1 and 10 minutes exceeds 0.04 inches, maintain the test load for an additional 50 minutes. Record additional tieback movements at 15, 20, 25, 30, 45, and 60 minutes. The time period starts when the pump reaches $1.15 \cdot P$.

00596D.71 Test Equipment:

(a) Jacks, Pumps, and Pressure Gauges – Provide the following:

- A dial gauge or vernier scale capable of measuring to the nearest 0.001 inch to measure the ground anchor movement. The movement measuring device shall have a minimum travel equal to the theoretical elastic elongation plus 2 inches of the total anchor length at the maximum test load and adequate travel so the ground anchor movement can be measured without resetting the device at an interim point.
- A hydraulic jack and pump jack to apply the test load. The jack and the primary pressure gauge shall be calibrated as a unit by an independent firm. Verify that the stressing equipment is accurate within ± 2 percent. Provide calibration certificate that is traceable to the National Institute of Standards and Technology (NIST). Perform the calibration within 60 days of the date the calibration submittals are provided to the Engineer. Do not use the equipment for testing until the Engineer approves the calibration. The primary pressure gauge shall be graduated in 100-psi increments or less. The ram travel shall be at least 2 inches greater than the theoretical elongation of the tendon at the maximum test load.
- A calibrated reference pressure gauge, to be kept at the site to periodically check the production primary pressure gauge. The reference gauge shall be calibrated with the test jack and the primary pressure gauge. Store the reference pressure gauge indoors and do not subject to rough treatment. Recalibrate jack and pressure gauges at no additional cost to the Agency if the load determined by the reference pressure gauge and the load determined by the primary pressure gauge differ by more than five percent.
- An electrical resistance load cell and readout for use in performing extended creep tests.

(b) Stressing Equipment - Provide stressing equipment capable of:

- Stressing the whole tendon in one stroke to the specified Test Load within 75 percent of the rated capacity.
- Stressing the tendon in increments so that the load in the tendon can be raised or lowered in accordance with the test specifications, and allow the anchor to be lift-off tested to confirm the lock-off load.

Provide a pump capable of applying each load increment in less than 60 seconds.

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00596D.72 Load Testing Setup – Set dial gauges with their stems coaxial with the tendon alignment to measure movement of the pulling head. Support gauges on an independent fixed frame, such as a tripod, that will not move as a result of stressing or other construction activities during testing.

Apply the Alignment Load on the tendon prior to setting dial gauges. The magnitude of AL depends on the type and length of the tendon.

Do not re-grip the strands, which would cause overlapping wedge bites. Do not allow wedge bites on the tendon below the anchor head.

Do not stress and test multiple element tendons with single element jacks.

Do not stress anchor before the grout has reached specified strength.

00596D.73 Performance Tests - Conduct performance tests by incrementally loading and unloading the tieback anchor according to the following schedule. Raise the load from one increment to another immediately after recording the ground anchor movement. Measure and record anchor movement to the nearest 0.001 inch with respect to an independent fixed reference point. Monitor the load with the primary pressure gauge. Place the reference pressure gauge in series with the primary pressure gauge during each performance test. At loads other than the maximum test load, hold the load just long enough to obtain the movement reading. Hold the maximum test load for a minimum of ten minutes. Continually adjust jack pressure to maintain a constant load. Start the load-hold period as soon as the maximum test load is applied. Record anchor movement at 1, 2, 3, 4, 5, 6, and 10 minutes. If anchor movement between one minute and ten minutes exceeds 0.04 inches, hold the maximum test load for an additional 50 minutes, and record anchor movement at 15, 20, 25, 30, 45, and 60 minutes.

Performance Test schedule:

AL
0.25*FDL
AL
0.25*FDL
0.50*FDL
AL
0.25*FDL
0.50*FDL
0.75*FDL
AL
0.25*FDL
0.50*FDL
0.75*FDL
1.00*FDL
1.15*FDL Test Load (Hold for minimum 10 minutes)
Reduce to AL

Raise to lock-off load = 1.0* FDL + seating losses

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Lift-off test; adjust to lock-off load

00596D.74 Proof Test – Perform proof tests by incrementally loading the tieback according to the following schedule. Raise the load from one increment to another immediately after recording the ground anchor movement. Measure and record anchor movement to the nearest 0.001 inch with respect to an independent fixed reference point. Hold the maximum test load in a proof test for ten minutes. Adjust jack pressure as necessary to maintain a constant load. Start the load-hold period as soon as the maximum test load is applied and the ground anchor movement is measured. Record anchor movement at 1, 2, 3, 4, 5, 6 and 10 minutes. If the ground anchor movement between one minute and ten minutes exceeds 0.04 inch, hold the maximum test load for an additional 50 minutes, and record the ground anchor movements at 15, 20, 25, 30, 45, and 60 minutes.

Proof Test schedule:

AL
0.25*FDL
0.50*FDL
0.75*FDL
1.00*FDL
1.15*FDL Test Load (Hold for minimum 10 minutes)

Reduce to AL

Raise to lock-off load = 1.0*FDL + seating losses

Lift-off test; adjust to lock-off load

00596D.75 Ground Anchor Acceptance Criteria - The Engineer will analyze the anchor test results and determine whether each anchor is acceptable according to the following:

- A performance-tested or proof-tested ground anchor with a 10 minute load hold is acceptable if:
 - (1) The ground anchor resists the maximum test load with less than 0.04 inch of movement between 1 minute and 10 minutes; and
 - (2) The total elastic movement at the maximum test load exceeds 95 percent of the theoretical elastic elongation of the unbonded length.
- A performance-tested or proof-tested ground anchor with a 60 minute load hold is acceptable if:
 - (1) The ground anchor resists the maximum test load with a creep rate that does not exceed 0.08 inch in the last log cycle of time, and;
 - (2) The total elastic movement at the maximum test load exceeds 95 percent of the theoretical elastic elongation of the unbonded length.
- A ground anchor subjected to extended creep testing is acceptable if:

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- (1) The ground anchor resists the maximum test load with a creep rate that does not exceed 0.08 inch in the last log cycle of time; and
- (2) The total elastic movement at the maximum test load exceeds 95 percent of the theoretical elastic elongation of the unbonded length.

If the initial lift-off reading for any anchor is within ± 5 percent of the designated lock-off load, adjust the tendon load accordingly and repeat the lift-off test.

00596D.76 Procedures for Anchors Failing Acceptance Criteria - Reject and replace all anchors that do not satisfy the minimum apparent free length criteria, at no additional cost to the Agency.

Re-groutable anchors that satisfy the minimum apparent free-length criteria but which fail creep criteria may be post-grouted and retested. Anchors that cannot be post-grouted, and re-groutable anchors that do not pass the acceptance criterion, will be rejected.

In the event that an anchor fails, modify the design and/or construction procedures. These modifications may include, but are not limited to, installing additional anchors, modifying the installation methods, increasing the bond length, reducing the anchor design load by increasing the number of anchors, increasing the total tendon length, or changing the anchor type. Complete design and/or construction modification at no additional cost to the Agency. Submit a description of any proposed modifications to the Engineer in writing. Do not implement proposed modifications until receiving written approval from the Engineer.

00596D.77 Anchor Lock-off – After testing has been completed, set the anchorage to achieve the design lock-off load considering seating losses (i.e., wedge seating).

The magnitude of the lock-off load will be specified by the Engineer, and will not exceed 70 percent specified minimum tensile strength of the tendon (Fpu or SMTS).

Seat the wedges at a minimum load of 50 percent Fpu (or SMTS). If the lock-off load is less than 50 percent Fpu, use shims under the wedge plate and seat the wedges at 50 percent Fpu (SMTS), and remove after seating to reduce the load in the tendon to the design lock-off load. Bar tendons may be locked off at any load less than 70 percent Fpu (SMTS).

Adjust lock-off load using shims. Do not re-grip strand tendons where re-gripping would result in overlapping wedge bites below the anchorage wedge plate.

00596D.78 Anchor Lift-off Test – After transferring the load to the anchorage, and prior to removing the jack, conduct a lift-off test to confirm the magnitude of the load in the anchor tendon. This load is determined by reapplying load to the tendon to lift off the wedge plate (or anchor nut) without unseating the wedges (or turning the anchor nut). This moment represents zero time for any long term monitoring. In the event that the load is removed from the anchor for any reason, repeat the anchor lift-off test procedure.

Measurement

00596D.80 Units of Measurement – The retaining wall will be measured on the area basis and will be the area shown, in a vertical plane, for the wall constructed and accepted. Field measurement of the wall area will not be required. The quantity will be the theoretical area shown in the Schedule of Items for the retaining wall unless changes are ordered in writing

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by the Agency or Engineer. If changes are ordered, an adjustment shall be made only for the quantity difference involved in the ordered plan changes.

No separate measurement will be made for preboring, soldier piles, lagging, excavation, tiebacks, testing, concrete, reinforcement, shoring, footings, or specified backfill.

Excavations and backfill below elevations shown on the plans which have been approved Engineer will be measured according to 00510.80.

No separate measurement for wall drainage materials will be made including geocomposite drainage strips, connector pipes, drain grates, granular drain backfill material and filter fabric, fittings and accessories.

Pile tip elevation is shown in the plans.

The estimated quantities of materials are as follows. These quantities are for estimating purposes only and are not to be used as final bid quantities. The contractor is responsible for determining the actual quantity of each item.

WALL 1

Material	Estimated Quantity	Unit
SOLDIER PILE		
Soldier Piles	1090	ft
Temporary Casing	600	ft
CLSM	122	yd ³
Structural Concrete	51	yd ³
Steel Reinforcement	3674	lb
Structural Excavation	49	yd ³
Timber Lagging	1051	ft ²
SOLDIER PILE WITH TIEBACK		
Soldier Piles	2458	ft
Temporary Casing	930	ft
CLSM	429	yd ³
Structural Concrete	70	yd ³
Tieback Anchors	62	ea
Steel Reinforcement	5048	lb
Structural Excavation	67	yd ³
Timber Lagging	2334	ft ²

Payment

00596D.90 General – Payment for the retaining walls will be made at the contract unit price per square foot for the following pay item:

Pay Item	Unit of Measurement
----------	---------------------

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Soldier Pile Retaining Wall	SF
Soldier Pile with Tieback Retaining Wall	SF
Moment Slab	FT

Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, technical representatives, and incidentals necessary to complete the work as specified.

No separate payment will be made for excavation, shoring, footings, or specified backfill.

The quantities of moment slab will be measured on the length basis from end to end of traffic rail.

Excavations and backfill below elevations shown on the plans which have been approved by the Engineer will be paid according to 00510.94.

No separate payment will be made for anchor testing.

Wall drainage and/or filter systems, including perforated pipe, drain material, geotextile, and drain pipe; reinforcing steel and concrete; and other appurtenances that are not covered by other pay items under the Contract, will be incidental and included in payment made for the retaining wall.

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 is not allowed on the cold planed surface. Before opening the area to traffic, pave the surface according to 00744.51.

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 modified as follows:

00730.11 Emulsified Asphalt - In the paragraph that begins "Obtain samples according to AASHTO T 40..." replace the words "AASHTO T 40" with the words "AASHTO R 66".

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 2.5 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 PG 64-22 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 00810 - METAL GUARDRAIL

Comply with Section 00810 of the Standard Specifications modified as follows:

00810.11 Posts - Replace this section with the following:

Furnish steel guardrail posts meeting the requirements of 00810.10. Wood guardrail posts will not be allowed.

00810.42 – Installation of Post and Anchors

Add the following to the end of this subsection:

Field verify existing soil anchors prior to guardrail post installation. Notify Engineer of any potential conflicts with existing soil anchors 21 calendar days prior to post installation. If existing soil anchor is in conflict with post location, adjust guardrail post location to be at least 6 inches minimum from soil anchor. Guardrail posts for Type 2A rail may be shifted up to 3'-1 ½". No gaps shall be greater than 12'6".

00810.43 – Erection of Rails and Other Components

Add the following to the end of this subsection:

Field cut and drill metal beam rail members to fit adjust guardrail post locations from the existing soil anchor conflict locations, only where necessary.

SECTION 00840 - DELINEATORS AND MILEPOST MARKER POSTS

Comply with Section 00840 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.

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SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 0865 of the Standard Specifications.

SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications.

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	0.05 cu. yd.
Perforated Steel Square Tube Anchor Sign Supports	0.05 cu. yd.

SECTION 00930 - METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications modified as follows:

00930.40(f) Tube Bending - Replace this subsection, except for the subsection number and title, with the following:

For major sign supports, bend tube using induction heating methods according to TPA-IBS-98 *Recommended Standards for Induction Bending of Pipe and Tube*. Provide written bend qualifications that include bending procedures, essential variables, material group, and destructive testing results. Destructive testing results shall include yield strength, tensile strength, and elongation at locations indicated in Table 2-1 of the TPA-IBS-98.

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	98
Perforated Steel Square Tube Anchor Sign Supports	59

SECTION 00940 - SIGNS

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Comply with Section 00940 of the Standard Specifications.

SECTION 01012 - STORMWATER CONTROL, WATER QUALITY BIOFILTRATION SWALE

Section 01012, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01012.00 Scope - This Work consists of furnishing and installing a water quality biofiltration swale as shown.

Materials

01012.10 Materials - Furnish Material meeting the following requirements:

Check Dam, Type 1	00280.15(a)
Drainage Geotextile, Type 1.....	02320
Slope and Channel Liner Matting.....	00280.14(e)
Riprap.....	00390.11
Riprap Geotextile, Type 1.....	02320

01012.12 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)
No. 4	100
No 10	95 - 100
No. 40	40 - 60
No. 100	10 - 25
No. 200	5 - 10

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.

01012.14 Stone Embankment Material - Furnish stone embankment material meeting the requirements of 00330.16 except:

Provide a maximum size between 9 inches and 3 inches.

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No large rock fragments are allowed.

01012.15 Slope and Channel Liner Matting - Furnish channel liner matting meeting the requirements of 00280.14(e) for resistance to shear stresses calculated for a 10-year storm event.

Construction

01012.40 General - Construct water quality biofiltration swale facility as shown. Perform excavation, fine grading, and placement work only when the facility area is dry and only from the top of the swale area. Do not stockpile excavated material in the facility area. Perform work in sequence as follows:

- (a) **Scarify** - Scarify the subsoil area a minimum 12 inches deep.
- (b) **Placement of Water Quality Mixture** - Place the water quality mixture in maximum 12 inch Lifts. Compact each Lift with a water filled landscape roller.
- (c) **Pervious Pavers** - Install pervious pavers for full length of swale and full width of channel bottom. Fasten adjoining paver panels together.
- (d) **Seeding** - Seed according to 01030.13.
- (e) **Slope and Channel Liner Matting** - After seeding install slope and channel liner matting as shown or directed.
- (f) **Check Dams** - Install permanent check dams spaced as shown or directed.

Maintenance

01012.70 Cleaning - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

01012.71 Removal - Remove temporary erosion and sediment control features according to 00280.70 only after water quality vegetation has met the establishment requirements of 01030.60.

Measurement

01012.80 Measurement - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Water Quality Swale (Sta. "S" 12+10 to Sta. "S" 14+00) Quantities:

Item	Quantity
Excavation	74 Cu. Yd.
Drainage Geotextile, Type 1.....	119 Sq. Yd.
Riprap Geotextile, Type 1	9 Sq. Yd.
Water Quality Mixture.....	28 Cu. Yd.
Matting, Type B.....	230 Sq. Yd.

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Check Dam, Type 1 11 Each

Payment

01012.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Water Quality Swale, Sta. 12+10 to Sta. 14+00".

The drainage facility identification number will be inserted in the blank.

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.13(c) Pure Live Seed - Replace this subsection, except subsection number and title, with the following subsection:

Use the PLS specified rate listed in 01030.13(f) for determining PLS application rates. Ensure the PLS application rate meets the PLS specified rate. Apply pre blended seed mixes, with multiple species, at a PLS application rate ensuring all species meet or exceed the PLS specified rate for each species in the seed mix.

PLS application rate for an individual seed species is determined as follows:

PLS specified rate is listed in 01030.13(f)

PLS factor is obtained by multiplying the seed label germination percentage times the seed label purity percentage. Use the purity and germination percentages from the label on actual bags of seed to be used on the Project.

PLS application rate is obtained by dividing the PLS specified rate by the PLS factor.

For a seed mix, make this calculation for each seed species in the mix and then adjust as follows:

Using the seed tag, determine the weight of each seed species in the bag and use this information to find the percentage, by weight, of each seed species is in 1 pound for the pre-blended mix.

Divide the percentage by weight of each seed species, per pound, for the pre-blended mix, by the PLS application rate for that specific seed species.

Determine the highest application rate in the seed mix and apply the seed mix at that application rate.

01030.13(f) Types of Seed Mixes - Add the following to the end of this subsection:

Provide the following seed mix formulas:

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Permanent Erosion Control Seeding Mix No. 1:

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
Elymus glaucus (Blue wildrye)	21.9
Festuca rubra ssp. rubra (Native red fescue)	13.1
Bromus carinatus (California brome)	4.4
Agrostis exarata (spike bentgrass)	4.4
Aruncus dioicus var. acuminatus (goatsbeard)	0.2

* Oregon Certified Seed

Water Quality Seeding, Mix No. 2:

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
Carex obnupta (slough sedge)	1.7
Elymus glaucus (Blue wildrye)	26.1
Hordeum brachyantherum (Meadow barley)	13.0
Bromus carinatus (California brome)	4.3

01030.13(g) Availability - Add the following sentence to the end of this subsection:

Submit the seed and seed mixes to be used on the project according to 00150.37.

Add the following subsection:

01030.15 Mulch - Add the following paragraphs and bullets to the end of this subsection:

Furnish mulch for seeding according to the following:

- Commercially available compost mulch

Furnish straw mulch for all temporary roadside erosion control seeding, except hydromulch may be used under the following conditions:

Spring planting west of the Cascades between March 1 and May 15.
Slopes are steeper than 1V to 1.5H and longer than 16 feet.

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Residential or commercial sites with low erosion potential such as sidewalk, median, or parking lot planter strips.

Projects that have variable slopes may include straw mulch and hydromulch when approved.

01030.40 General - Add the following sentence after the sentence beginning "Notify the Agency...":

Notify the Agency of the acreage to be seeded at least 7 Days before seeding begins.

01030.42 Weed Control - Add the following paragraph and bullets after the paragraph that begins "If a pesticide has been approved for..." and before subsection (a):

The Specified Weeds and plant species to be removed include the following:

Hedera helix (English ivy)

Add the following subsection:

01030.43(c) Seed Application Rates - Determine the seeding application rate according to 01030.13(c). Apply seed mixes at the highest application rate calculated to provide not less than the specified application rate for each individual seed species in the mix.

01030.60 General - Add the following sentence after the last bullet:

The minimum living plant coverage for erosion control and water quality seeding is 85 percent of ground surface.

01030.80 Measurement - Add the following to the end of this subsection:

Soil testing will be measured according to 01040.80

01030.90 Payment - Add the following to the end of this subsection:

Soil testing will be paid for according to 01040.90.

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications.

SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications.

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 (Certified LPA) Clackamas County" published by the Agency, which contain Part 00100 "General Conditions", which deal with the solicitation process and contractual relationships.
- The "2021 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 (Certified LPA) Clackamas County", Part 00100 "General Conditions", is written in the indicative mood, in which the subject is expressed. The "2021 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 Section 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 on line, including through the Oregon Legislative Counsel Committee website (see 00110.05(e)) and through the Oregon Secretary of State Archives Division web site. 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
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
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
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
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
TM	- Test Method (ODOT)
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 Owner 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 require formal approval by the Board of County Commissioners, pursuant to LCRB Rule Division 160, 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 written offer by a bidder on forms furnished by the County to do work stated in the bid documents at the prices quoted. "Bid" is synonymous with "proposal" in the bid documents.

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 ORPIN 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. The date and time for Bid Closing is the same as the date and time for Bid Opening.

Bid Documents- The following documents together comprise the Bid Documents including but 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
- 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)
- INSURANCE CERTIFICATION APPROACH ROAD, UTILITY OR MISCELLANEOUS PERMITS

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 price agreement for Extra Work, Changed Work, field directives, or other changes. A Change Order does not change the contract value, scope, or time until it is incorporated into an Amendment. Change Orders will be agreed upon, in writing, by the County Project Manager and the Contractor's designated representative.

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.

Construction Contracts Unit – Agency's office that administers construction contracts

Contract - The written Contract Documents, including amendments, signed by the Contractor and Clackamas County, which describes the work to be done, the contract amount, and defines the relationships and obligations of the Contractor and the County.

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 Agreement, 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.

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, the Department of Transportation and Development including the Board of County Commissioners, 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.

Legal Holiday - As defined in 00170.65 "Minimum Wage and Overtime Rates for Public Works Projects".

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.

Organic Soil - A Soil with sufficient organic content to influence the Soil properties.

ORPIN – Oregon Procurement Information Network (orpin.oregon.gov).

Owner – Synonymous with Agency.

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 the County's Procurement Department creates 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 Owner's representative who directly supervises the engineering and administration of the 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.

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).

Shop Drawings – Synonymous with Working Drawings.

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 - Synonymous with 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. The Standard Drawings include the ODOT Standard Drawings.

Standard Specifications - "General Conditions for Construction for Clackamas County" published by the Agency and the "2021 Oregon Standard Specifications for Construction", Parts 00200 through 03000, "Technical Specifications", current edition, published by the Oregon Department of Transportation and 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 wing walls, 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.

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 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.

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 and pay a fee. 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 and fee 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 and fee shall be placed in the ODOT Procurement Office Bid Box located in the lobby of:

Oregon Department of Transportation
3930 Fairview Industrial Drive SE
Salem, OR 97302.

- If delivered by mail or parcel delivery service, the application and fee shall be sent to:

ODOT Procurement Office - Construction Contracts Unit, MS# 2-2
3930 Fairview Industrial Drive SE
Salem, OR 97302-1166.

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, and:

As and when applicable, the Contractor shall maintain the certifications required by ORS 279A.107.

00120.05 Requests for Solicitation Documents – 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 2021 Oregon Standard Specifications for Construction, might 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 00110.20)

00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered - Before submitting a Bid, Bidders shall make a careful visual examination of the site of the proposed Work, the Bid Booklet, Plans, and Specifications. Each Bidder shall thoroughly examine and be familiar with legal and procedural documents, General Conditions for Construction for (Certified LPA) Clackamas County, Specifications, drawings, Plans, Addenda (if any), and all other Contract Documents. The submission of a Bid shall constitute an acknowledgment upon which the County may rely, that the Bidder is experienced in the uses and interpretation of Plans and Specifications such as those included in the Contract Documents and has thoroughly examined and is familiar with the Contract Documents.

Bidders shall also contact Utility owners to verify all Utilities' anticipated involvement on the Project Site. Bidders shall also review any subsurface investigation material referenced in 00120.25 that may be available and conduct additional investigation of any unusual condition apparent during the visual site examination. As soon as reasonably practicable after noting any such unusual condition, Bidder shall notify Agency, in writing, of any such unusual condition and the additional investigation undertaken by Bidder. Submission of a Bid will constitute confirmation that the Bidder has examined the Project Site and 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. The failure or neglect of a bidder to receive or examine any of the Contract Documents, perform site investigations and/or other investigations or examinations shall in no way relieve the Bidder from any obligations with respect to the bid or the contract.

Any clarification of Plans and Specifications needed by the Bidder shall be requested in writing through the Engineer. Unless the procurement period is shorter than one week, requests for changes or clarification shall be submitted at least five days prior to the date of Bid Closing. The Agency will respond to each request at least 72 hours prior to the date of Bid Closing. If the Procurement period is less than seven days, requests shall be submitted within one day after the Procurement is issued and the Agency will issue its response to each such request at least 24 hours prior to Bid Closing. Failure to timely request clarification or changes shall be deemed acceptance of all of the terms and conditions of the Procurement. 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- See Section 2, Instructions to Bidders, Article 3 - 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 County reserves the right to make necessary changes or corrections to the Contract Documents at any time prior to the opening of bids via Addenda. The County will notify Bidders whose names and electronic mail (email) addresses appear on the Plan Holder's List, of change or corrections by electronic mail (email). The County may elect to notify Bidders by telephone initially and follow up with an electronic mail notification. All Addenda will be posted to the project's ORPIN listing.

The County is not responsible for failure of Bidders to receive notifications of changes or corrections made by the County, and sent as stated above. Bids opened and found not to be based on the changes or corrections will not be considered and will be deemed non-responsive.

00120.40 Preparation of Bids - :

(a) General:

- (1) **Paper Bids** – See Section 2, Instructions to Bidders, Article 6.
- (2) **Email Bids** – See Section 2, Instructions to Bidders, Article 6.

(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

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) Paper Bid Schedule Entries - Using figures, Bidders shall fill in all blank spaces in the paper Bid Schedule. For each item in the paper 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). Unit prices submitted which contain more than two decimal places, will be truncated by the Agency at the second decimal place to determine the product of the unit price and quantity. No rounding will be considered or paid. Bidders Bid shall also enter the total amount of the Bid obtained by adding amounts for all items in the paper 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 Bid Advertisement. 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.

00120.68 Mistakes in Bids -

General - Clarifications to or withdrawal of a bid after Bid Closing because of an inadvertent mistake in the Bid requires careful consideration by the County to protect the integrity of the competitive bidding system and to assure fairness to all Bidders. Bid corrections or withdrawal by reason of a non-judgmental mistake is permissible, but only to the extent it is not contrary to the interest of the County or the fair treatment of other Bidders. Mistakes in Bids are governed under LCRB Rule C-049-350.

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 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 Agency finds that it is in the public interest to do so (ORS 279C.395).
- The Bid guaranty is insufficient or improper.
- The original Bid Bond form is not used or is altered.
- Pre-Qualification submission requirements are not met.
- 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 two working hours of the time Bids are due to be submitted, or the disclosure form is not complete.
- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.
- 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 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 nonresponsive according to the criteria listed in 00130.10 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 the 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", 2021 Edition, Sections 00200 through 03000, as published by the Oregon Department of Transportation (ODOT).
- "Oregon Standard Drawings" latest edition, as published by ODOT.

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:

(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 - Security deposited by unsuccessful bidders will be returned as soon as practicable after the Bid Opening.

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 use every reasonable and practicable means to avoid damage to property and injury to persons.
- The Contractor shall use no means or methods that will endanger, unnecessarily, either persons or property.
- 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 an Engineer's written order modifying the Work, the Contractor shall perform the Work as modified via approved Change Order, which may be subject to approval as an Amendment.

If an Amendment incorporating changes to the Work 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 pursuant to Amendments shall neither invalidate the Contract nor release the Surety. Payment for changes in the Work shall be made in accordance with 00195.20. Contract Time adjustments shall be made in accordance with 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 or Project Manager 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 - Except as indicated elsewhere in the Contract (e.g. Amendment approval by the BCC), 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.

00150.10 Coordination of Contract Documents - The Contract Documents, including, but not limited to, Amendments, 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
- Schedule of Prices;
- Addenda;
- 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;
- Agreement Form; 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 the Contractor's expense.

(b) Agency 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 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: The Agency, through its designee shall at all times be allowed access to all parts of the operations and work locations of the Contractor, and shall be furnished such information and assistance by the Contractor, or the designated representative or representatives of the Contractor, as may be required to make a complete and detailed inspection.

(a) Inspection by the Engineer - The Engineer may test Materials furnished and inspect Work performed by the Contractor to ensure Contract compliance. The Contractor shall notify the Engineer 24 hours (one full Work Day) in advance for inspection of each portion of the Work.

Contractor shall not begin placing successive Courses or portions of Work until preceding Courses or portions of the Work have been inspected.

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 or via 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 or via email by the time which the email transmittal is electronically received by the Contractor's email inbox;
- At the time of actual receipt or seven 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 three 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
- Via email to the Agency Project Manager;
- 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 of actual receipt via email to the Agency Project Manager;
- At the time of actual receipt or seven 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 three 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 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(2)(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 reasonable accuracy zone according to OAR 952-001-0090(2)(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(5), 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. In addition, prior to construction, the Contractor shall provide to the Engineer videotape showing private property, if any, which may be disturbed during 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.

Upon completion of the requirements of all On-Site Work required under the Contract, Contractor is to promptly remove from the work location, and other property owned or controlled by the Agency, all equipment, materials and other property the Contractor has placed or caused to be placed thereon that is not to become the property of the Agency. It is further understood and agreed that any such equipment, materials and other property that are not removed within 30 days after the day this contract terminates, or within such longer time as may be agreed upon in writing between the Contractor and the Agency, shall become the property of the Agency and may be used or otherwise disposed of by the Agency without obligation to the Contractor or to any party to whom the Contractor may transfer title. Nothing in this section shall be construed as relieving the Contractor from an obligation to clean up, and to burn, remove, or dispose of debris, waste materials, and such, in accord with other provisions of the contract.

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. Only materials, improvements and property free and clear of liens, claims and encumbrances shall be so furnished by the Contractor.

(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 Surfacing, 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 ODOT *Standard Specification for Microcomputer Signal Controller* and errata 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 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. 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 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.

(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.

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. The Contractor shall not take, sell, use, remove or otherwise dispose of any sand, gravel, rock, earth, firewood, and/or other material obtained or produced from within the limits of rights-of-way, gravel pits, rock quarries or other property owned by or held by the Agency unless specially authorized by this contract or by written consent of the Agency.

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. The Contractor shall include in the document containing the property owner's written approval a summary of the requirements of the permits described above, which shall be subject to the Engineer's approval.

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), 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:

- Contract Change Orders;
- Special Provisions;
- ODOT *Laboratory Manual of Test Procedures*;
- MFTP; and
- Standard Specifications.

Nonfield-Tested Materials:

- 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, AWWA, IMSA, ISSA, and UL; and
- Industry standards in the location where the Work is being performed.

Sampling and testing frequencies:

- 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 outlined 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 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.

(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 specified, complete this document (ODOT Form 734-2126) as required by 00160.20 for Federal-aid projects.

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.

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 (\bar{X}) for each constituent:

$$\bar{X} = \frac{\sum X}{n}$$

Where $\sum X$ = summation of sample test values
 n = total number of samples

- (2) Compute standard deviation (sd) for each constituent:

$$sd = \sqrt{\frac{\sum X^2 - n\bar{X}^2}{n-1}}$$

Where $\sum X^2$ = summation of the squares of each sample test value
 \bar{X}^2 = square of the lot arithmetic mean

- (3) Compute the upper quality index (Q_U) for each constituent:

$$Q_U = \frac{USL - \bar{X}}{sd}$$

Where USL (upper specification limit) is the target value plus allowable tolerance

- (4) Compute the lower quality index (Q_L) for each constituent:

$$Q_L = \frac{\bar{X} - LSL}{sd}$$

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 subplot 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:

$$\text{WPF} = (\text{PF}) \times (f_i)$$

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.

$$\text{CPF} = \frac{\sum \text{WPF}}{\sum f_i}$$

Where $\sum \text{WPF}$ = 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
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

PAY FACTOR	REQUIRED QUALITY LEVEL FOR A GIVEN SAMPLE SIZE (n) AND A GIVEN 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

PAY FACTOR	REQUIRED QUALITY LEVEL FOR A GIVEN SAMPLE SIZE (n) AND A GIVEN 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 and 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, 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 Clackamas County Circuit Court for the State of Oregon; 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.

This project is to be constructed in Clackamas County rights of way. There are no separate permits required from Clackamas County to perform the work required under this contract.

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.

00170.06 Federal-Aid Participation - This Project is to be conducted according to the regulations applying to Federal-Aid Highway Projects.

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(d).

(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 (House Bill 3060, 2017) 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. 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 in Oregon*. 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;
- Copy of driver license;
- Vehicle identification number;
- Copy of vehicle registration;
- Motor vehicle license plate number;
- Motor Carrier account number;
- Copy of ODOT Motor Carrier 1A Permit; 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.

00170.67 Fees - The fee required by ORS 279C.825(1) will be paid by the Agency to the Commissioner of the Oregon Bureau of Labor and Industries under the administrative rules of the Commissioner.

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.

- **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 - When federal transportation funding is involved, the liability coverages of 00170.70(a) shall also include the State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation and their respective officers, members 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 Department of Transportation, and their respective officers, members, agents and employees" as a Certificate holder and as an endorsed 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. If requested by Agency, the Contractor shall provide complete copies of insurance policies, endorsements, self-insurance documents and related insurance documents to Agency's representatives responsible for verification of the insurance coverages required by the Contract.

(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) Builders' Risk - If specified by Special Provision, the Contractor shall obtain, at its expense, and keep in effect during the term of the Contract, Builders' 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 State of Oregon as loss payee.

(k) Builder's Risk Installation Floater - 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 labor, 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 labor, 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 State of Oregon, the Owner, the Contractor and Subcontractors as their interests may appear.

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, omissions, or the improper conduct 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, person, or Entity 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, FAX, 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.

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.

This 00170.85 provision shall survive expiration or termination 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(f) 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 Subsection 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 - Under the provisions of ORS 279C.505 and 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;
- Not permit any lien or claim to be filed or prosecuted against the state, county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished;
- Pay to the Revenue Department all sums withheld from the employees pursuant to ORS 316.197; 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 or employee of the Contractor or any Subcontractor 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.

The Contractor must provide, at a minimum, a 24-hour notice to the Clackamas County Engineer or Project Manager in order to perform any work on Saturdays.

(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 Microsoft Project2016 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 Project2016, 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 the current version of Microsoft Project 2016 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.

Submit the following during the preconstruction conference unless otherwise directed:

- The names, addresses, and telephone numbers of two or more persons employed by the Contractor who can be reached day or night to handle emergency matters.
- Subcontractor's list including contact list for each subcontractor with phone numbers and addresses and work to be performed.
- List of personnel authorized to sign change orders and receive progress payment warrants.

A representative of each subcontractor shall be required to attend the pre-construction conference.

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.

(3) Work Day Calculation - The number of Work 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 or Work 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;
- Due to a fire hazard; 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;
- Work stoppage required by the Engineer to determine the extent of Work defects;
- Time for the Contractor to correct the Work defects from date of notification of the defects until the correction work is completed and has been approved by the Engineer;
- 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. The liquidated damages shall constitute payment in full only of damages incurred by the Agency due to the Contractor's failure to complete the Work on time.

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.

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; 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 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 his 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.

(g) No Agency-Provided Weigh Technician - The Contractor must provide a weigh technician. The Agency will not provide one for the Contractor.

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.

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 the Agency 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. The Agency 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.

The Agency 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 Agency-selected index ceases to be available for any reason, the Agency 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% ± of the BV, there will be no adjustment.
- If the MV is more than 110% of the BV, then:

$$PA = (((MV - BV) \div BV) - 0.10) \times (CB \times PIP)$$
- If the MV is less than 90% of the BV, then:

$$PA = (((MV - BV) \div BV) + 0.10) \times (CB \times PIP)$$

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, 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 a regular period each month to be determined at the Preconstruction Conference, the Contractor will make an estimate of the amount and value of pay item work completed and in place. This estimate shall indicate pertinent County contract and purchase order numbers, be signed and shall be submitted to the Engineer or Project Manager for review and approval. The amount of Work completed will be documented and 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 Contractor will make an estimate of the amount and value of acceptable material to be incorporated in the completed work which has been delivered and stored as given in 00195.60(a) for review and approval.

(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 Contractor's reviewed 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. 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, the Agency will deposit the cash retainage withheld in an interest-bearing escrow account as required by ORS 279C.570(2). The Contractor shall execute such documentation and instructions respecting the interest-bearing escrow account as the Agency may require to protect its interests, including but not limited to a provision that no funds may be paid from the account to anyone without the Agency's advance written authorization. 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.

For a contract over \$500,000, if the Contractor requests that the Agency deposit the retainage in an interest-bearing account under ORS 279C.560(5), the Agency will use the "Cash, Alternate A" in this Subsection. For a contract \$500,000 or less, if the Contractor requests that the Agency deposit the retainage in an interest-bearing account under ORS 279C.560(5), the Agency will use an interest-bearing account (in a bank, savings bank, trust company, or savings association) as provided under ORS 279C.560(5).

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) - Upon receipt of an approved retainage surety bond, the Agency will limit the amount of cash retainage withheld to \$10,000, which will be deposited in an interest-bearing escrow account as described in (1) above. The surety bond must be in the bond form provided by the Agency. The bond must be provided by the same Surety that provides the Performance and Payment Bonds.

If the Contractor elects this form of retainage, the Agency will withhold from progress payments up to 5% of the value of the Work accomplished as cash retainage until the retained amount equals \$10,000. After that amount is retained, no further cash retainage will be withheld until the additional required retainage that would have been withheld exceeds the face amount of the retainage surety bond provided. Thereafter, retainage will be withheld from progress payments according to these Specifications. According to 00195.50(b), if at any time the Agency determines that satisfactory progress is not being made on the Work, the Agency may withhold up to 5% of the value of the Work accomplished from subsequent progress payments.

If an acceptable retainage surety bond is provided, the Contractor shall notify all Subcontractors of the existence of the retainage surety bond and shall advise them of their rights under ORS 279C.560(7) and ORS 701.435.

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 shall be released to the Contractor according to 00195.50(d).

(3) Bonds, Securities, and Other Instruments - In accordance with ORS 279C.560, unless the Agency finds in writing that accepting a bond, security or other instrument poses an extraordinary risk that is not typically associated with the bond, security or other instrument, the Agency will approve the Contractor's written request to deposit bonds, securities or other instruments with the Agency or in a custodial account or other account satisfactory to the Agency with an approved bank or trust company, to be held instead of cash retainage for the benefit of the Agency. In such event, 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 shall accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be assigned to or made payable to the Agency and shall be of a kind 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.

The Contractor shall execute and provide such documentation and instructions respecting the bonds, securities and other instruments as the Agency may require to protect its interests. When the Engineer determines that all requirements for the protection of the Agency's interest have been fulfilled, the bonds and securities deposited instead of cash retainage will be released to the Contractor.

(d) Release of Retainage - As the Work progresses, release of the amounts to be retained under (b) of this Subsection will only be considered for Pay Items that have been satisfactorily completed. For purposes of this Subsection, a Pay Item will be considered satisfactorily completed only if all of the Work for the Pay Item is complete and all contractual requirements pertaining to the Pay Item and Work have been satisfied. Work not included in a Pay Item, or which constitutes part of an

uncompleted Pay Item, will not be regarded as satisfactorily completed Work for the purposes of this Subsection.

When the Work is 50% completed and upon written application of the Contractor and written approval of the Surety, the Engineer or Project Manager may reduce or eliminate retainage on remaining progress payments if the Work is progressing satisfactorily. 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;
- 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.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 materials 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 or Project Manager 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 or Project Manager 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 or Project Manager 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 a Force Account 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.

00199.15 Inappropriate Protest or Claim - It shall be presumed that the Contractor submits a protest or claim for additional compensation in good faith, based upon facts which reasonably support the Contractor's position and with full knowledge and understanding of the injury done to the Agency when notice of differing Project Site conditions or claims for additional compensation are not submitted in a timely manner as required under the Contract. Accordingly, the submission of a protest or claim without the concurrent submission of evidence that reasonably supports the protest or claim, or the submission of a protest or claim in an untimely manner will constitute a waiver of the protest or claim.

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 Confirmation of Oral Notice – Not later than the end of the next business day following the day that oral notice of protest is given, deliver written documentation to the Engineer of the oral notice that includes the notice of protest and the areas of disagreement.

(c) Written Notice - File a proper written notice of protest 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 or to the Project, citing specific facts, persons, dates and Work involved;
- Describe the Contractor's proposed alternative to the Work ordered, if any, which will avoid damage to Contractor or to the Project;
- Describe the nature of the damages;
- Cite the specific Contract provision(s), if any, 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 THIS NOTICE REQUIREMENT RENDERS THE NOTICE IMPROPER AND SHALL CONSTITUTE A WAIVER OF ANY CLAIM FOR ADDITIONAL COMPENSATION OR A COMBINATION OF ADDITIONAL COMPENSATION AND CONTRACT TIME FOR ANY PART OF THE PROTESTED WORK.

(d) Engineer's Record and Response – The Engineer will file a copy of each written notice of protest in the Project records and will issue a written response to the protest within fourteen (14) business days of receipt of a

timely filed written notice of protest. The Engineer has no responsibility to evaluate the protest unless the Contractor has timely filed a proper notice submitting all of the above information.

(e) Final Documentation of Claim - Within 45 Calendar Days following completion of the protested work, Contractor shall provide the Engineer with complete documentation of protested work, listing exact materials, equipment and labor used for the work and the dollar amount requested for each. If the claim is accepted, no additional compensation will be awarded based on documentation submitted after this deadline. If the claim is denied or if the Contractor is not satisfied with the decision by the Engineer, the amount claimed by the Contractor in any subsequent Step or proceeding may not exceed the dollar amount requested under this subsection.

(f) Records – Contractor must 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.

(g) 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.

(h) Work to Proceed - In spite of any protest, proceed promptly with the Work ordered by the Engineer.

(i) Evaluation of Protest - The Engineer has no responsibility for evaluating a protest that is not timely filed, or for which adequate supporting documentation has not been made available to the Engineer. Provided the procedures above are followed, the Engineer will promptly evaluate all protests, after the Contractor has fully complied with the requirements described in 00199.20(c), Written Notice. 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.

(j) 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 the written notice, 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 Review Procedure

(a) Engineer Claim Review - 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. The County intends to resolve claims at the lowest possible level.

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 Director finds

the claim has merit, and equitable adjustment will be offered. If the 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 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 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 (1) 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.

CLACKAMAS COUNTY CONCURRENCE

JHowie Digitally signed by: JHowie
DN: CN = JHowie, email = jhowie@clackamas.us
Date: 2021.08.27 13:10:22 -0500

8-27-2021

Capital Projects Supervisor Date

FEDERAL AID NO. C005(111)

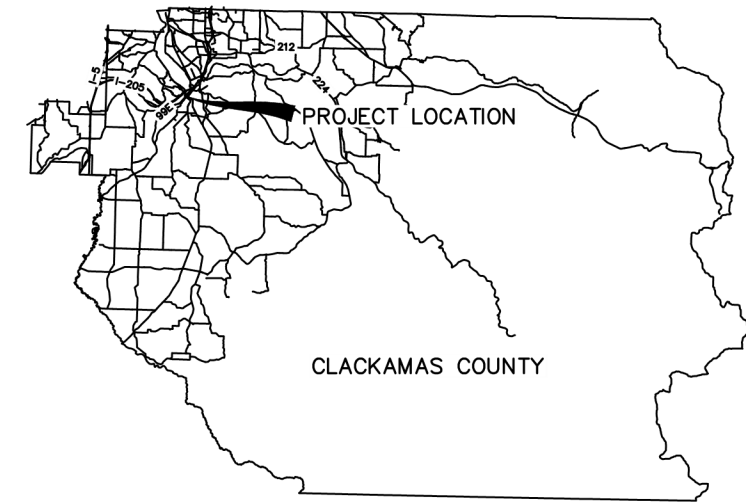
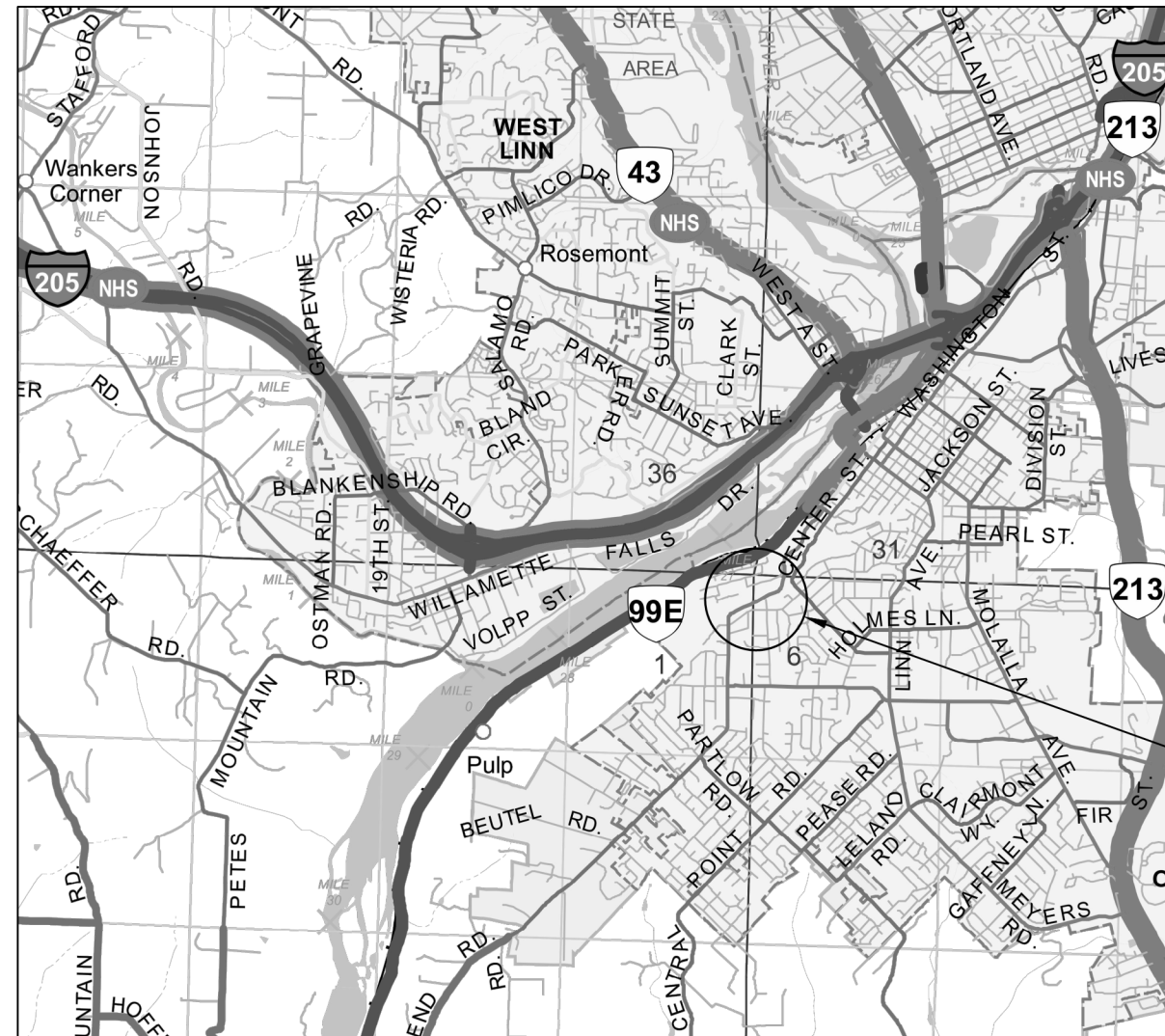


EXPIRES: 12/31/2021

CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

FINAL PS&E PLANS FOR PROPOSED PROJECT
STRUCTURES, PAVING, STORM SEWER, AND GRADING

SOUTH END ROAD AT MP 3.8 CLACKAMAS COUNTY OREGON



OVERALL LENGTH OF PROJECT – 1581 FT (0.30 MILES)

PROJECT LOCATION

INDEX OF SHEETS	
1	COVER SHEET
1A	INDEX OF SHEETS (CONT'D) & STANDARD DRAWING LIST



T. 5S, R. 1E SEC. 03

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 OAR 952-001-0100. YOU MAY OBTAIN COPIES OF THE RULES FROM THE CENTER OR ANSWERS TO QUESTIONS ABOUT THE RULES BY CALLING (503) 232-1987.

NOTE:
PROJECT DATUM ELEVATION IS BASED ON NAVD 1988 DERIVED FROM RTK GPS OBSERVATIONS COORDINATES ARE ORN-83 SPC(FTI)

DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663

COVER SHEET	SOUTH END ROAD AT MP 3.8		FED. AID NO.: C005111
	DATE: AUGUST 2021	PROJECT NO.: 22270	
REVISIONS	CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045		
	DIRECTOR DAN JOHNSON		
DESIGNED BY:	CRCO	DRAFTED BY:	RJXM
CHECKED BY:	MJHI		
NO. DATE:			
Sheet No.	1		

STANDARD DRAWINGS:

OREGON DEPARTMENT OF TRANSPORTATION

- BR208 - 3-TUBE CURB MOUNT RAIL
- BR209 - 3-TUBE CURB MOUNT RAIL TRANSITION

- RD335 - STANDARD STORM SEWER MANHOLE
- RD339 - PIPE TO STRUCTURE CONNECTIONS
- RD364 - CONCRETE INLETS TYPE G-1, G-2, G-2M, AND G-2MA
- RD365 - FRAMES & GRATES FOR CONCRETE INLETS
- RD370 - DITCH INLET TYPE D
- RD401 - MIDWEST GUARDRAIL SYSTEM RAIL HEIGHT ADJUSTMENT
- RD402 - MIDWEST GUARDRAIL SYSTEM TYPES
- RD403 - MIDWEST GUARDRAIL SYSTEM WOOD POST AND BLOCK
- RD404 - MIDWEST GUARDRAIL SYSTEM STEEL POST AND BLOCK
- RD407 - MIDWEST GUARDRAIL SYSTEM (W-BEAM)
- RD416 - MIDWEST GUARDRAIL SYSTEM STANDARD HARDWARE (NUTS, BOLTS, WASHERS AND MISC.)
- RD420 - MIDWEST GUARDRAIL SYSTEM NON-FLARED ENERGY-ABSORBING TERMINAL
- RD701 - DRAINAGE CURBS
- RD1005 - CHECK DAMS TYPE 1, 3 AND 4
- RD1010 - INLET PROTECTION TYPE 2, 3, 6, 7, 10 AND 11
- RD1015 - INLET PROTECTION TYPE 4
- RD1030 - SEDIMENT BARRIER TYPE 2, 3 AND 4
- RD1040 - SEDIMENT FENCE
- RD1055 - SLOPE AND CHANNEL MATTING

- TM200 - SIGN INSTALLATION DETAILS
- TM206 - SIGN BRACING DETAIL
- TM230 - MOUNTING DETAILS FOR REMOVABLE LEGEND, 4" THROUGH 8" LETTERS & NUMBERS
- TM500 - PAVEMENT MARKING STANDARD DETAIL BLOCKS
- TM502 - PAVEMENT MARKING STANDARD DETAIL BLOCKS
- TM521 - DURABLE & HIGH-PERFORMANCE PAVEMENT MARKINGS SURFACE & GROOVE INSTALLED NON-PROFILE
- TM560 - ALIGNMENT LAYOUT: GENERAL
- TM570 - TRAFFIC DELINEATORS
- TM576 - TRAFFIC DELINEATORS INSTALLATION FOR NON-FREEWAYS
- TM635 - BREAKAWAY SIGN & LUMINAIRE SUPPORTS - SUPPORT LOCATION GUIDELINES
- TM670 - WOOD POST SIGN SUPPORTS
- TM671 - 3-SECOND GUST WIND SPEED MAP
- TM681 - PERFORATED STEEL SQUARE TUBE (PSST) SIGN SUPPORT INSTALLATION
- TM687 - PERFORATED STEEL SQUARE TUBE (PSST) ANCHOR FOUNDATION
- TM688 - PERFORATED STEEL SQUARE TUBE (PSST) SLIP BASE FOUNDATION
- TM800 - TABLES, ABRUPT EDGE AND PCMS DETAILS
- TM820 - TEMPORARY BARRICADES
- TM821 - TEMPORARY SIGN SUPPORTS
- TM822 - TEMPORARY SIGN SUPPORTS
- TM840 - CLOSURE DETAILS
- TM844 - TEMPORARY PEDESTRIAN ACCESSIBLE ROUTES
- TM850 - 2-LANE, 2-WAY ROADWAYS



STANDARD DRAWING LIST

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

INDEX OF SHEETS (CONT'D)	
1	COVER SHEET
1A	INDEX OF SHEETS (CONT'D) & STANDARD DRAWING LIST
2 TO 3	TYPICAL SECTIONS
4	GUARDRAIL TERMINAL GRADING DETAIL
5 TO 9	PLAN, PROFILE, AND CONSTRUCTION NOTES
10	WQ SWALE PLAN, PROFILE, AND DETAILS
11	DRAINAGE DETAILS
12 TO 15	EROSION CONTROL PLAN
16 TO 19	RE-VEGETATION PLAN
WA01	SOLDIER PILE WALL NOTES
WA02 TO WA05	RETAINING WALL PLAN AND ELEVATION
WA06	SOLDIER PILE WALL DETAILS
WA07	SOLDIER PILE DETAILS
WA08	CANTILEVER SOLDIER PILE WALL DETAILS
WA09 TO WA10	SOLDIER PILE SCHEDULE
WA11	MOMENT SLAB AND INLET DETAIL
WA12	TIEBACK DETAILS
WA13 TO WA15	RETAINING WALL GEOTECHNICAL DATA
TC-1	DETOUR PLAN
TC-2 TO TC-5	TRAFFIC CONTROL PLAN
SS-1 TO SS-4	STRIPING PLAN

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

DESIGNED BY: CRCO
DRAFTED BY: RJXM
CHECKED BY: MJHI

NO.	DATE	REVISIONS



TYPICAL SECTIONS

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
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150 BEAVERCREEK ROAD
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DIRECTOR

DAN JOHNSON

DESIGNED BY: CRCO

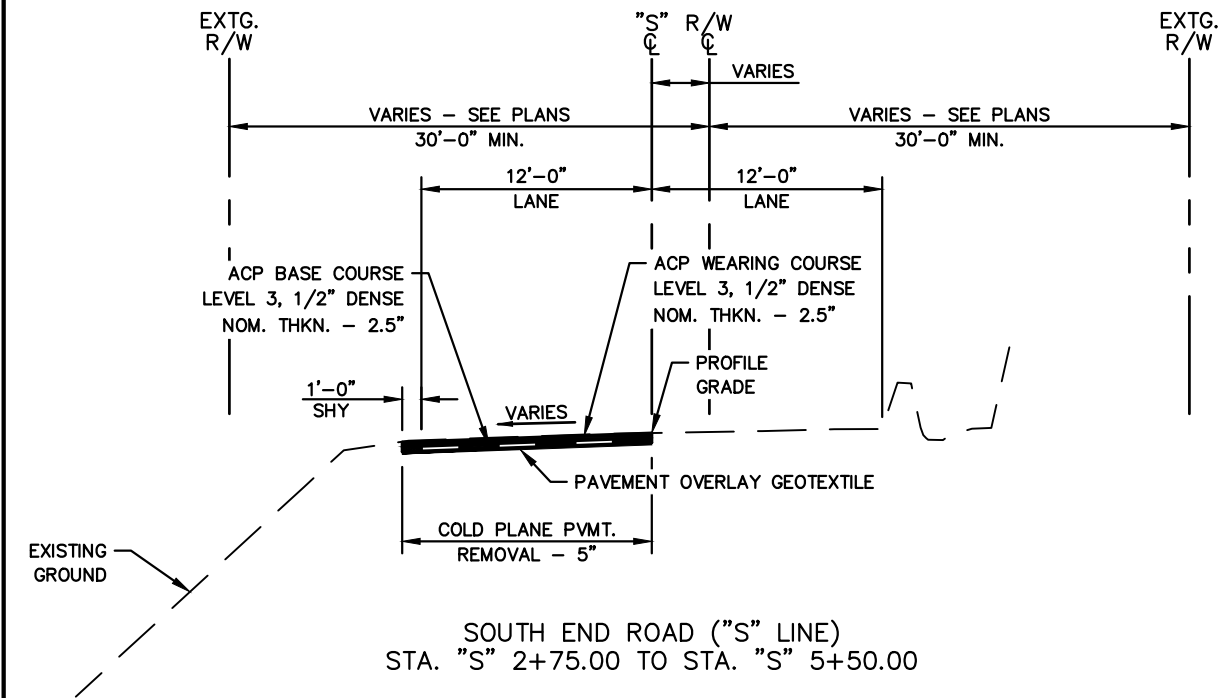
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CHECKED BY: MJHI

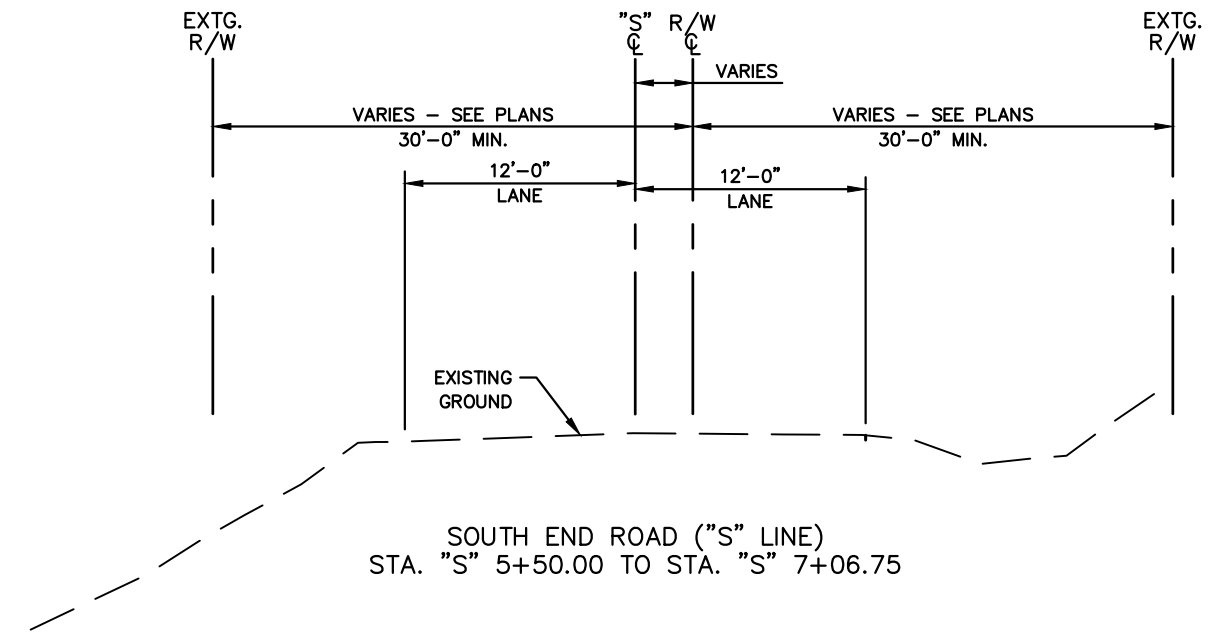
REVISIONS

NO. DATE:

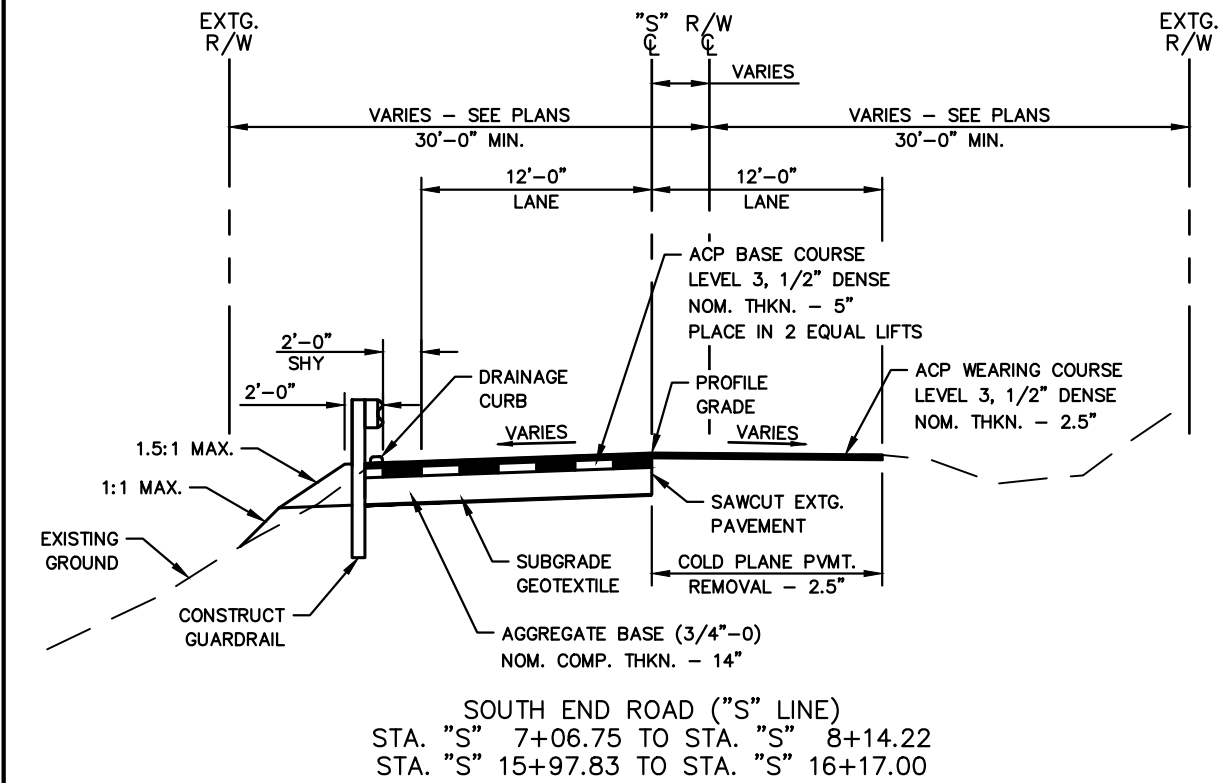
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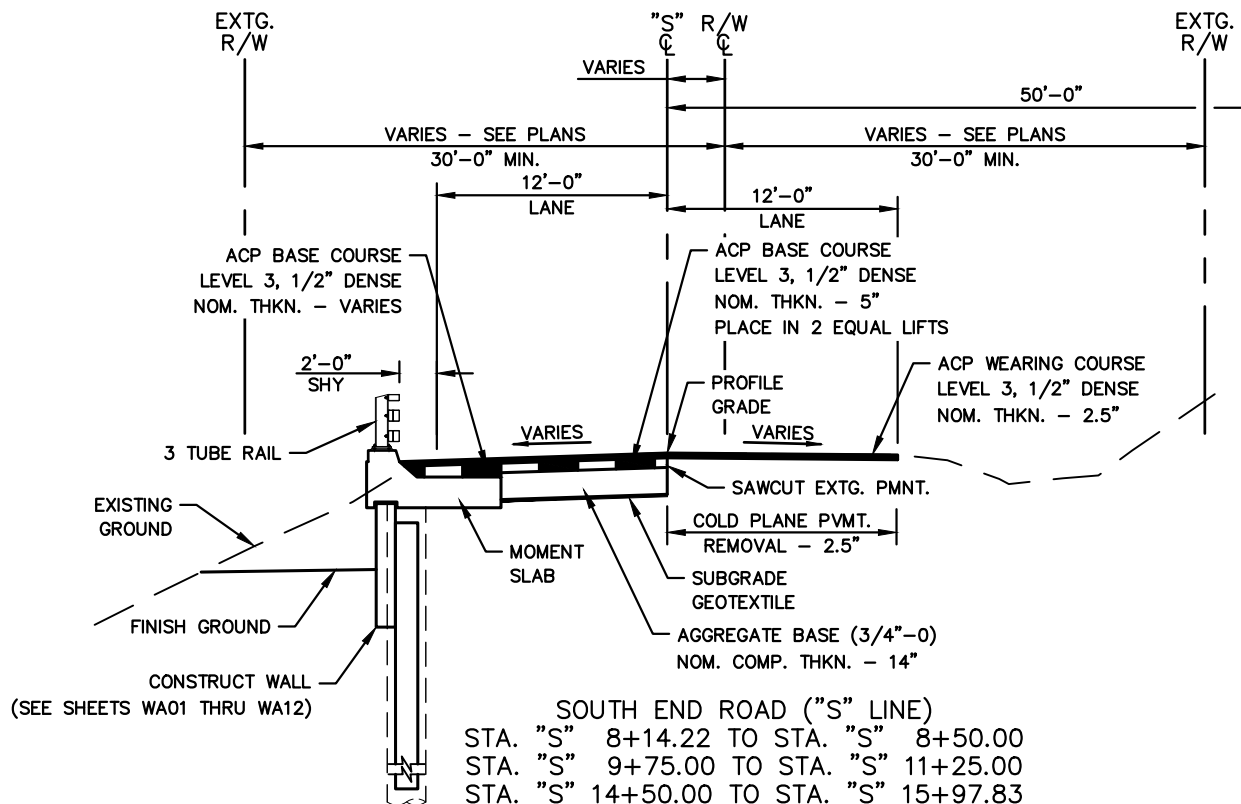
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STA. "S" 2+75.00 TO STA. "S" 5+50.00



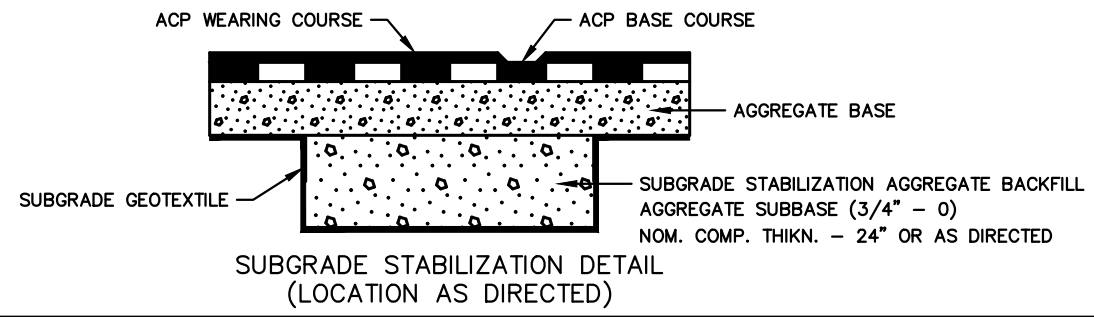
SOUTH END ROAD ("S" LINE)
STA. "S" 5+50.00 TO STA. "S" 7+06.75



SOUTH END ROAD ("S" LINE)
STA. "S" 7+06.75 TO STA. "S" 8+14.22
STA. "S" 15+97.83 TO STA. "S" 16+17.00



SOUTH END ROAD ("S" LINE)
STA. "S" 8+14.22 TO STA. "S" 8+50.00
STA. "S" 9+75.00 TO STA. "S" 11+25.00
STA. "S" 14+50.00 TO STA. "S" 15+97.83



SUBGRADE STABILIZATION DETAIL
(LOCATION AS DIRECTED)

- NOTES:
1. PLACE SUBGRADE GEOTEXTILE IN ALL CONSTRUCTED PAVEMENT AREAS. EVALUATE FOR SUBGRADE STABILIZATION PRIOR TO PLACEMENT OF GEOTEXTILE.
 2. SIDE SLOPES ARE SHOWN AS HORIZONTAL:VERTICAL.





TYPICAL SECTIONS

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
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150 BEAVERGREEK ROAD
OREGON CITY, OR 97045

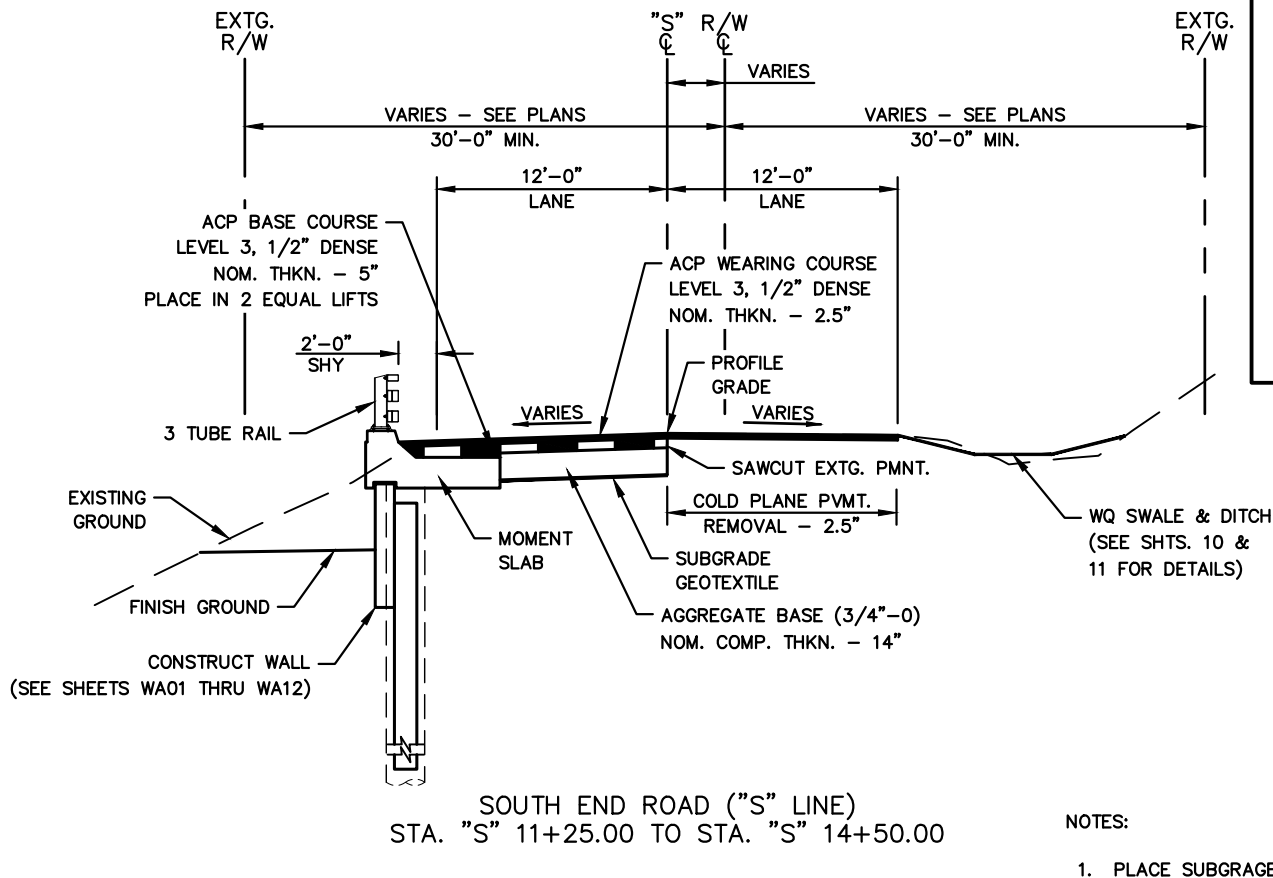
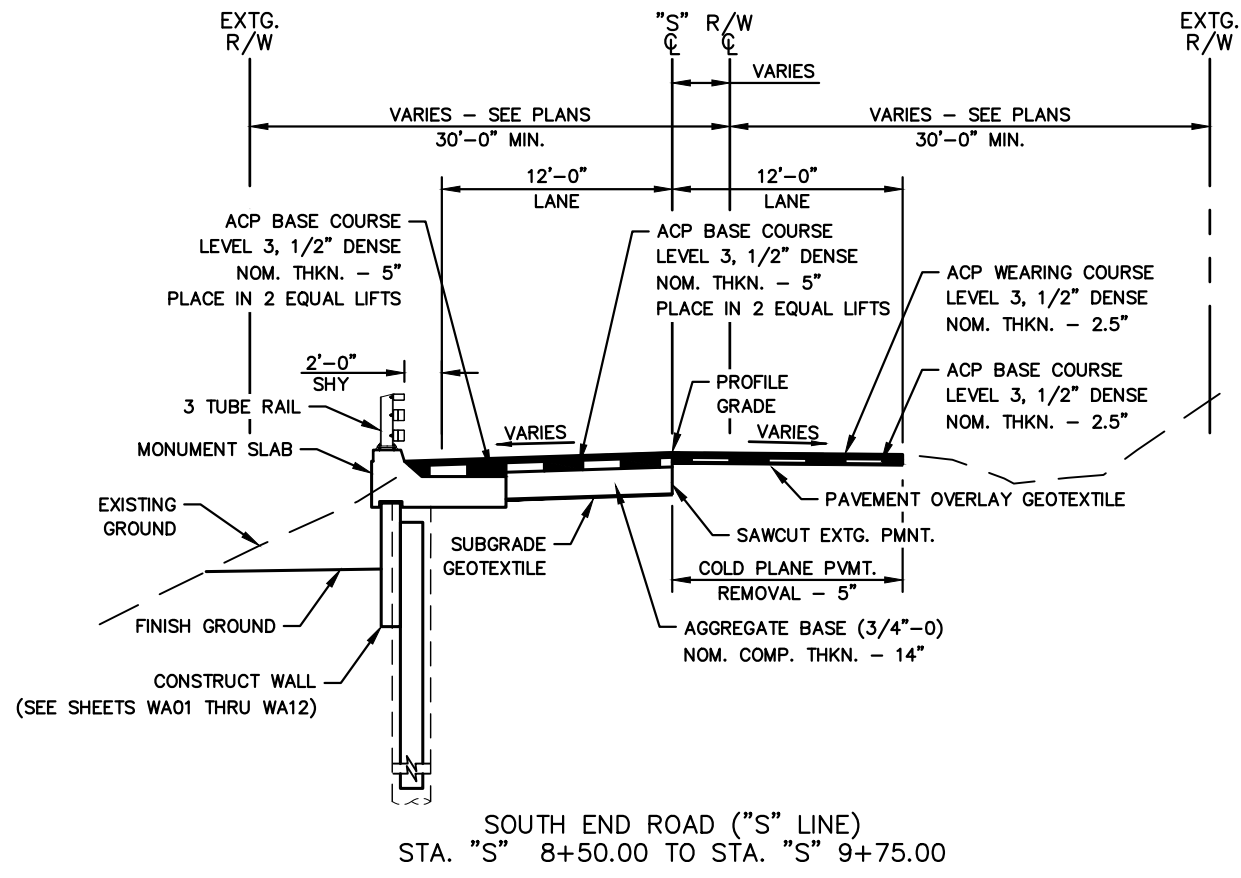
DIRECTOR

DAN JOHNSON

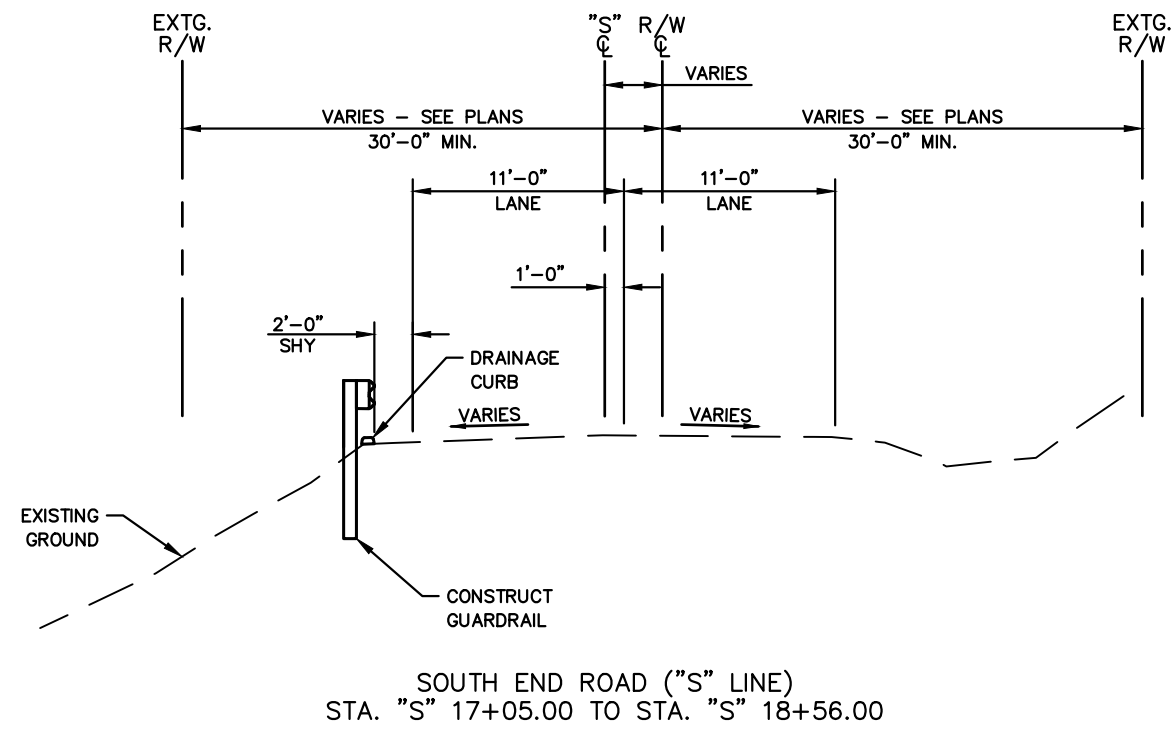
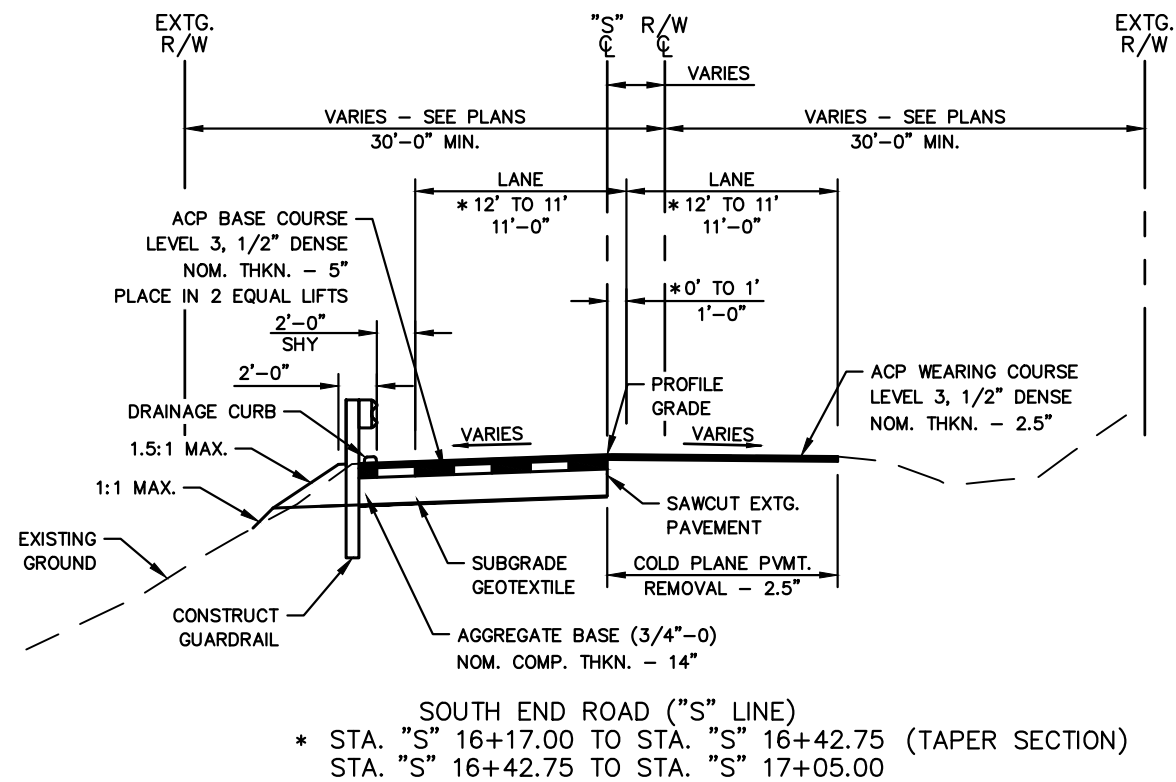
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REVISIONS

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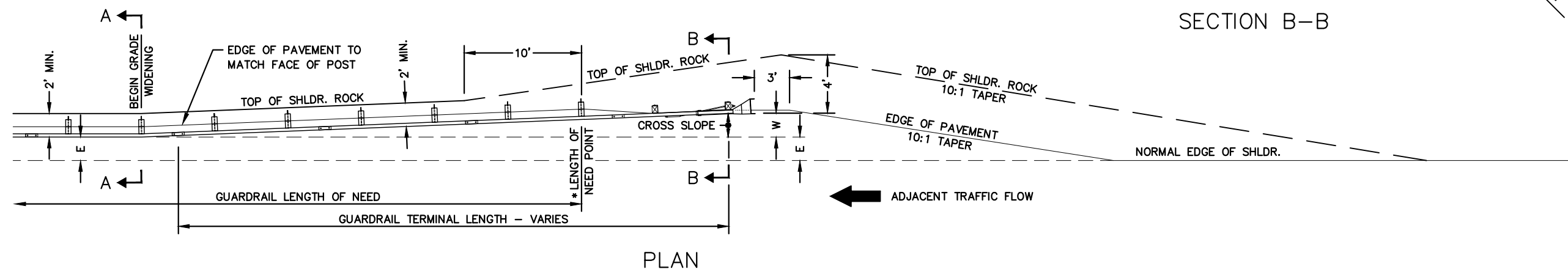
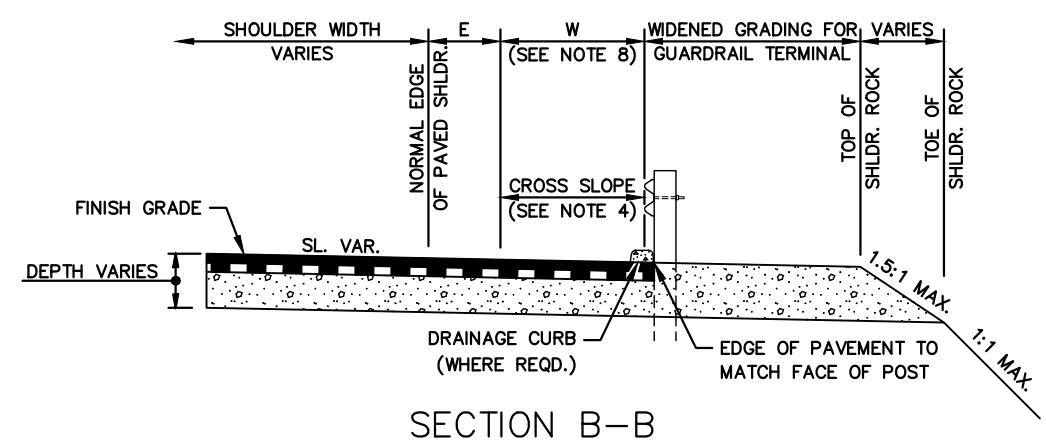
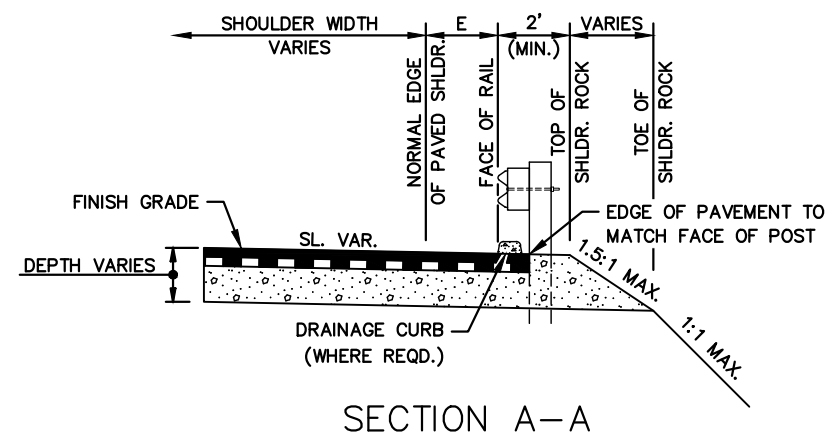
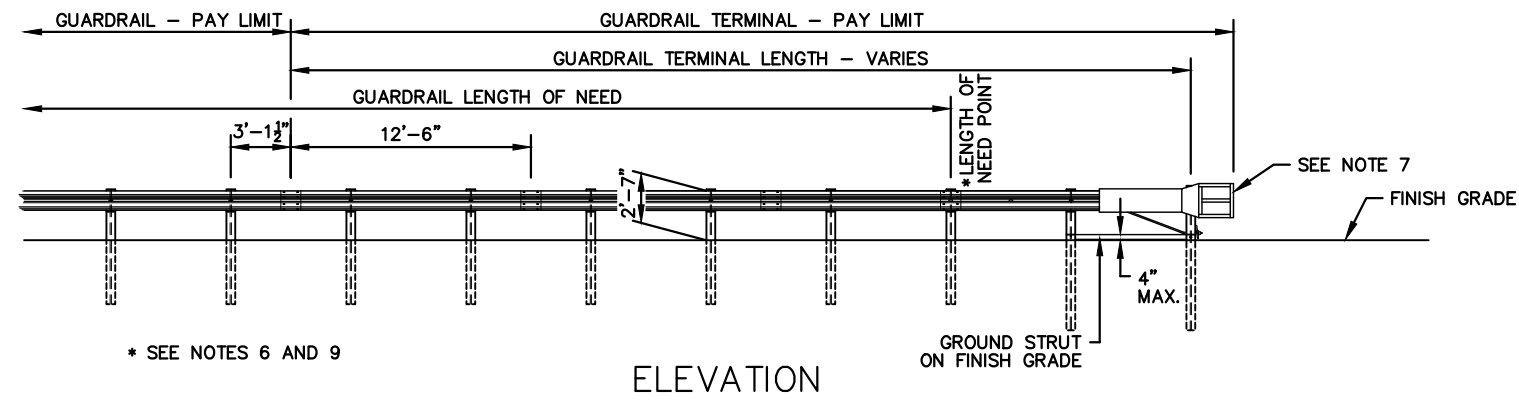


- NOTES:
1. PLACE SUBGRADE GEOTEXTILE IN ALL CONSTRUCTED PAVEMENT AREAS. EVALUATE FOR SUBGRADE STABILIZATION PRIOR TO PLACEMENT OF GEOTEXTILE.
 2. SIDE SLOPES ARE SHOWN AS HORIZONTAL:VERTICAL.





GUARDRAIL TERMINAL GRADING DETAIL
 SOUTH END ROAD AT MP 3.8
 DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111



GENERAL NOTES:

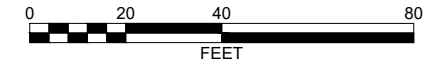
1. USE DETAILS SHOWN AS A GENERAL GUIDE SINCE MANUFACTURER'S DETAILS MAY VARY. INSTALL A GUARDRAIL TERMINAL SYSTEM THAT MEETS MASH REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS. ENSURE THAT GUARDRAIL TERMINAL MEETS APPROPRIATE TEST LEVEL FOR THE PROJECT.
2. SEE APPROPRIATE GUARDRAIL STANDARD DRAWING(S) FOR DETAILS NOT SHOWN. SEE PROJECT PLANS FOR DETAILS NOT SHOWN. SEE STD. DWG. RD701 FOR DRAINAGE CURBS, WHERE REQUIRED. E=2' OR AS SHOWN ON PROJECT PLANS.
3. GUARDRAIL NON-FLARED TERMINAL SHALL BE INSTALLED WITH A MIN. 1 FOOT OFFSET ENSURING THAT THE END PIECE IS ENTIRELY OFF NORMAL SHLDR.
4. CROSS SLOPE TO MATCH ADJACENT ROADWAY CROSS SLOPE (PREFERRED). IF REQUIRED, MAXIMUM SHOULDER SLOPE 10% FOR GUARDRAIL WIDENING. IF REQUIRED, MAXIMUM GRADE BREAK AT NORMAL EDGE OF SHOULDER 8%.
5. ON TWO WAY TWO LANE HIGHWAYS, BOTH ENDS OF GUARDRAIL RUNS SHALL BE PROVIDED WITH A TERMINAL FLARED OR NON-FLARED. PAVING OF WIDENED SHLDR. TO THE FACE OF POSTS ON BOTH ENDS OF GUARDRAIL RUNS IS REQUIRED.
6. PROVIDE GUARDRAIL TERMINAL FROM ODOT'S QPL. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS (POST COUNT VARIES). PROVIDE SHOP DRAWINGS TO ENGINEER.
7. INSTALL A REFLECTORIZED OBJECT MARKER ON HEAD OF EVERY GUARD RAIL TERMINAL WITH "W" 4 FEET OR LESS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
8. "W" DISTANCE IS MEASURED TO FACE OF GUARDRAIL AT END POST, EXCLUSIVE OF END PIECE.
9. LENGTH OF NEED POST LOCATION VARIES BY MANUFACTURER.

CLACKAMAS COUNTY
 DEPT. OF TRANSPORTATION
 AND DEVELOPMENT
 150 BEAVERCREEK ROAD
 OREGON CITY, OR 97045
 DIRECTOR
 DAN JOHNSON

DESIGNED BY: CRCO
 DRAFTED BY: RJXM
 CHECKED BY: MJHI

NO.	DATE	REVISIONS

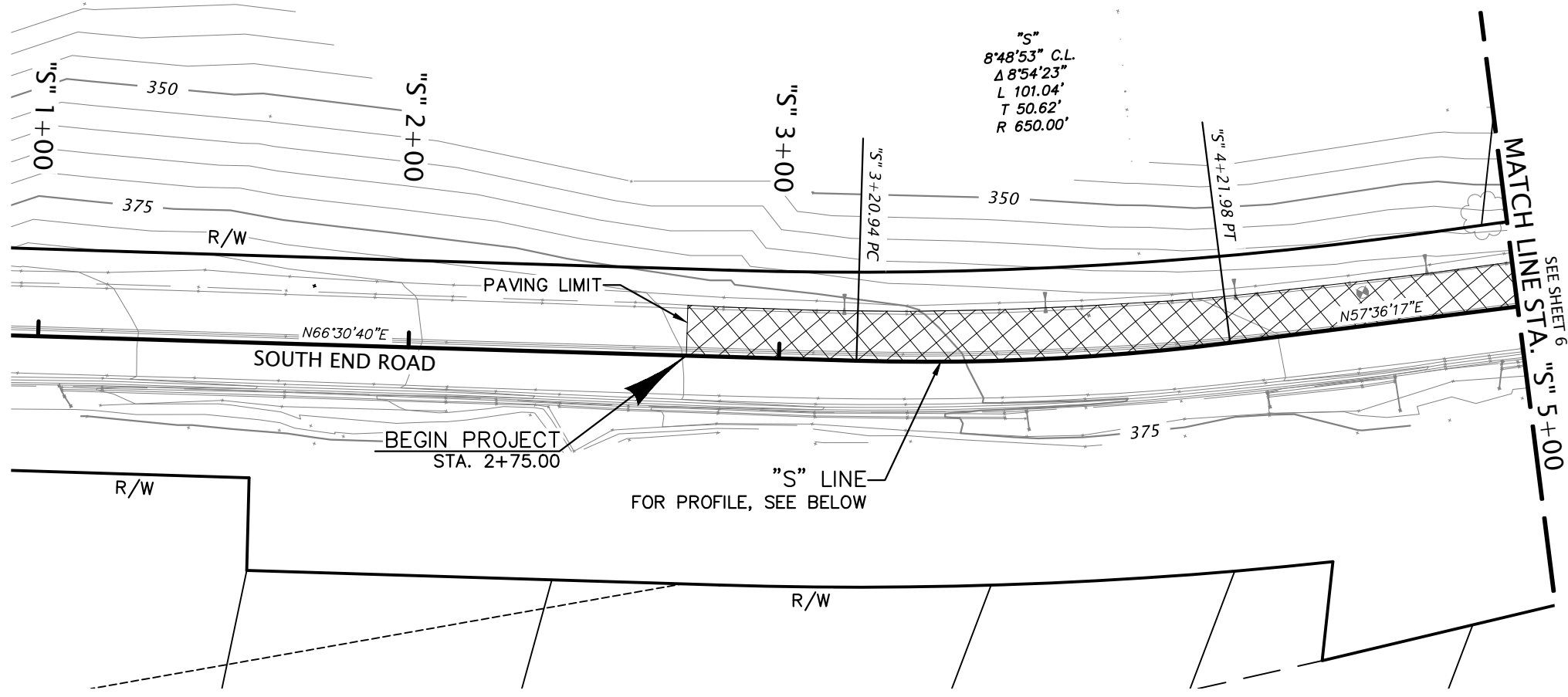
DAVID EVANS AND ASSOCIATES INC.
 2100 SW River Parkway
 Portland Oregon 97201
 Phone: 503.223.6663



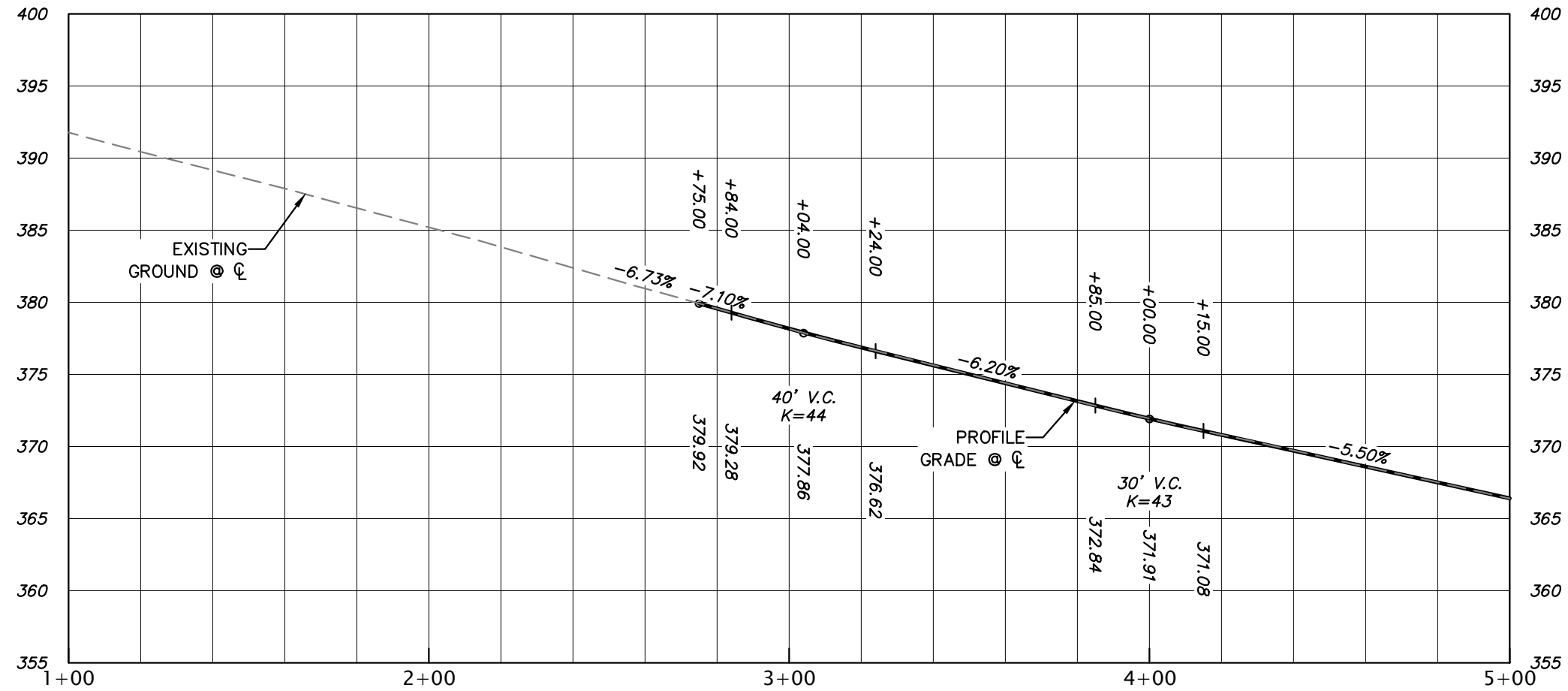
REGISTERED PROFESSIONAL ENGINEER
88394PE

OREGON
SEPT. 11, 2018
CONOR R. COSTIGAN

EXPIRES: 12/31/2021



"S" LINE - CENTERLINE PROFILE



COLD PLANE PAVEMENT REMOVAL - 5"

DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663

PLAN, PROFILE, AND CONSTRUCTION NOTES

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

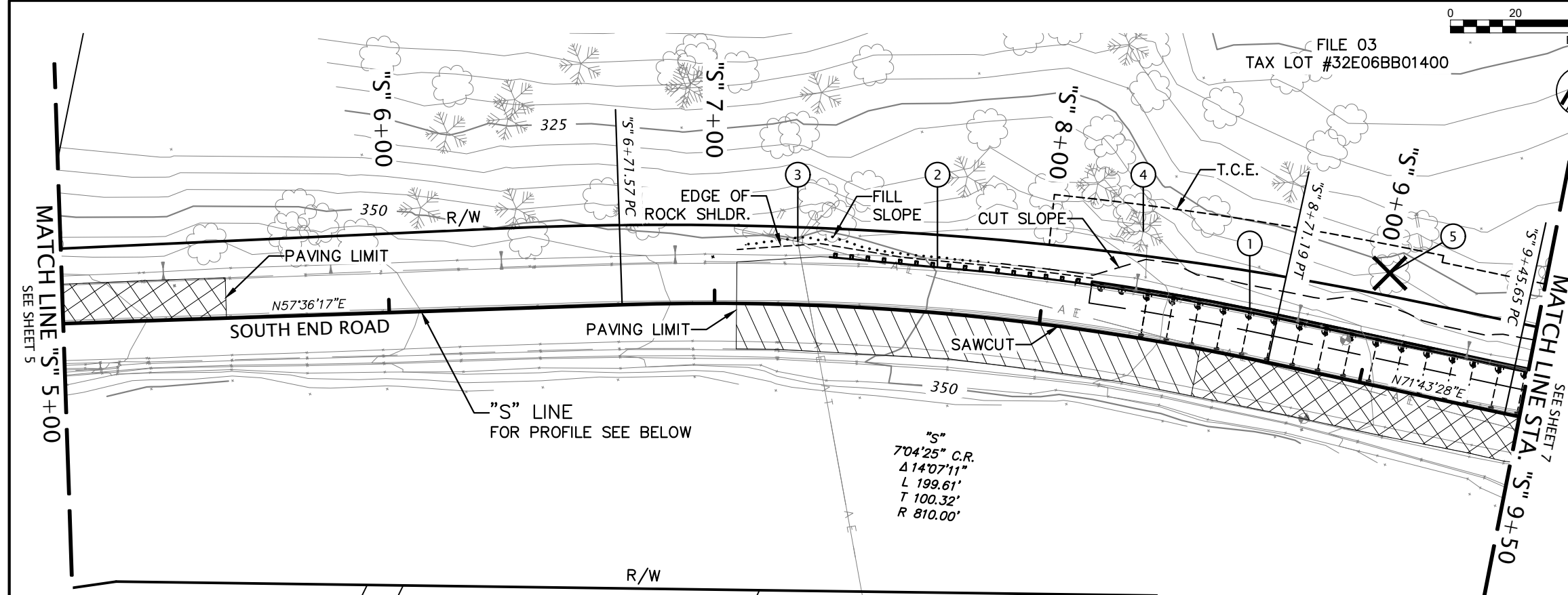
CLACKAMAS COUNTY

DAN JOHNSON
DIRECTOR

DESIGNED BY: CRCO
DRAFTED BY: RJXM
CHECKED BY: MJHI

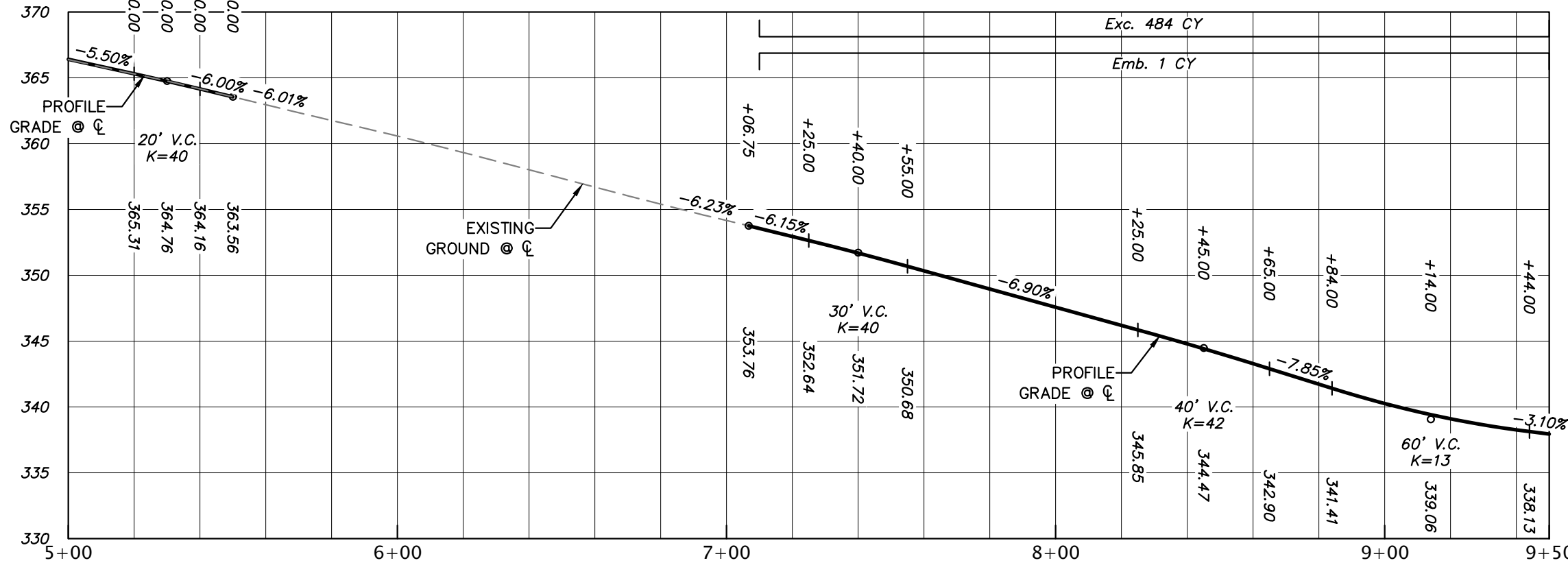
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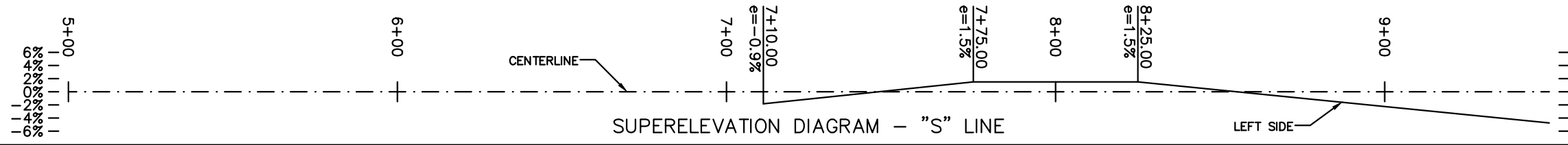


- ① CONSTRUCT TIE BACK SOLDIER PILE WALL (SEE WA SHEETS FOR DETAILS)
- ② STA. "S" 7+34.67 TO "S" 8+14.22, LT. CONST. GUARDRAIL, TYPE 2A - 50' CONST. GUARDRAIL, TYPE 3 - 12.5' CONST. GUARDRAIL TERMINAL, NON-FLARED W=1', E=2' TEST LEVEL 3 CONST. GUARDRAIL TRANSITION TO 3-TUBE CURB MOUNT RAIL USE 8-FOOT POSTS CONST. DRAINAGE CURB - 81' (FOR DETAILS, SEE STD. DWG. BR209, RD401, RD402, RD403, RD404, RD407, RD416, RD420, & RD701)
- ③ PRESERVE AND PROTECT UTILITY POLE
- ④ PRESERVE AND PROTECT 30" DIA. FIR TREE
- ⑤ REMOVE SIX 14" TO 24" DIA. MAPLE TREES (AS NECESSARY)

"S" LINE - CENTERLINE PROFILE



SUPERELEVATION DIAGRAM - "S" LINE



GENERAL NOTE:
TREES OR PORTION OF TREES WITHIN COUNTY R/W OR T.C.E. CAN BE TRIMMED TO ACCOMMODATE CONTRACTOR EQUIPMENT. NO TREE TRIMMING OR REMOVAL IS ALLOWED OUTSIDE OF COUNTY R/W OR THE DEFINED T.C.E., OR FOR TREES SPECIFICALLY IDENTIFIED FOR PROTECTION.

- COLD PLANE PAVEMENT REMOVAL - 2.5"
- COLD PLANE PAVEMENT REMOVAL - 5"

DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
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CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

PLAN, PROFILE, AND CONSTRUCTION NOTES

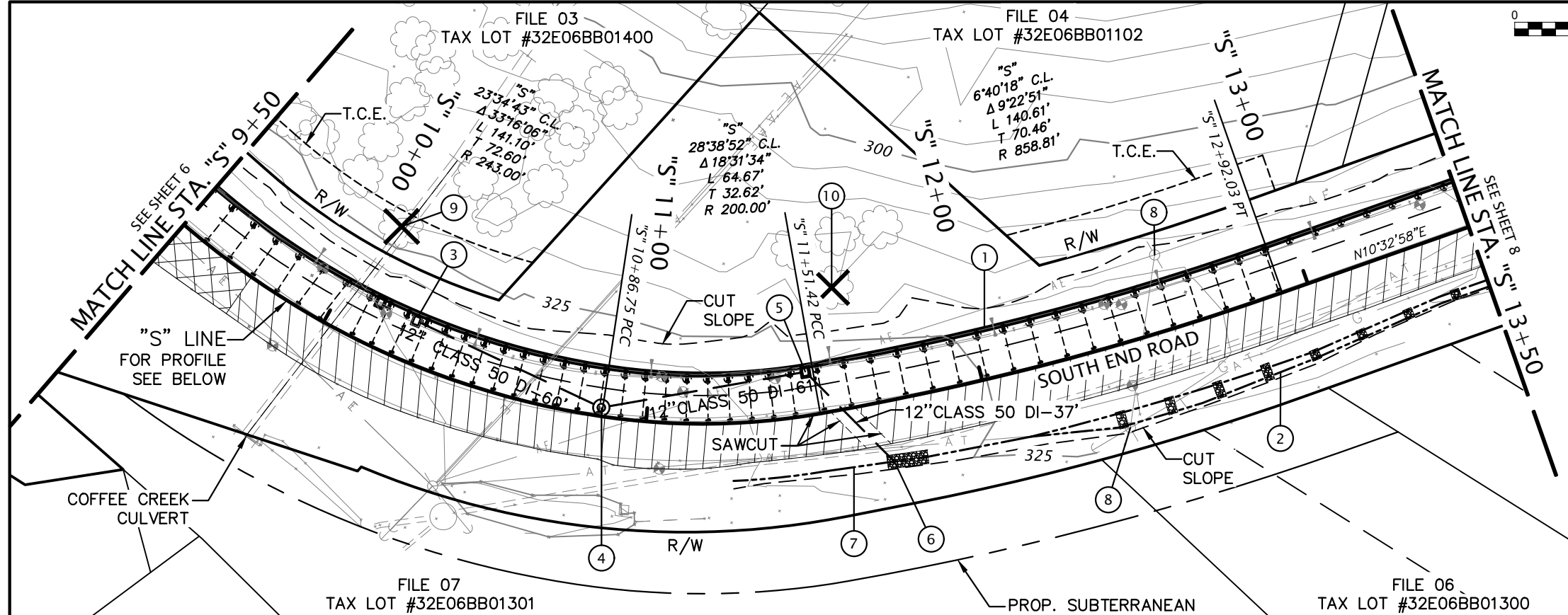
SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

NO.	DATE	REVISIONS

DESIGNED BY: CRCO
DRAFTED BY: RJXM
CHECKED BY: MJH

Sheet No. **6**

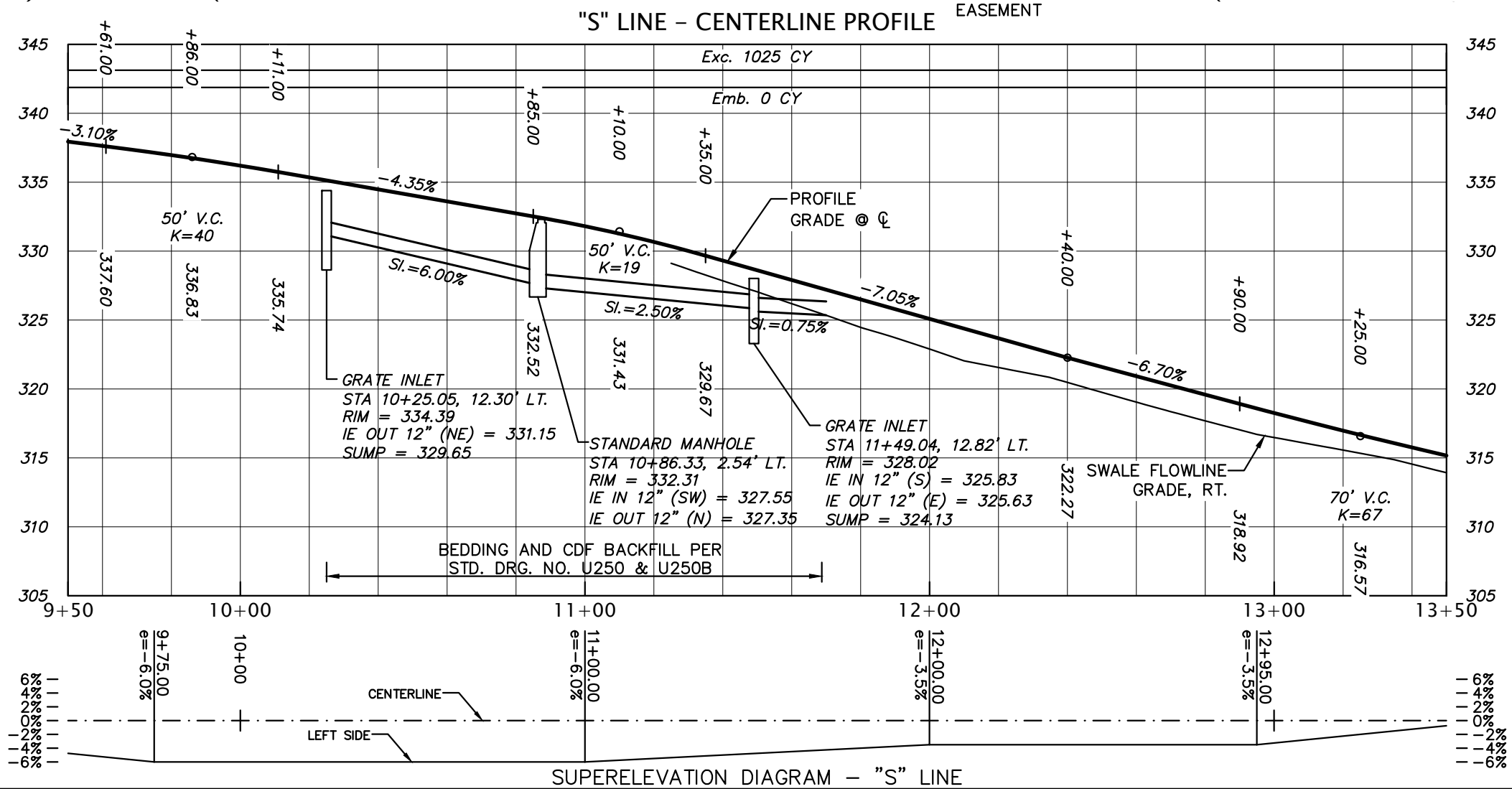


REGISTERED PROFESSIONAL ENGINEER
88394PE

OREGON
SEPT. 11, 2018
CONOR R. COSTIGAN

EXPIRES: 12/31/2021

- ① CONSTRUCT TIE BACK SOLDIER PILE WALL (SEE WA SHEETS FOR DETAILS)
- ② CONSTRUCT WQ SWALE (SEE SHEET 10 FOR DETAILS)
- ③ STA. "S" 10+25.05, 12.30' LT. CONST. TYPE "G-1" INLET W/ 1.5' SUMP INSTALL 12" DI STORM SEW. PIPE - 60' (SEE STD. DRG. NO. RD364 AND RD365)
- ④ STA. "S" 10+86.33, 2.54' LT. CONST. STANDARD MANHOLE INSTALL 12" DI STORM SEW. PIPE - 61' (SEE STD. DRG. NO. RD335 AND RD356)
- ⑤ STA. "S" 11+49.04, 12.82' LT. CONST. TYPE "G-1" INLET W/ 1.5' SUMP INSTALL 12" DI STORM SEW. PIPE - 37'
- ⑥ STA. "S" 11+70.00, 20.73' RT. IE OUT 12" = 325.35 CONST. RIPRAP BASIN (SEE SHEET 11 FOR DETAILS)
- ⑦ CONSTRUCT WQ SWALE & DITCH (SEE SHEETS 10 & 11 FOR DETAILS)
- ⑧ RELOCATE UTILITY POLE (BY OTHERS) - 2
- ⑨ REMOVE 20" DIA. MAPLE TREE (AS NECESSARY)
- ⑩ REMOVE THREE 16" TO 20" DIA. MAPLE TREES (AS NECESSARY)



GENERAL NOTE:
TREES OR PORTION OF TREES WITHIN COUNTY R/W OR T.C.E. CAN BE TRIMMED TO ACCOMMODATE CONTRACTOR EQUIPMENT. NO TREE TRIMMING OR REMOVAL IS ALLOWED OUTSIDE OF COUNTY R/W OR THE DEFINED T.C.E., OR FOR TREES SPECIFICALLY IDENTIFIED FOR PROTECTION.

- COLD PLANE PAVEMENT REMOVAL - 2.5"
- COLD PLANE PAVEMENT REMOVAL - 5"

DAVID EVANS AND ASSOCIATES INC.
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CLACKAMAS COUNTY
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150 BEAVERCREEK ROAD
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DAN JOHNSON
DIRECTOR

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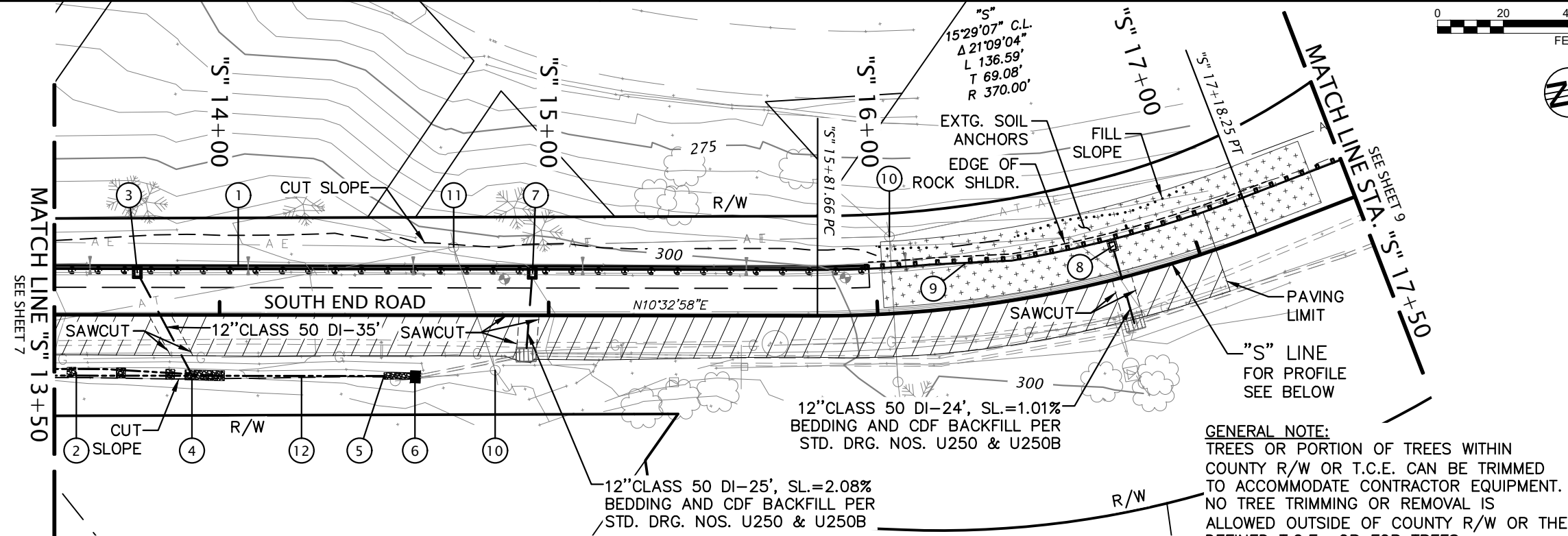
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PLAN, PROFILE, AND CONSTRUCTION NOTES

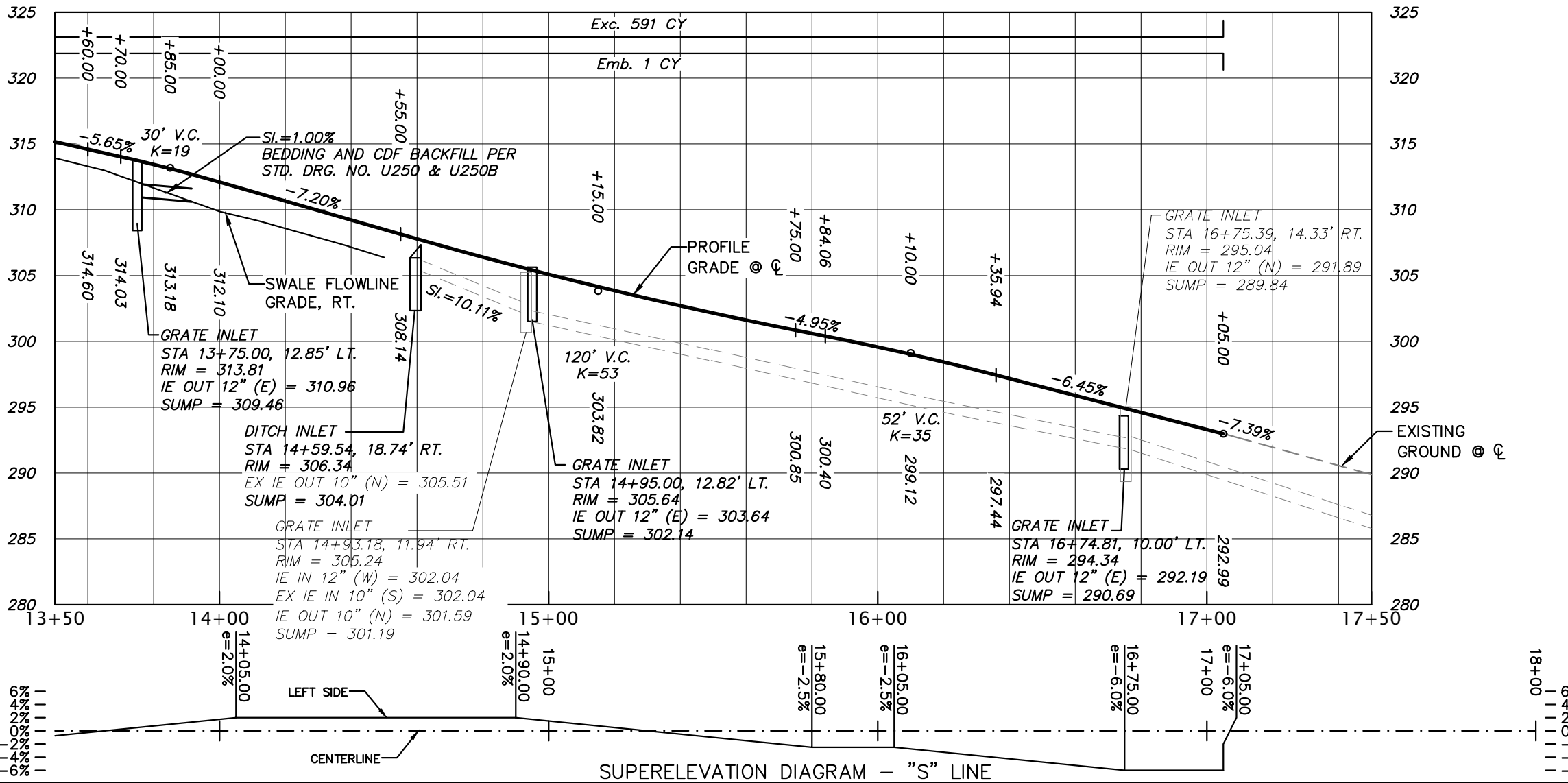
SOUTH END ROAD AT MP 3.8

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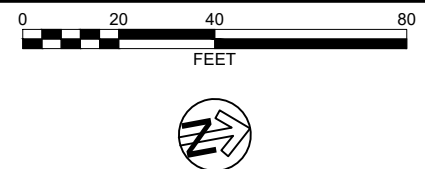
Sheet No. 7



"S" LINE - CENTERLINE PROFILE



SUPERELEVATION DIAGRAM - "S" LINE



- ① CONSTRUCT TIE BACK SOLDIER PILE WALL (SEE WA SHEETS FOR DETAILS)
- ② CONSTRUCT WQ SWALE (SEE SHEET 10 FOR DETAILS)
- ③ STA. "S" 13+75.00, 12.85' LT. CONST. TYPE "G-1" INLET W/ 1.5' SUMP INSTALL 12" DI STORM SEW. PIPE - 35'
- ④ STA. "S" 13+91.53, 18.06' RT. IE OUT 12" = 310.61 CONST. RIPRAP BASIN (SEE SHEET 11 FOR DETAILS)
- ⑤ STA. "S" 14+50.00, 18.50' RT. CONST. RIPRAP BASIN (SEE SHEET 11 FOR DETAILS)
- ⑥ STA. "S" 14+59.54, 18.74' RT. CONST. TYPE "D" DITCH INLET CONNECT TO EXTG. CULVERT
- ⑦ STA. "S" 14+95.00, 12.82' LT. CONST. TYPE "G-1" INLET W/ 1.5' SUMP INSTALL 12" DI STORM SEW. PIPE - 25', SI. = 2.08%, CONNECT TO EXTG. INLET
- ⑧ STA. "S" 16+74.81, 10.00' LT. CONST. TYPE "G-1" INLET W/ 1.5' SUMP INSTALL 12" DI STORM SEW. PIPE - 24', SI. = 1.15%, CONNECT TO EXTG. INLET
- ⑨ STA. "S" 15+97.83 TO "S" 18+56.00, LT. CONST. GUARDRAIL, TYPE 2A - 175' CONST. GUARDRAIL, TYPE 3 - 12.5' CONST. GUARDRAIL TRANSITION TO 3-TUBE CURB MOUNT RAIL USE 8-FOOT POSTS CONST. DRAINAGE CURB - 206' (FOR DETAILS, SEE STD. DWG. BR209, RD401, RD402, RD403, RD404, RD407 RD416, RD420 & RD701)
- ⑩ PRESERVE AND PROTECT UTILITY POLE
- ⑪ RELOCATE UTILITY POLE (BY OTHERS)
- ⑫ CONSTRUCT WQ SWALE & DITCH (SEE SHEETS 10 & 11 FOR DETAILS)

- APPROX. LOCATION OF EXTG. SOIL ANCHORS
- COLD PLANE PAVEMENT REMOVAL - 2.5"

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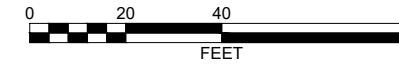
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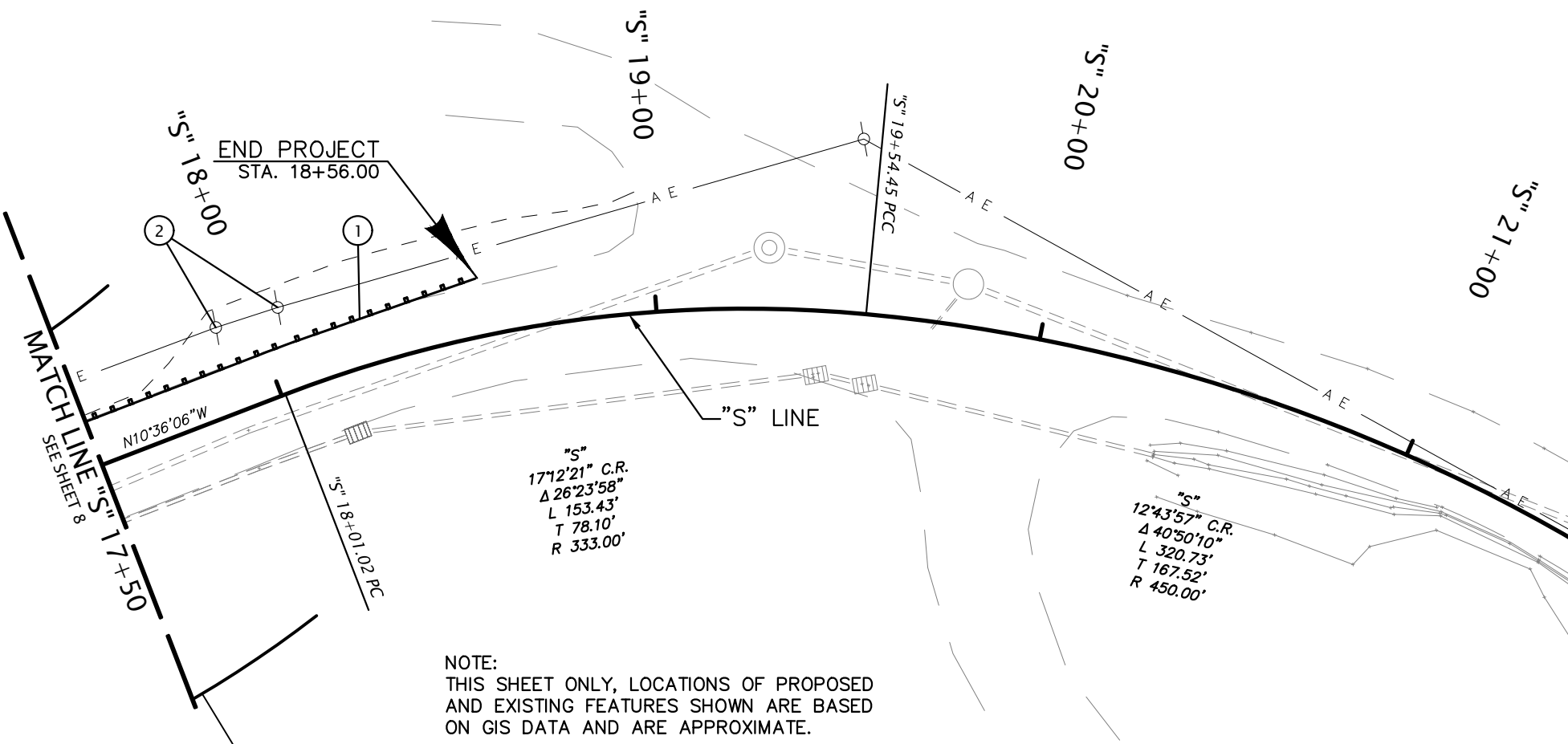
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REGISTERED PROFESSIONAL
ENGINEER
88394PE

OREGON
SEPT. 11, 2018
CONOR R. COSTIGAN

EXPIRES: 12/31/2021



NOTE:
THIS SHEET ONLY, LOCATIONS OF PROPOSED
AND EXISTING FEATURES SHOWN ARE BASED
ON GIS DATA AND ARE APPROXIMATE.

- ① SEE SHEET 8, NOTE 9
CONST. GUARDRAIL, TYPE 2A
CONST. GUARDRAIL TERMINAL, NON-FLARED
W=1', E=2'
TEST LEVEL 3
USE 8-FOOT POSTS
CONSTRUCT DRAINAGE CURB
(FOR DETAILS, SEE STD. DWG. BR209,
RD401, RD402, RD403, RD404, RD407
RD416, RD420 & RD701)
- ② PRESERVE AND PROTECT UTILITY POLES
AND EQUIPMENT

PLAN, PROFILE, AND CONSTRUCTION NOTES

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY

DAN JOHNSON
DIRECTOR

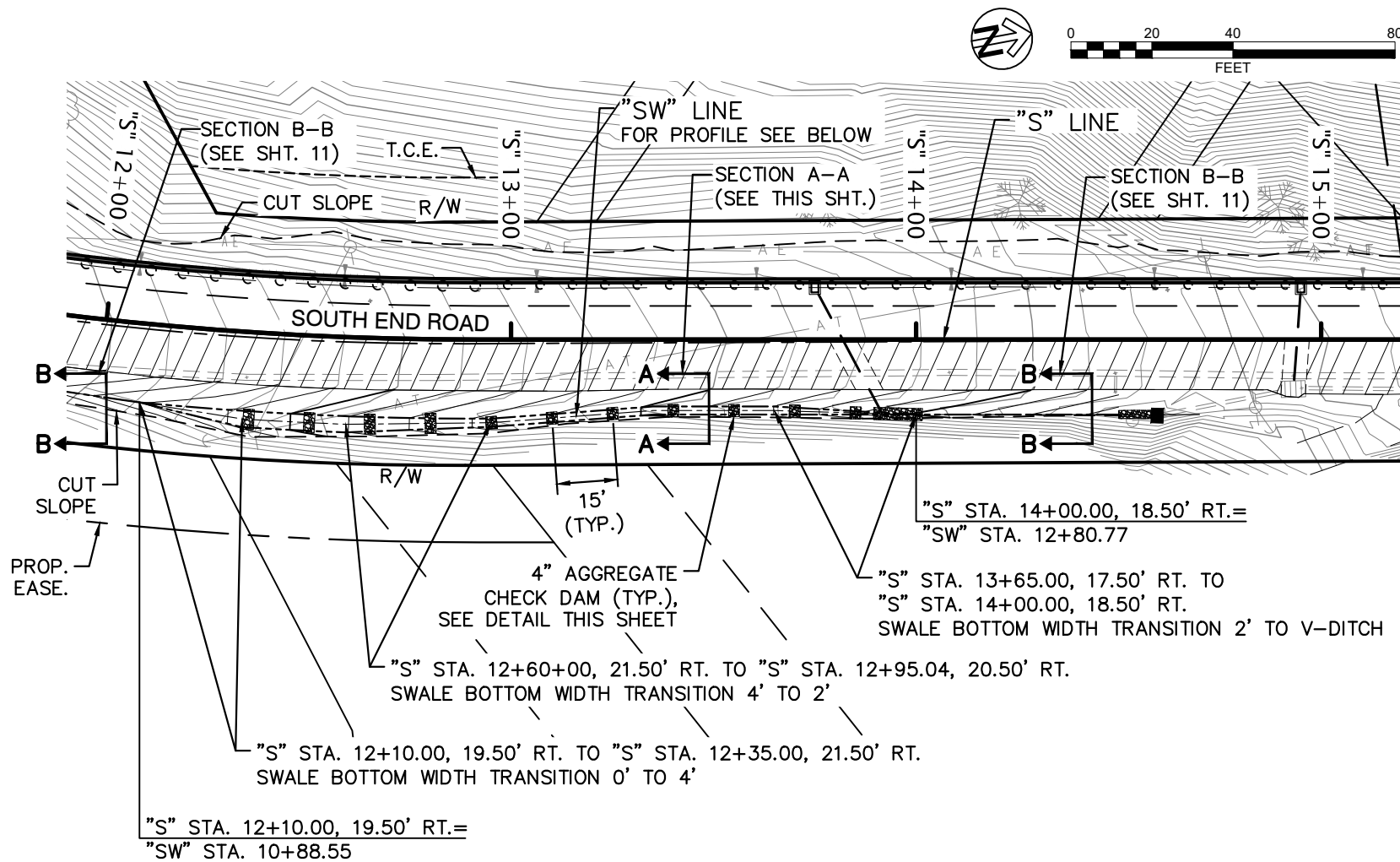
DESIGNED BY: CRCO
DRAFTED BY: RJXM
CHECKED BY: MHJL

NO.	DATE	REVISIONS

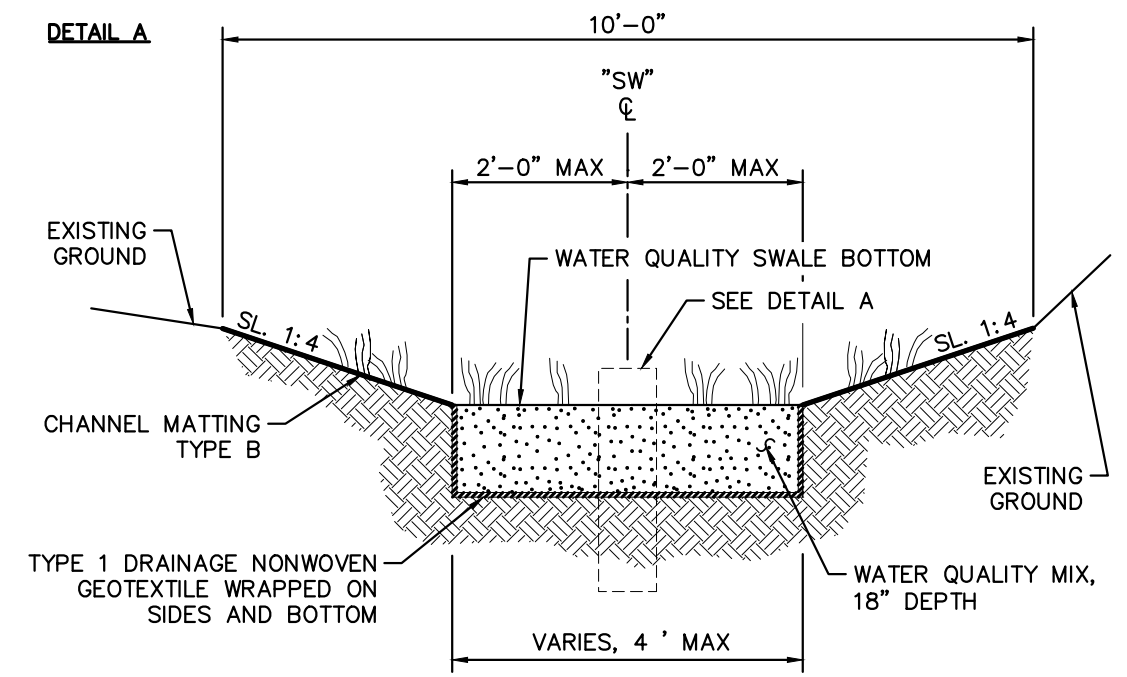
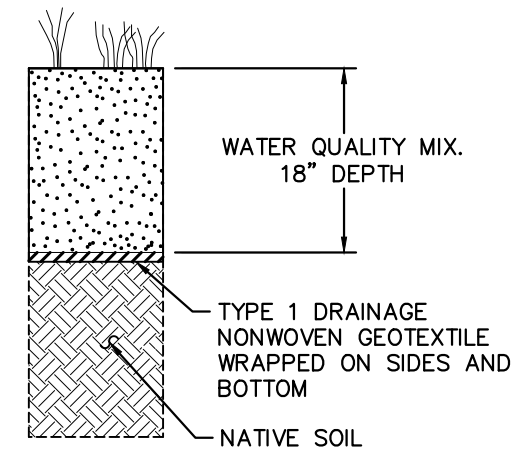
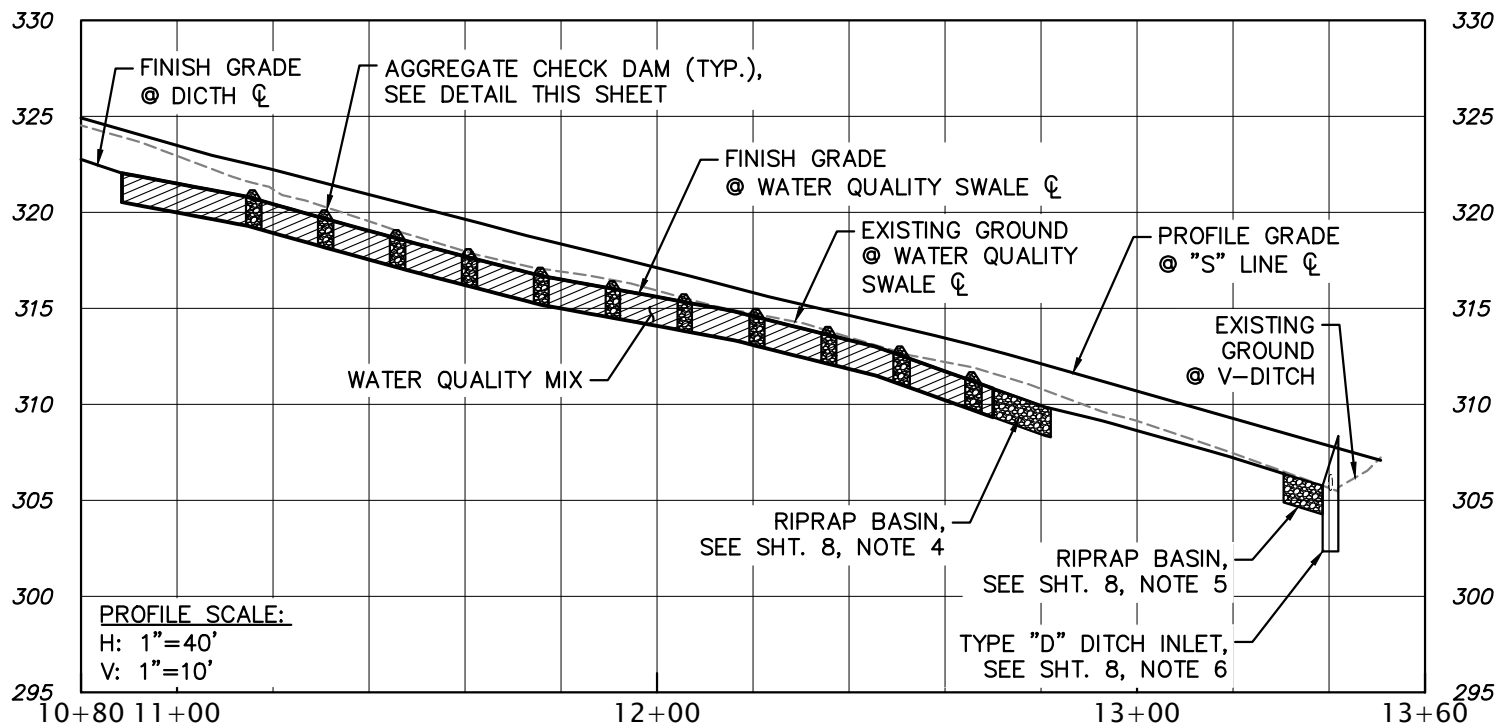
Sheet No. **9**

COLD PLANE PAVEMENT
REMOVAL - 2.5"

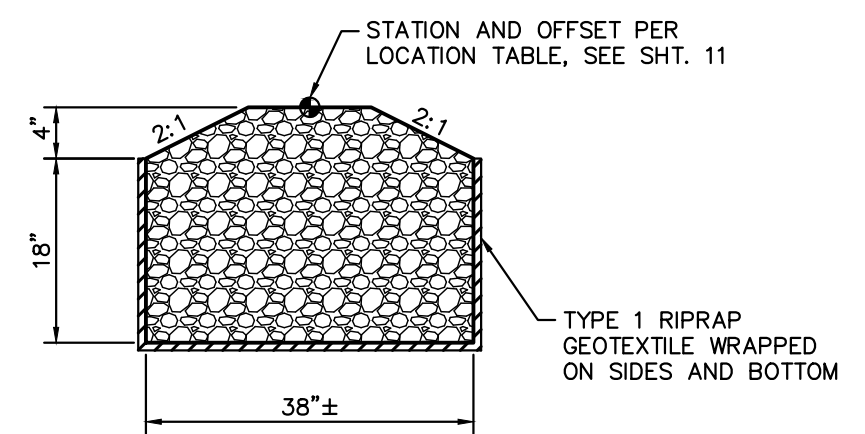
DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663



WATER QUALITY SWALE "SW" CENTERLINE PROFILE



WATER QUALITY SWALE "SW" CROSS SECTION A-A
N.T.S.



REGISTERED PROFESSIONAL ENGINEER
74328PE
OREGON
SEPT. 9, 2008
ATALIA SAMPSON RASKIN
EXPIRES 12-31-2022

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

WQ SWALE PLAN, PROFILE, AND DETAILS
SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

DESIGNED BY: ASR
DRAFTED BY: ASR
CHECKED BY: DKWR

NO.	DATE	REVISIONS

Sheet No. 10



DRAINAGE DETAILS

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

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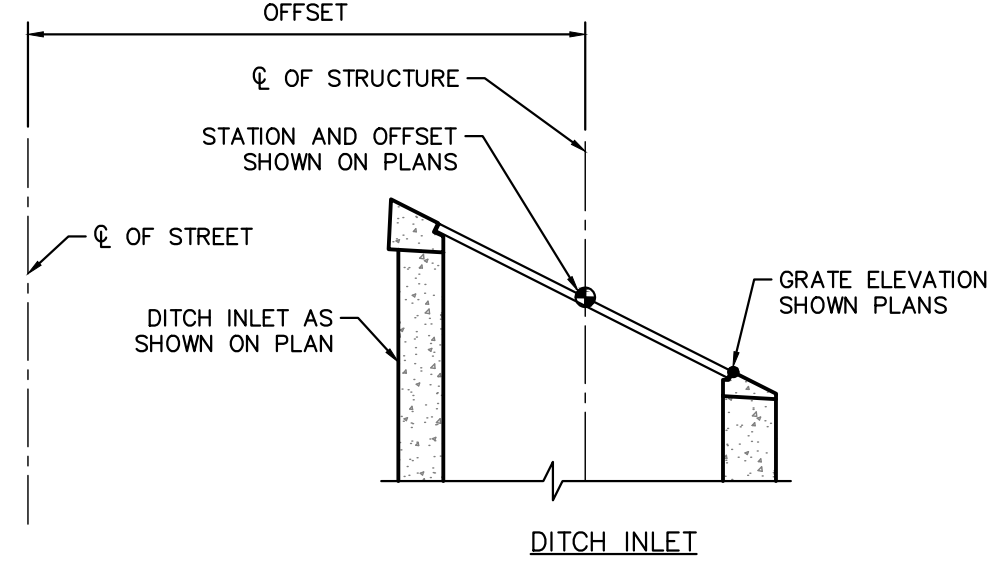
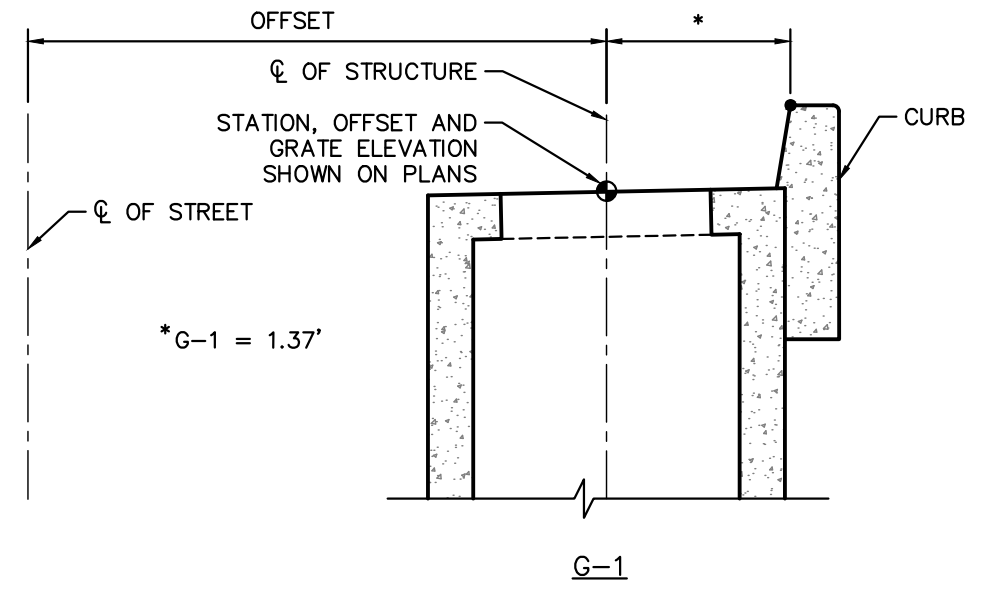
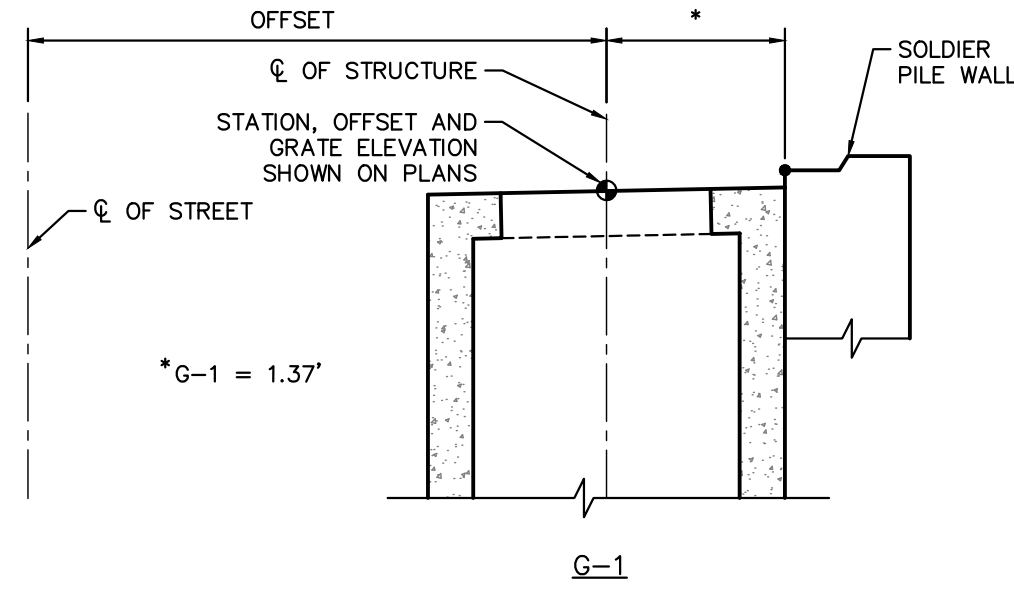
DIRECTOR

DAN JOHNSON

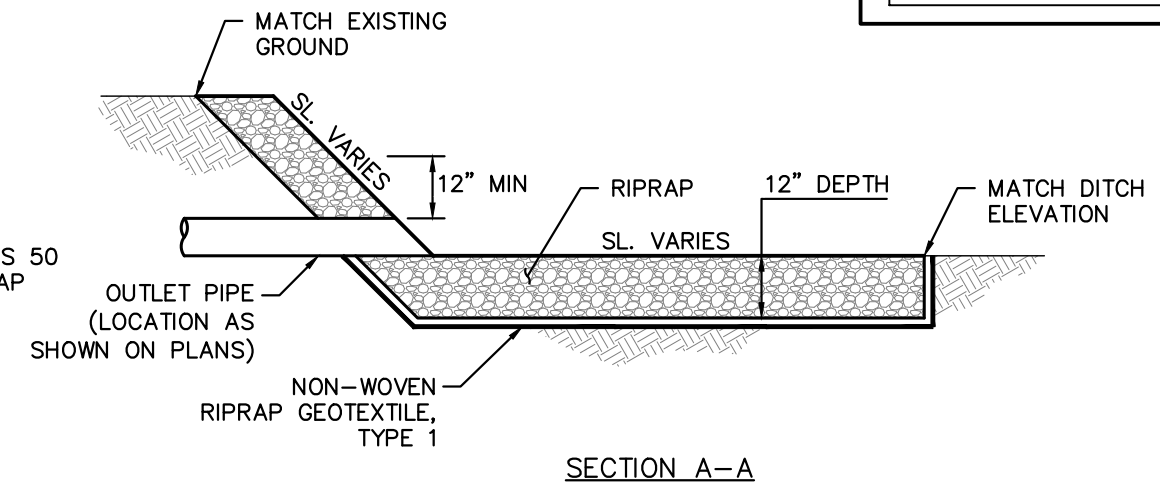
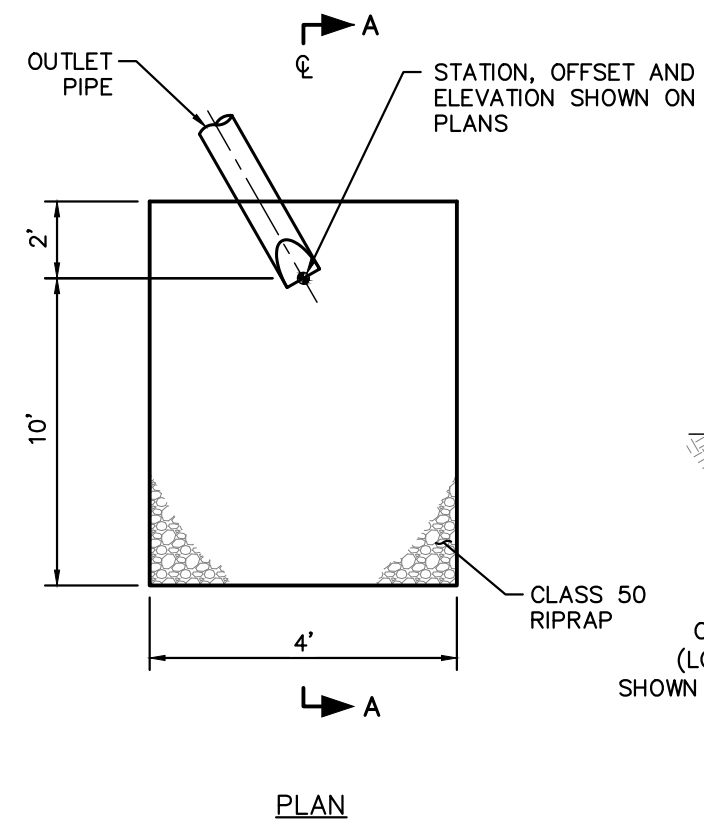
DESIGNED BY: ASR
DRAFTED BY: ASR
CHECKED BY: DKWR

REVISIONS

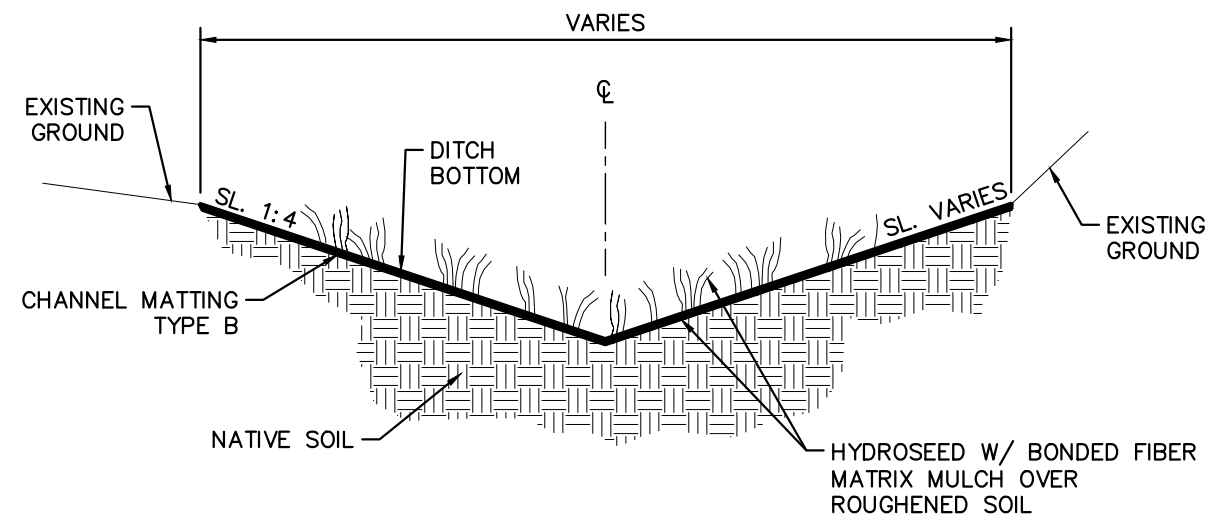
NO.	DATE	DESCRIPTION



DRAINAGE STRUCTURE OFFSET DETAIL
N.T.S.



RIRAP OUTFALL TYPICAL
N.T.S.



DITCH CROSS SECTION B-B
N.T.S.

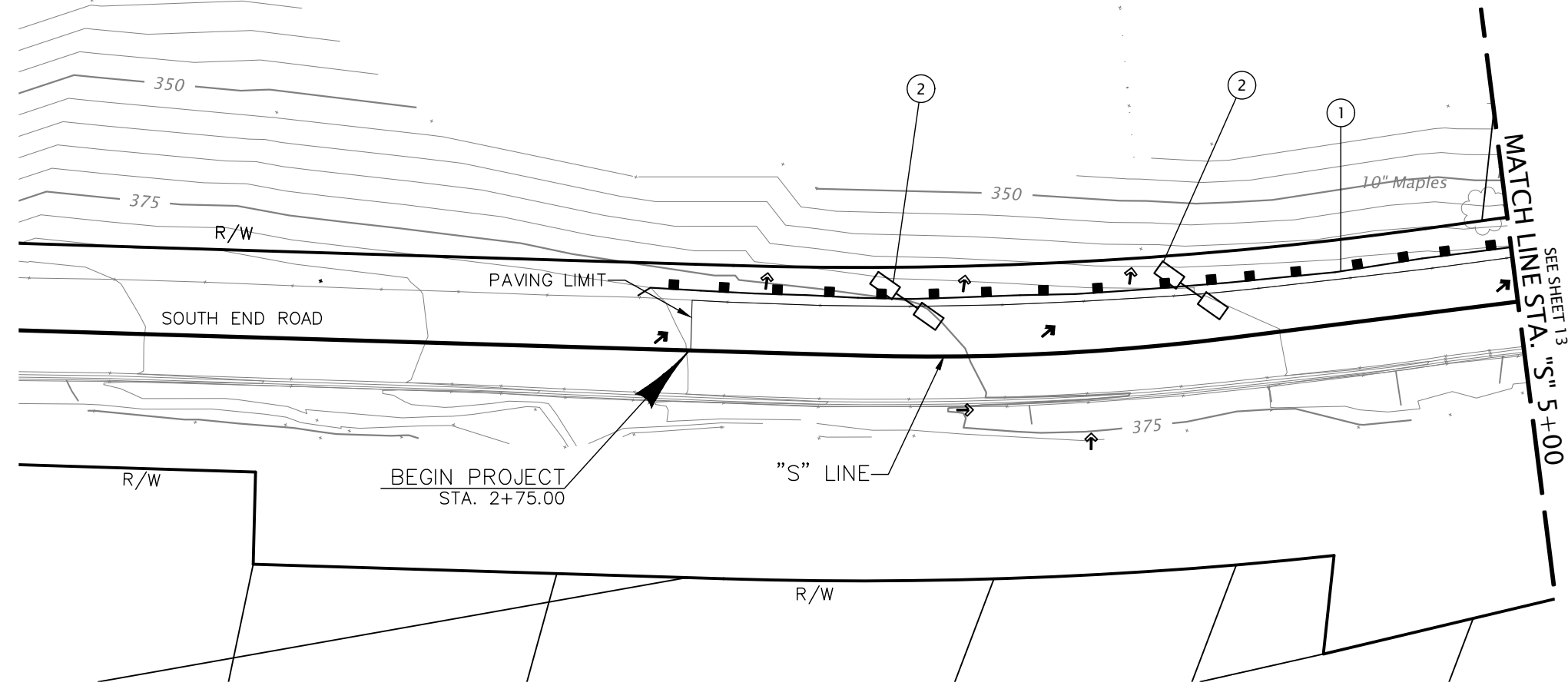
STATION	WIDTH
12+36.53, 21.5' RT.	5
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12+65.80, 21.2' RT.	5
12+80.43, 20.7' RT.	5
12+95.15, 20.5' RT.	3
13+10.11, 19.4' RT.	3
13+25.06, 18.3' RT.	3
13+40.04, 17.5' RT.	3
13+55.04, 17.50' RT.	3
13+70.04, 17.6' RT.	3
13+85.02, 18.1' RT.	3



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OREGON
10/18/93
LANDSCAPE ARCHITECT
RENEWS: 10/31/2021



- ① INSTALL SEDIMENT FENCE
(SEE STD. DRG. RD1040)
- ② INSTALL CHECK DAM TYPE 3
(SEE STD. DRG. RD1005)

EROSION AND SEDIMENT CONTROL PLAN

- EROSION CONTROL NOTES:**
1. CONSTRUCTION EQUIPMENT WILL EXCLUSIVELY USE SOUTH END ROAD TO COMPLETE RE-PAVING AND WALL CONSTRUCTION
 2. MATERIAL STAGING SHALL OCCUR ONLY ON SOUTH END ROAD.
 3. THE CONSTRUCTION, ADJUSTMENT, MAINTENANCE, AND UPGRADING OF THESE EROSION AND SEDIMENT CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE PROJECT TO COMPLY WITH SECTION 00280 OF THE OREGON STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND LOCAL AGENCY PERMITS.
 4. EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN ARE FOR ANTICIPATED SITE CONDITIONS. ADJUST OR UPGRADE THESE MEASURES FOR UNEXPECTED STORM EVENTS TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DOES NOT LEAVE THE SITE.
 5. INSTALL OR CONSTRUCT EROSION AND SEDIMENT CONTROL MEASURES WITHIN RIGHT-OF-WAY OR VERIFIED EASEMENTS UNLESS DIRECTED OTHERWISE.

LEGEND

- SEDIMENT FENCE
- CHECK DAM TYPE 3 (BIOFILTER BAGS)

EROSION CONTROL PLAN

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

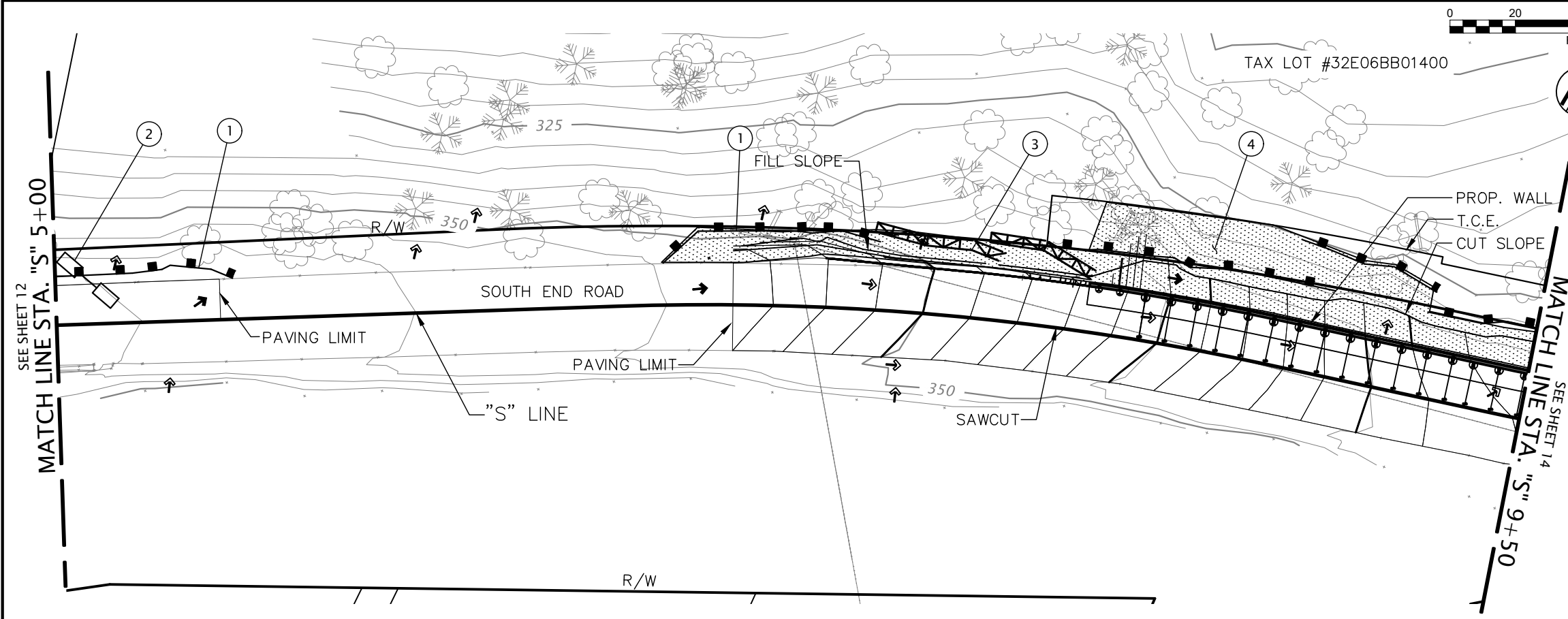
CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

DESIGNED BY:	BAR
DRAFTED BY:	BAR
CHECKED BY:	MJHI

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2100 SW River Parkway
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EROSION AND SEDIMENT CONTROL PLAN

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RENEWS: 10/31/2021

- ① INSTALL SEDIMENT FENCE (SEE STD. DRG. RD1040)
- ② INSTALL CHECK DAM TYPE 3 (SEE STD. DRG. RD1005)
- ③ INSTALL SEDIMENT BARRIER TYPE 3 (SEE STD. DRG. RD1030)
- ④ APPLY COMPOST BLANKET TO ALL DISTURBED SOILS FOLLOWING CONSTRUCTION ACTIVITIES (SEE STD. DRG. RD1055)

LEGEND

- SEDIMENT FENCE
- CHECK DAM TYPE 3 (BIOFILTER BAGS)
- SEDIMENT BARRIER TYPE 3 (STRAW WATTLES)
- COMPOST BLANKET

EROSION CONTROL PLAN

SOUTH END ROAD AT MP 3.8

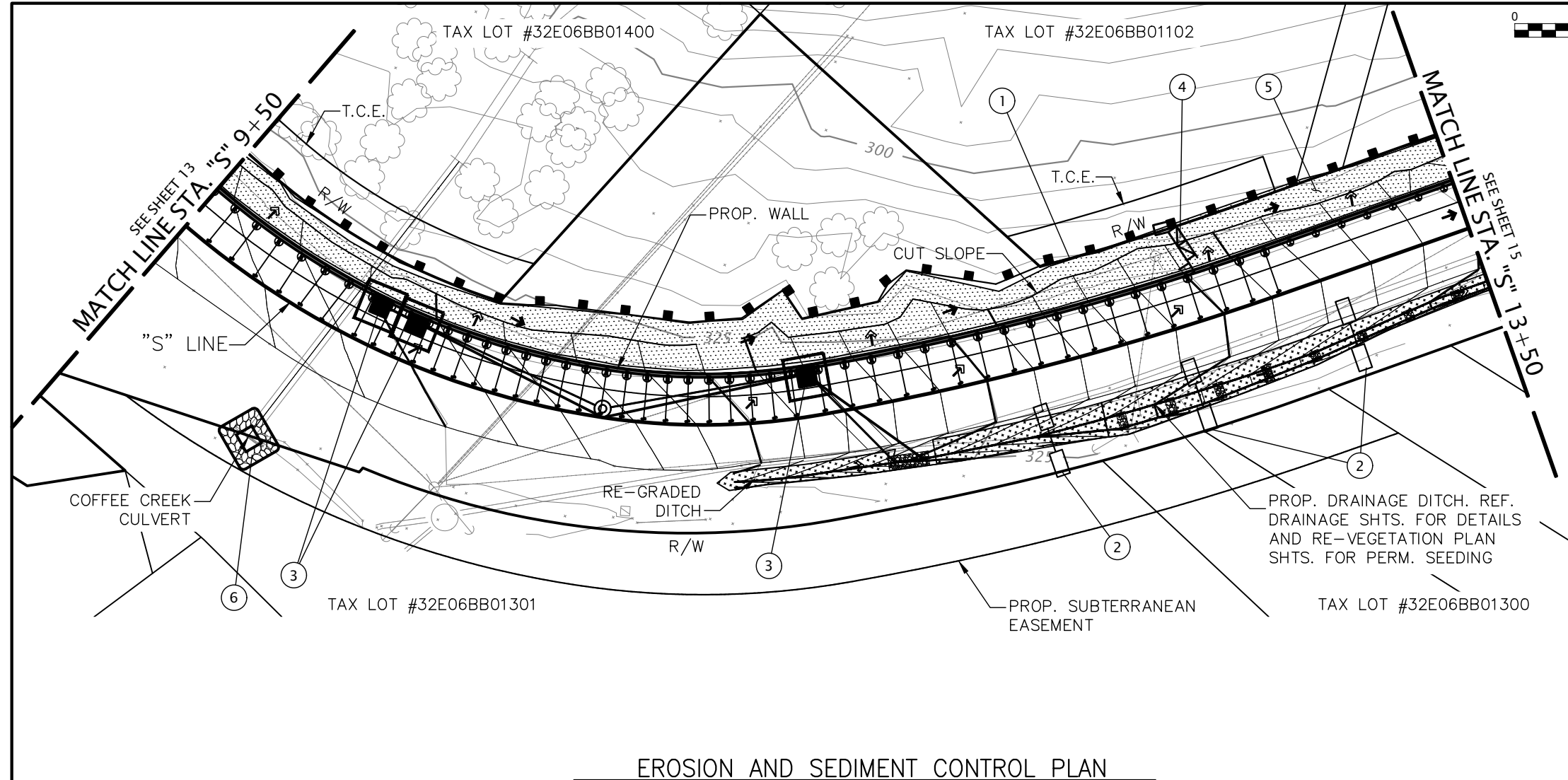
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EROSION AND SEDIMENT CONTROL PLAN

- ① INSTALL SEDIMENT FENCE (SEE STD. DRG. RD1040)
- ② INSTALL CHECK DAM TYPE 3 (SEE STD. DRG. RD1005)
- ③ INSTALL INLET PROTECTION TYPE 3 (SEE STD. DRG. RD1010)
- ④ INSTALL SEDIMENT BARRIER TYPE 3 (SEE STD. DRG. RD1030)
- ⑤ APPLY COMPOST BLANKET TO ALL DISTURBED SOILS FOLLOWING CONSTRUCTION ACTIVITIES (SEE STD. DRG. RD1055)
- ⑥ INSTALL INLET PROTECTION TYPE 7 (STRAW WATTLES) AT CULVERT INLET (SEE STD. DRG. RD1010)

LEGEND

	SEDIMENT FENCE
	CHECK DAM TYPE 3 (BIOFILTER BAGS)
	INLET PROTECTION TYPE 7 (STRAW WATTLES)
	SEDIMENT BARRIER TYPE 3 (STRAW WATTLES)
	COMPOST BLANKET
	EROSION CONTROL MATTING AND PERM. SEEDING

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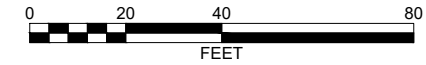
EROSION CONTROL PLAN
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
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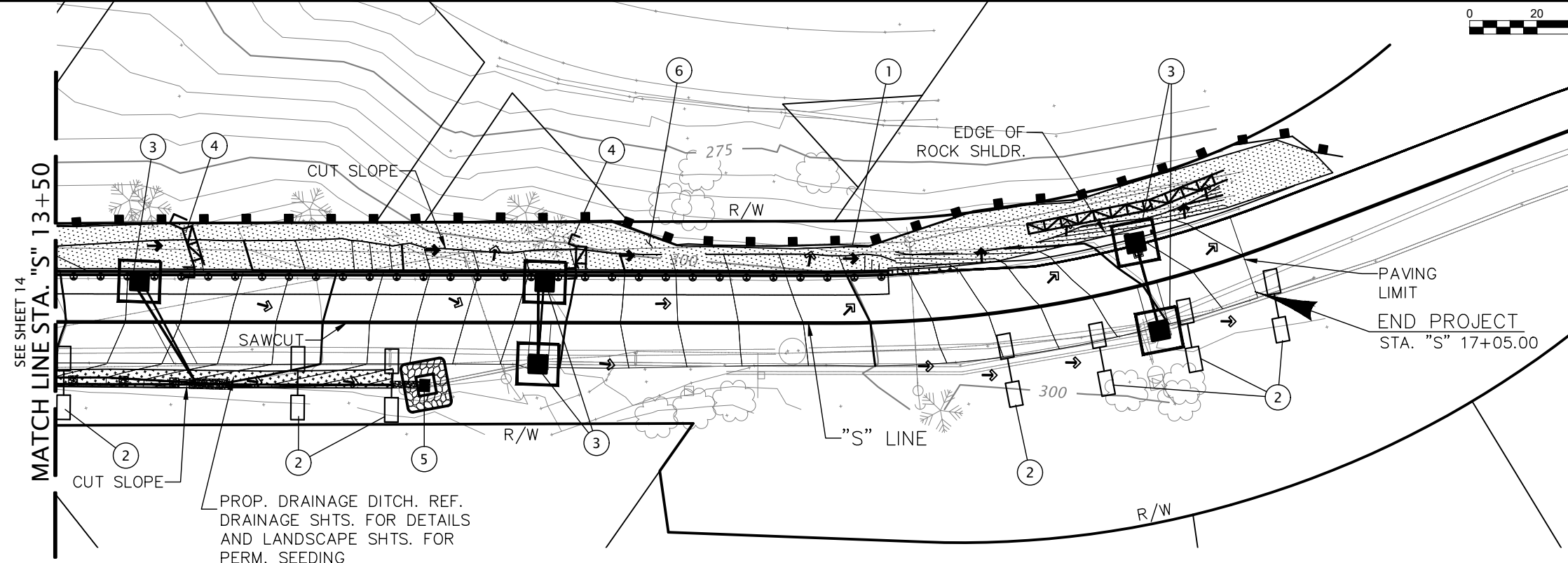
DESIGNED BY: BAR
DRAFTED BY: BAR
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RENEWS: 10/31/2021



- ① INSTALL SEDIMENT FENCE (SEE STD. DRG. RD1040)
- ② INSTALL CHECK DAM TYPE 3 (SEE STD. DRG. RD1005)
- ③ INSTALL INLET PROTECTION TYPE 3 (SEE STD. DRG. RD1010)
- ④ INSTALL SEDIMENT BARRIER TYPE 3 (SEE STD. DRG. RD1030)
- ⑤ INSTALL INLET PROTECTION TYPE 4 (SEE STD. DRG. RD1015)
- ⑥ APPLY COMPOST BLANKET TO ALL DISTURBED SOILS FOLLOWING CONSTRUCTION ACTIVITIES (SEE STD. DRG. RD1055)

EROSION AND SEDIMENT CONTROL PLAN

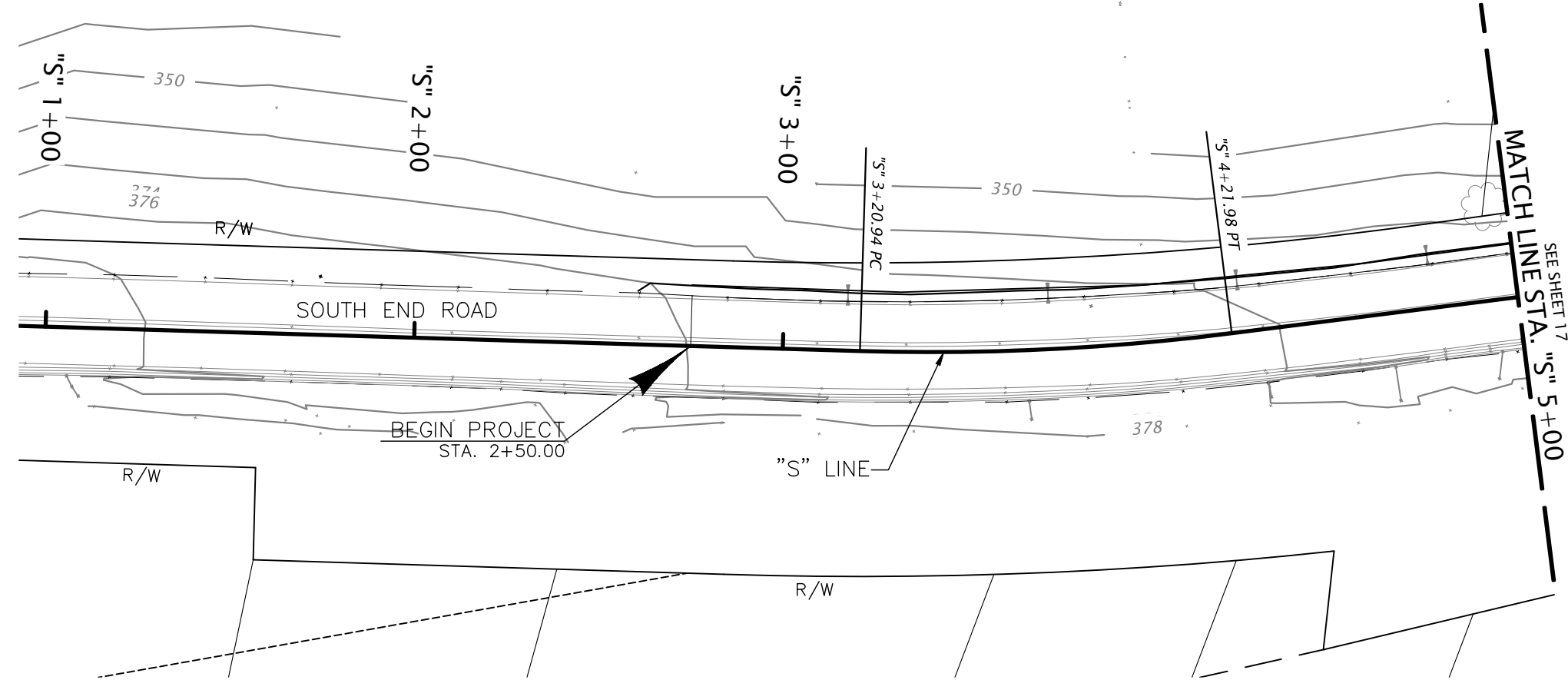
LEGEND

- SEDIMENT FENCE
- CHECK DAM TYPE 3 (BIOFILTER BAGS)
- SEDIMENT BARRIER TYPE 3 (STRAW WATTLES)
- INLET PROTECTION TYPE 4
- COMPOST BLANKET

<p>EROSION CONTROL PLAN</p> <p>SOUTH END ROAD AT MP 3.8</p>	<p>DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111</p>				
<p>CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045</p>	<p>DIRECTOR DAN JOHNSON</p>				
<p>DESIGNED BY: BAR</p> <p>DRAFTED BY: BAR</p> <p>CHECKED BY: MJHI</p>	<p>NO. DATE:</p> <table border="1" style="width: 100%; height: 40px;"> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> </tr> </table>				
<p>REVISIONS</p>	<p>Sheet No. 15</p>				



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NO PROPOSED OR REQUIRED
RE-VEGETATION, THIS SHEET

RE-VEGETATION PLAN

SOUTH END ROAD AT MP 3.8

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON
DIRECTOR

DESIGNED BY:
BAR

DRAFTED BY:
BAR

CHECKED BY:
M.JHI

- NOTES:
1. SEE SHT. 17 FOR PLANT MATERIAL SCHEDULE
 2. SEE SHT. 18 FOR DECIDUOUS AND CONIFER TREE PLANTING DETAIL.
 3. SEE SHT. 19 FOR SHRUB PLANTING DETAILS.

LEGEND

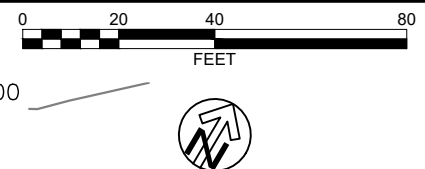
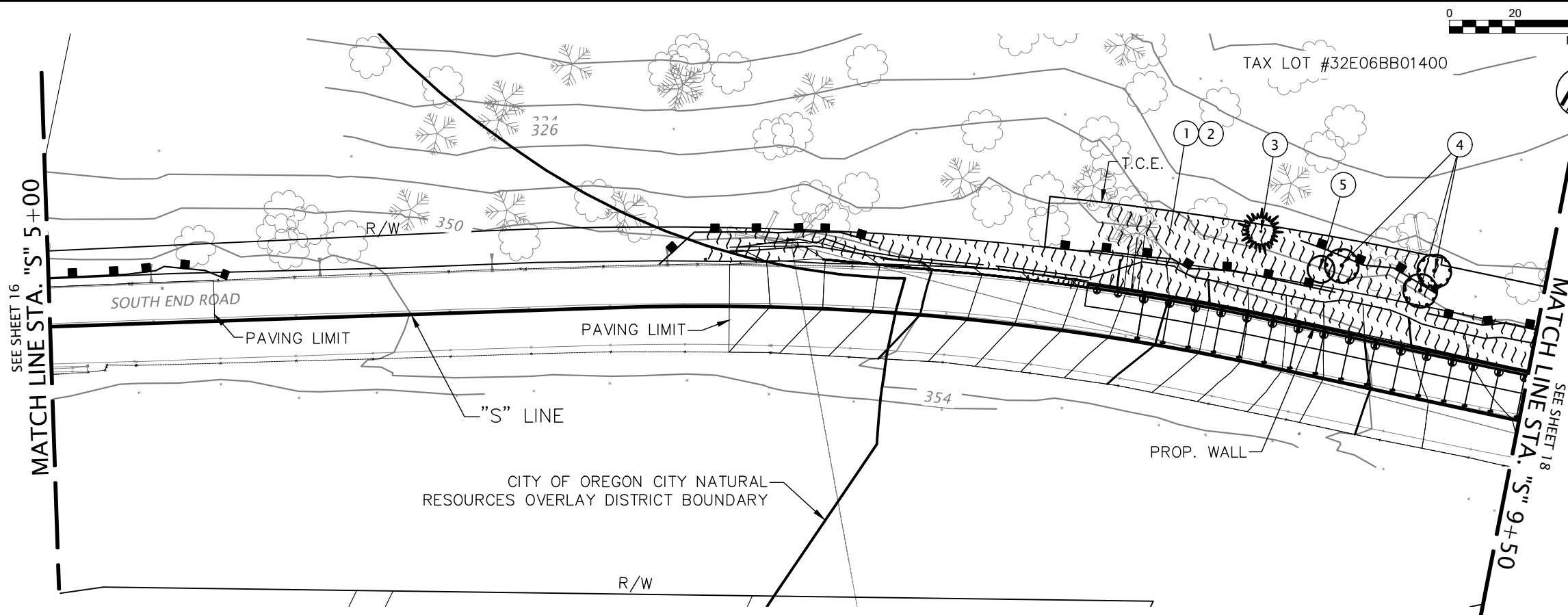
SEDIMENT FENCE/TREE PROTECTION BARRIER

REVISIONS

NO.	DATE	DESCRIPTION



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10/18/93
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RENEWS: 10/31/2021

RE-VEGETATION PLAN
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

- ① REMOVE ENGLISH IVY FROM MITIGATION AREA
- ② INSTALL NATIVE PLANTINGS THEN APPLY HYDROSEED (EROSION CONTROL SEEDING) TO ALL AREAS DISTURBED BY CONSTRUCTION
- ③ INSTALL CONIFER TREE – DOUGLAS FIR
- ④ INSTALL DECIDUOUS TREE – BIGLEAF MAPLE
- ⑤ INSTALL DECIDUOUS TREE – CASCARA

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DAN JOHNSON
DIRECTOR

DESIGNED BY: BAR
DRAFTED BY: BAR
CHECKED BY: M/JH

- NOTES:
1. SEE SHT. 17 FOR PLANT MATERIAL SCHEDULE
 2. SEE SHT. 18 FOR DECIDUOUS AND CONIFER TREE PLANTING DETAIL.
 3. SEE SHT. 19 FOR SHRUB PLANTING DETAILS.

NO.	DATE	REVISIONS

MITIGATION PLANTING SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE/CONDITION	QUANTITY
	ACER MACROPHYLLUM	BIGLEAF MAPLE	1-INCH CALIPER	5
	FRANGULA PURSHIANA	CASCARA	1-INCH CALIPER	2
	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	6' HT. MIN.	3
SHRUBS	ACER CIRCINUATUM	VINE MAPLE	CONT. – NO. 1	10
	OEMLARIA CERASIFORMIS	INDIAN PLUM	CONT. – NO. 1	10
	CORYLUS CORNUTA	CALIFORNIA HAZELNUT	CONT. – NO. 1	4
SEEDING	NATIVE UPLAND EROSION CONTROL SEED MIX NO. 1		APPLY @ 1 LB. PLS PER 1,000 SQFT	
	WATER QUALITY SEED MIX NO. 2		APPLY @ 1 LB. PLS PER 1,000 SQFT	

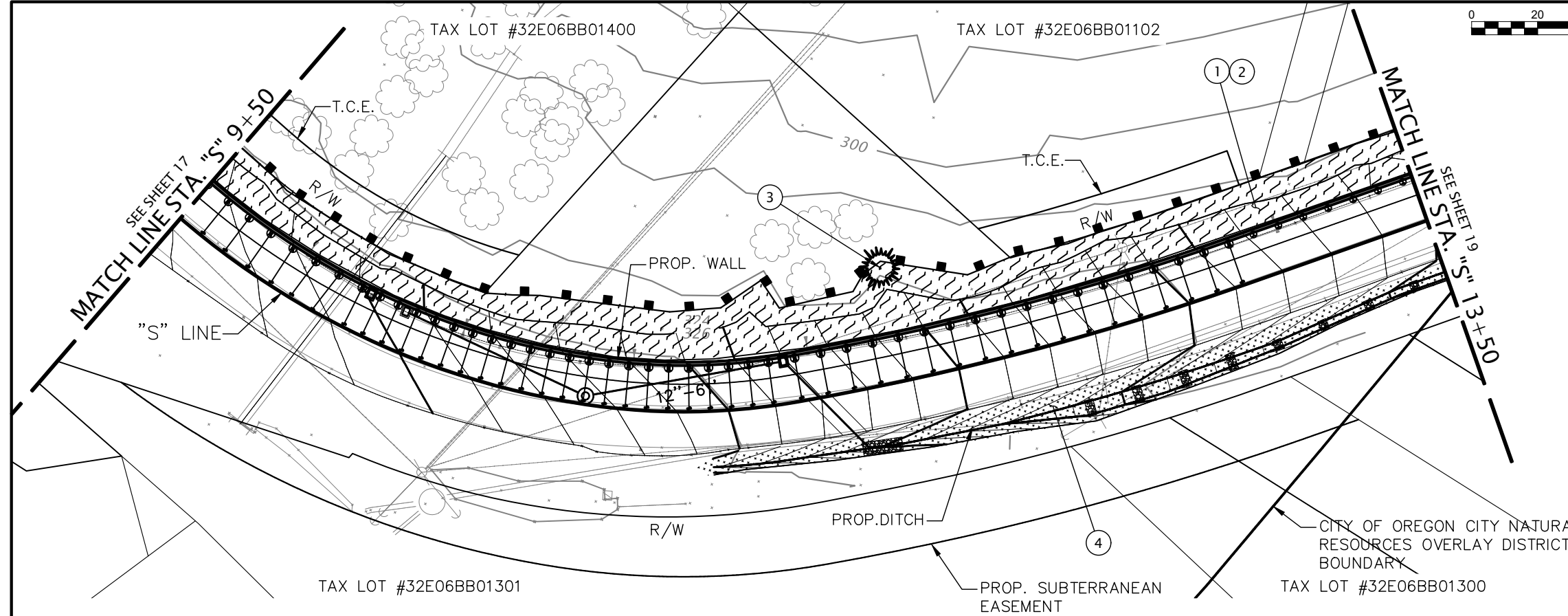
LEGEND

- EROSION CONTROL SEEDING MIX NO. 1 (NROD MITIGATION AREA)
- WATER QUALITY SEEDING MIX NO. 2
- SEDIMENT FENCE/TREE PROTECTION BARRIER

SPACING NOTES:

1. TREES TO BE SPACED 12' O.C. AND 12' MIN. FROM EDGE OF PAVEMENT, WALL, AND EXTG. OR PROP. UTILITIES.
2. SHRUBS TO CLUSTERED IN SAME-SPECIES GROUPS OF 3 OR 5, EXCEPT C. CORNUTA TO BE PLACED INDIVIDUALLY IN HIGHEST SUNLIGHT LOCATIONS.

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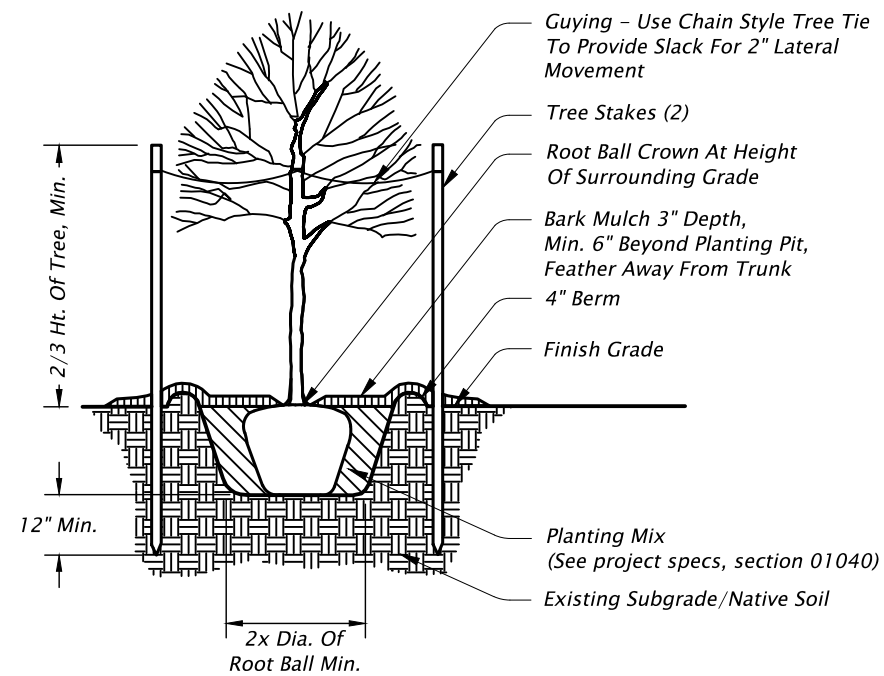


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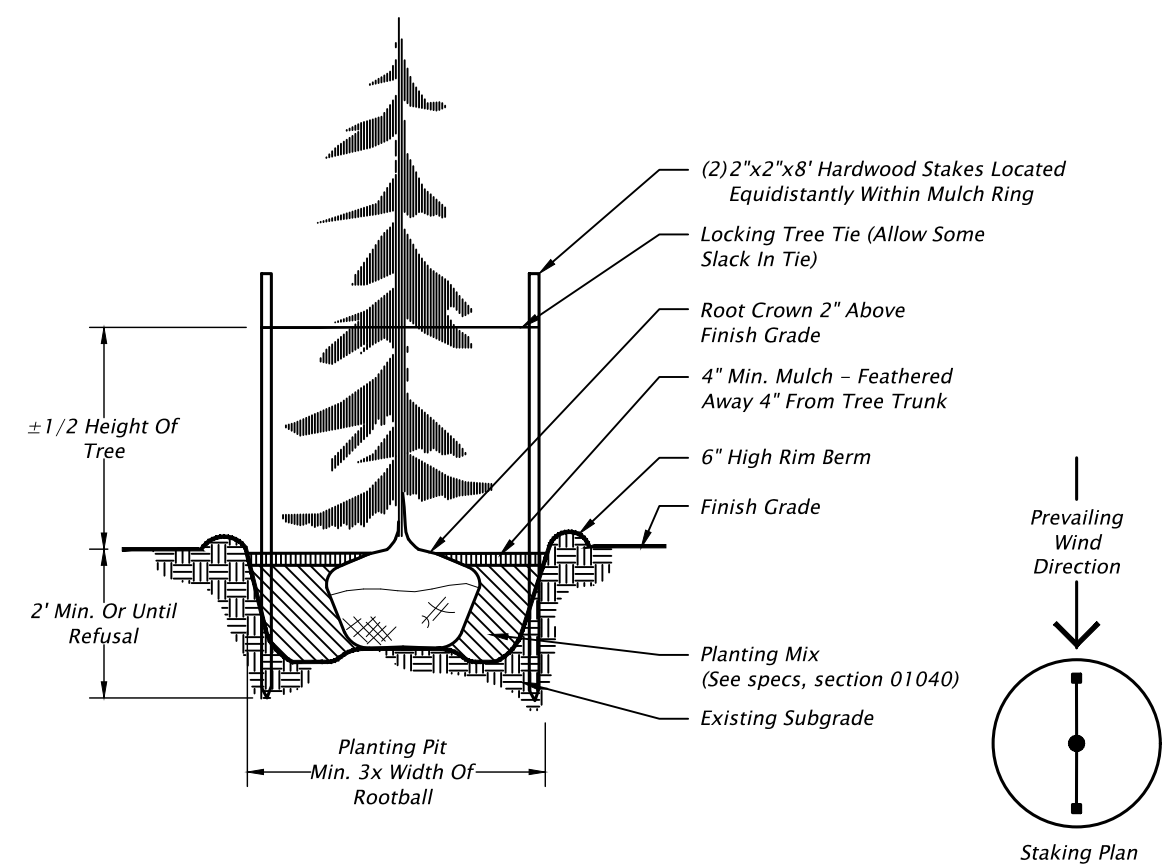
RE-VEGETATION PLAN
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

- ① REMOVE ENGLISH IVY FROM MITIGATION AREA
- ② INSTALL NATIVE PLANTINGS THEN APPLY HYDROSEED (EROSION CONTROL SEEDING) TO ALL AREAS DISTURBED BY CONSTRUCTION
- ③ INSTALL CONIFER TREE - DOUGLAS FIR
- ④ APPLY WATER QUALITY SEEDING TO DITCH AND SWALE. COORDINATE APPLICATION WITH MATTING, TYP.

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**DECIDUOUS TREE PLANTING
FOR TREES 1.5" CAL. AND OVER**



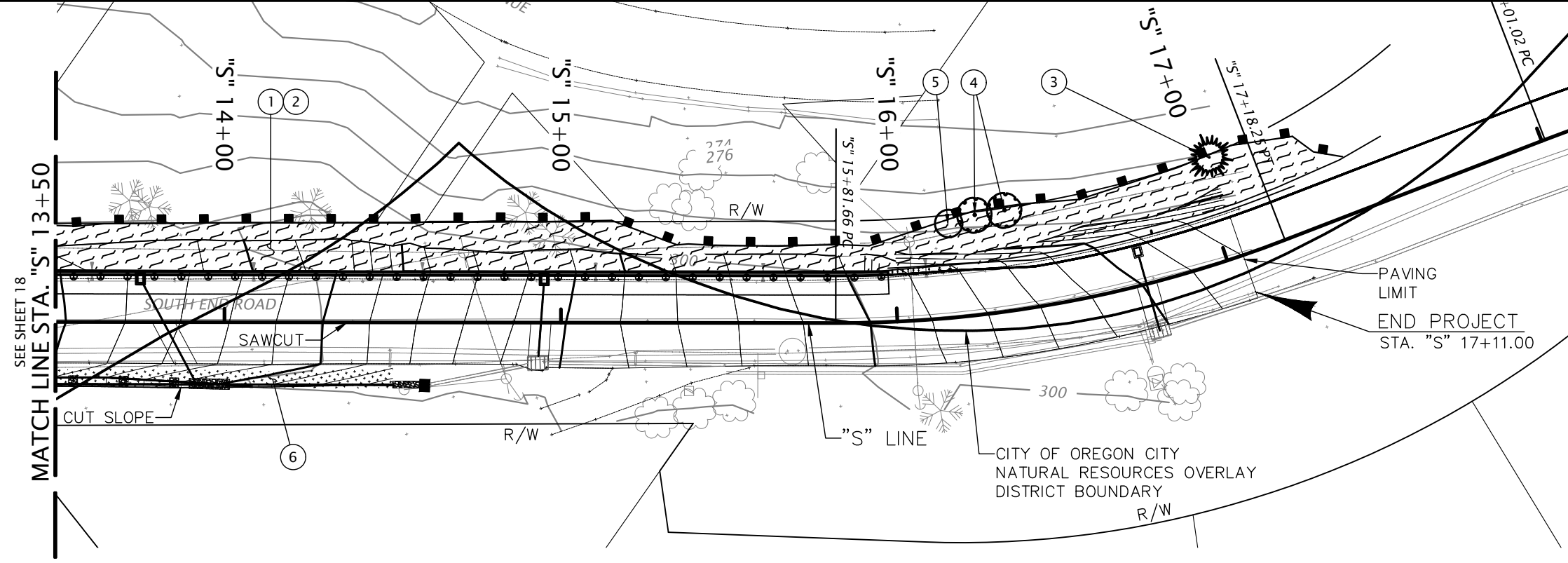
CONIFER TREE PLANTING

- NOTES:
- 1. SEE SHT. 17 FOR PLANT MATERIAL SCHEDULE
 - 2. SEE SHT. 18 FOR DECIDUOUS AND CONIFER TREE PLANTING DETAIL.
 - 3. SEE SHT. 19 FOR SHRUB PLANTING DETAILS.

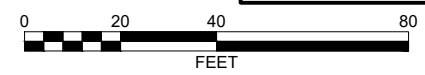
LEGEND

	EROSION CONTROL SEEDING (NROD MITIGATION AREA)
	WATER QUALITY SEEDING MIX NO. 2
	SEDIMENT FENCE/TREE PROTECTION BARRIER

DESIGNED BY: BAR	DRAFTED BY: BAR	CHECKED BY: XXXX
NO.	DATE:	
REVISIONS		
Sheet No.	18	



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10/18/93
LANDSCAPE ARCHITECT
RENEWS: 10/31/2021



- ① REMOVE ENGLISH IVY FROM MITIGATION AREA
- ② INSTALL NATIVE PLANTINGS THEN APPLY HYDROSEED (EROSION CONTROL SEEDING MIX NO. 1) TO ALL AREAS DISTURBED BY CONSTRUCTION
- ③ INSTALL CONIFER TREE - DOUGLAS FIR
- ④ INSTALL DECIDUOUS TREE - BIGLEAF MAPLE
- ⑤ INSTALL DECIDUOUS TREE - CASCARA
- ⑥ APPLY WATER QUALITY SEEDING TO DITCH AND SWALE. COORDINATE APPLICATION WITH MATTING, TYP.

RE-VEGETATION PLAN
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

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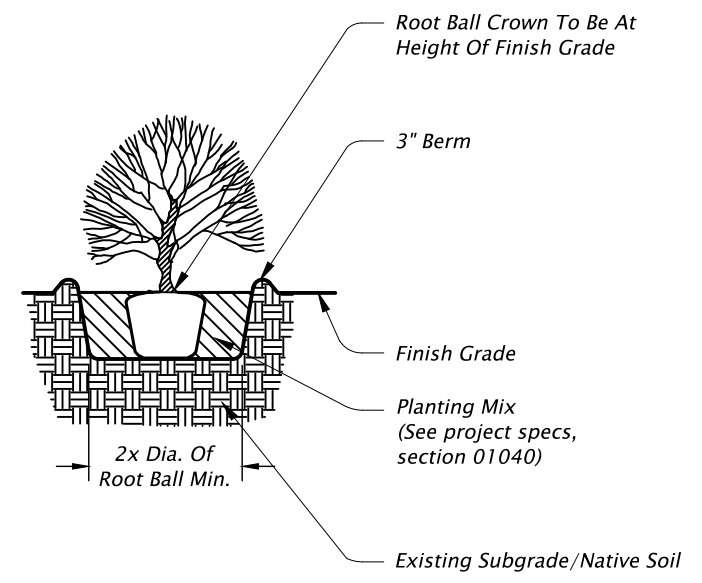
DESIGNED BY: BAR
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CHECKED BY: XXXX

NOTES:

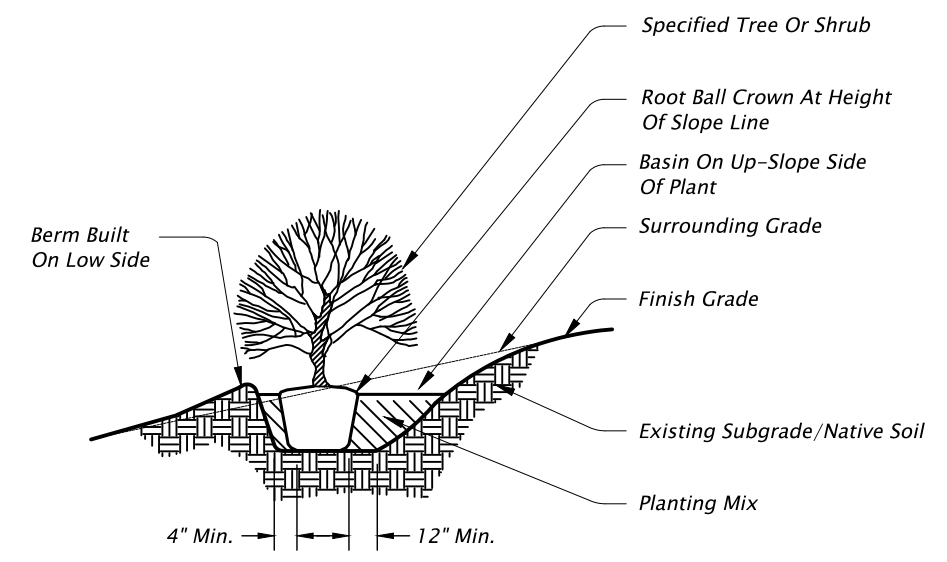
1. SEE SHT. 17 FOR PLANT MATERIAL SCHEDULE
2. SEE SHT. 18 FOR DECIDUOUS AND CONIFER TREE PLANTING DETAIL.
3. SEE SHT. 19 FOR SHRUB PLANTING DETAILS.

LEGEND

- EROSION CONTROL SEEDING MIX NO. 1 (NROD MITIGATION AREA)
- WATER QUALITY SEEDING MIX NO. 2
- SEDIMENT FENCE/TREE PROTECTION BARRIER



CONTAINER STOCK PLANTING



SLOPE PLANTING

NO.	DATE	REVISIONS

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2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663

SOLDIER PILE AND SOLDIER PILE WALL WITH TIEBACK GENERAL NOTES:

DESIGN SPECIFICATIONS - AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION 2017.

PROVIDE ALL MATERIALS AND PERFORM ALL WORK ACCORDING TO THE 2021 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION

THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES IN THE FIELD PRIOR TO COMMENCEMENT OF WORK.

PROVIDE A MINIMUM SERVICE LIFE OF 75 YEARS FOR WALL COMPONENTS.

THESE DIMENSIONS SHALL DETERMINE THE MINIMUM DIMENSIONS FOR CONSTRUCTION OF WALLS.

TOP OF SOLDIER PILE IS 12" BELOW TOP OF WALL, EXCEPT AS SHOWN.

THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES TO MAINTAIN ALL DRILLED HOLES OR SHAFTS FREE FROM SLOUGHING OR CAVING OF SURROUNDING SOIL. CONTRACTOR SHALL PROVIDE CASING, USING AUGER CAST METHODS, OR OTHER APPROVED METHODS AS NEEDED TO MEET THIS REQUIREMENT (SEE SPECIAL PROVISIONS).

PROVIDE CLASS 3300 - 1 1/2", 1", OR 3/4" STRUCTURAL CONCRETE FOR MOMENT SLAB AND WALL FASCIA.

CONTROLLED LOW STRENGTH MATERIAL (CLSM) FOR PREBORED HOLES SHALL ATTAIN A 28 DAY COMPRESSIVE STRENGTH OF 100-200 PSI.

PROVIDE STRUCTURAL STEEL ACCORDING TO ASTM SPECIFICATIONS A 572 GRADE 50 FOR SOLDIER PILE.

PROVIDE ALL REINFORCING STEEL ACCORDING TO ASTM A706 OR AASHTO M31 (ASTM A 615) GRADE 60. USE THE FOLLOWING SPLICE LENGTHS UNLESS SHOWN OTHERWISE.

ALIGNMENT AND ELEVATION OF EXISTING 12" DIAMETER CONCRETE PIPES TO BE FIELD VERIFIED.

TIE BACK WALL DESIGN ASSUMES A FREE DRAINING CONDITION TO THE ELEVATION OF THE VERTICAL ALIGNMENTS. MAINTAIN A FREE DRAINING CONDITION AT ALL TIMES.

CONTRACTOR SHALL SUBMIT THE TIEBACK CONSTRUCTION METHOD FOR REVIEW AND RETURN BY THE ENGINEER BEFORE PERFORMING ANY CONSTRUCTION.

PROVIDE CONTRACTION JOINTS THROUGH CIP FACING OF SOLDIER PILE WALL AND TIEBACK WALL AT 32 FT CTRS, UNLESS SHOWN OTHERWISE.

PROVIDE EXPANSION JOINTS THROUGH CIP FACING OF SOLDIER PILE WALL AND TIEBACK WALL AT 96 FT CTRS UNLESS SHOWN OTHERWISE.

THE CONTRACTOR SHALL VERIFY THE LOCATION AND AVOID ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRILLING FOR TIEBACK ANCHORS. ANCHORS WHICH INTERFERE WITH UTILITIES, SHALL BE RELOCATED. NEW LOCATIONS TO BE APPROVED BY THE ENGINEER.

PROVIDE CENTRALIZERS ON TIEBACKS SO THAT THE TIEBACKS ARE GROUTED CONCENTRIC WITH AUGERED HOLES.

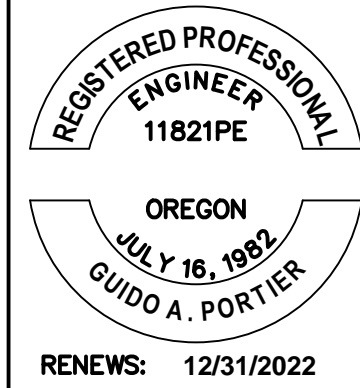
FOR REQUIRED PERFORMANCE TESTING OF THE TIEBACKS, SEE SPECIAL PROVISIONS.

REINFORCING SPLICE LENGTHS (CLASS B) GRADE 60 F'C = 3.3 KSI, λrc = 0.4, 2 IN MIN. CONCRETE CLEAR COVER											
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18
UNCOATED	1'-4"	1'-9"	2'-2"	2'-7"	3'-0"	3'-5"	3'-10"	4'-4"	4'-10"	NOT PERMITTED	

SPLICE REINFORCING STEEL AT ALTERNATE BARS, STAGGERED AT LEAST ONE SPLICE LENGTH OR AS FAR AS POSSIBLE, UNLESS SHOWN OTHERWISE.

ALL REINFORCING SPACING SHALL HAVE 2" OF CONCRETE COVER UNLESS SHOWN OTHERWISE.

PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES UNLESS NOTED OTHERWISE.



SOLDIER PILE WALL NOTES

SOUTH END ROAD AT MP 3.8

FED. AID NO.: C005111

PROJECT NO.: 22270

DATE: AUGUST 2021

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DIRECTOR

DAN JOHNSON

DESIGNED BY:
JJDZ

DRAFTED BY:
SXGO

CHECKED BY:
GAP

SOLDIER PILE WALL AND SOLDIER PILE WITH TIEBACK CONSTRUCTION NOTES:

- PERFORM GENERAL EXCAVATION AND STRUCTURAL EXCAVATION AS SHOWN ON PLANS TO THE APPROXIMATE LEVEL OF TOP OF SOLDIER PILE WALL.
- DRILL THE PREBORED HOLE, INSTALL FABRICATED SOLDIER PILE AND POUR CLSM TO 1 FT MIN BELOW TOP OF WALL. REMOVE TEMPORARY METAL CASING BEFORE CONCRETE SETS, IF USED.
- NO PREBORING SHALL OCCUR WITHIN 2 SOLDIER PILE SPACES OF A PREVIOUSLY PREBORED HOLE UNLESS THE CONCRETE IN THE PREVIOUS HOLE HAS SET FOR A MINIMUM OF 24 HRS.
- CONTINUE WITH STEP 1 AND 2 UNTIL ALL SOLDIER PILES HAVE BEEN INSTALLED.
- THE CONSTRUCTION OF TIMBER LAGGING IS FROM THE TOP OF SOLDIER PILE DOWNWARDS. NO CONSTRUCTION LIVE LOAD SURCHARGE IS ALLOWED WITHIN 5FT OF THE WALL CONTROL LINE.
- PERFORM TOP DOWN STRUCTURE EXCAVATION IN LIFTS NOT EXCEEDING 5.0 FT IN HEIGHT.
- CONSTRUCT CAST-IN-PLACE FACING AFTER THE TIMBER LAGGING EXCAVATION IN FRONT OF SOLDIER PILE WALL IS COMPLETE.

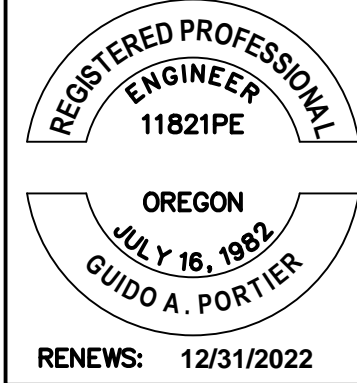
REVISIONS

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**DAVID EVANS
AND ASSOCIATES INC.**
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Sheet No.
WA01



RETAINING WALL PLAN AND ELEVATION

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON
DIRECTOR

DESIGNED BY:
JJDZ

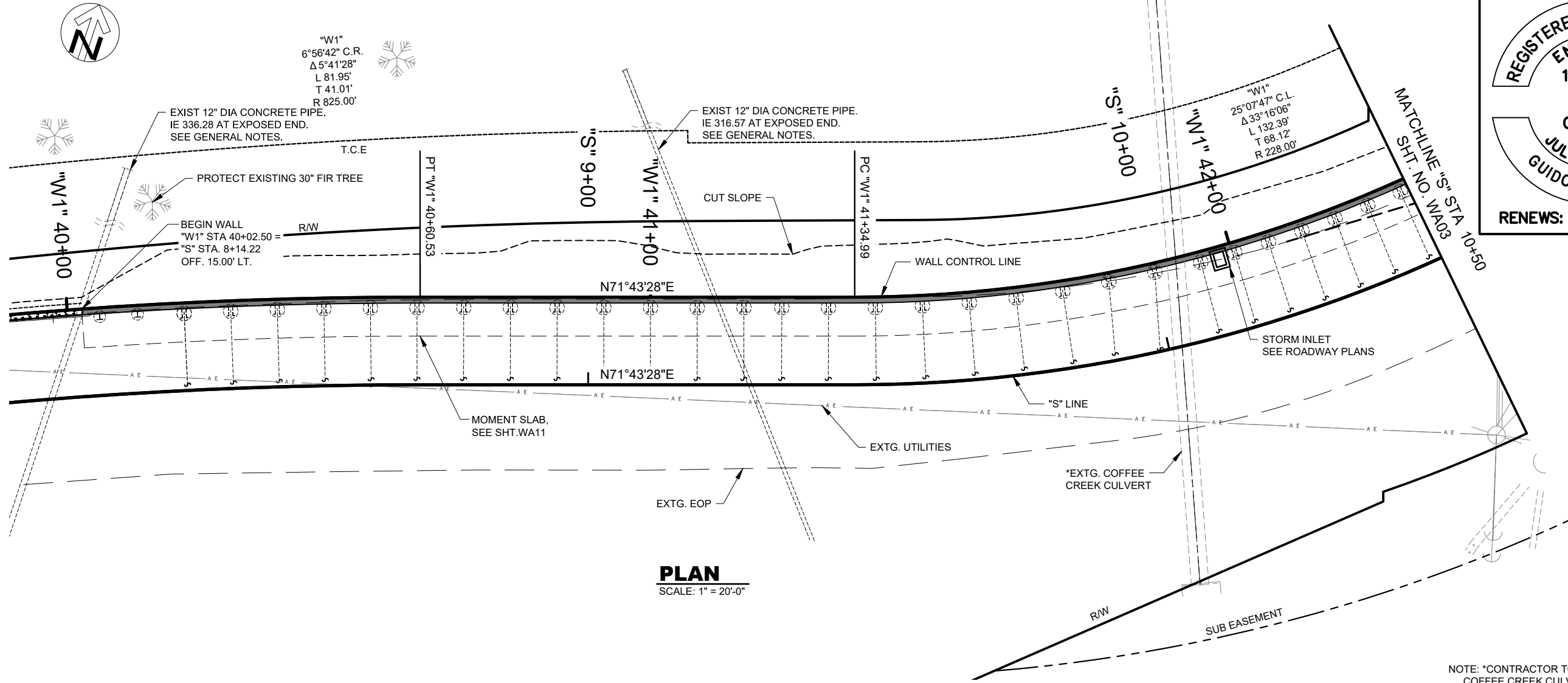
DRAFTED BY:
SXGO

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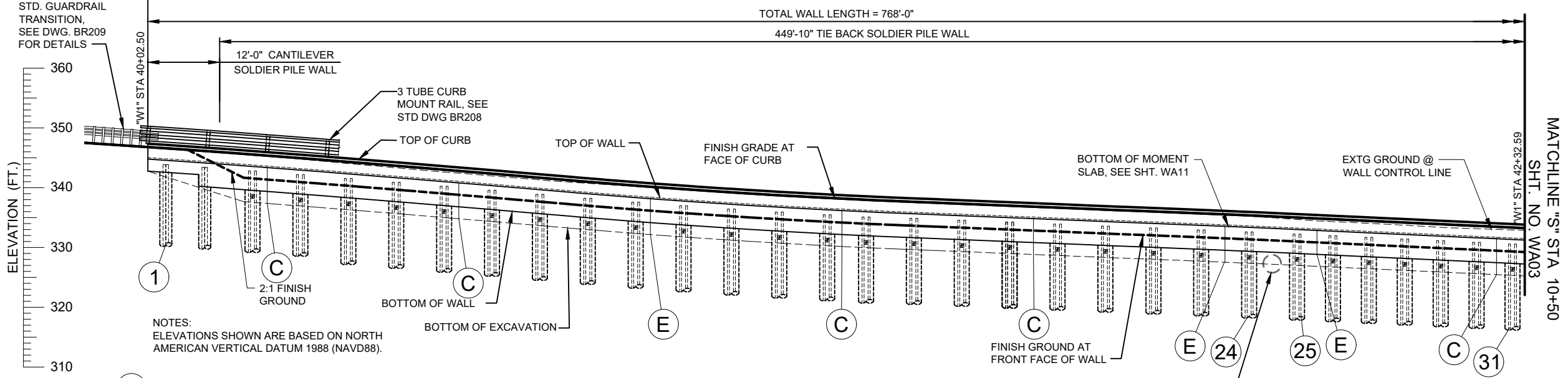
NO.	DATE:

Sheet No.
WA02



PLAN
SCALE: 1" = 20'-0"

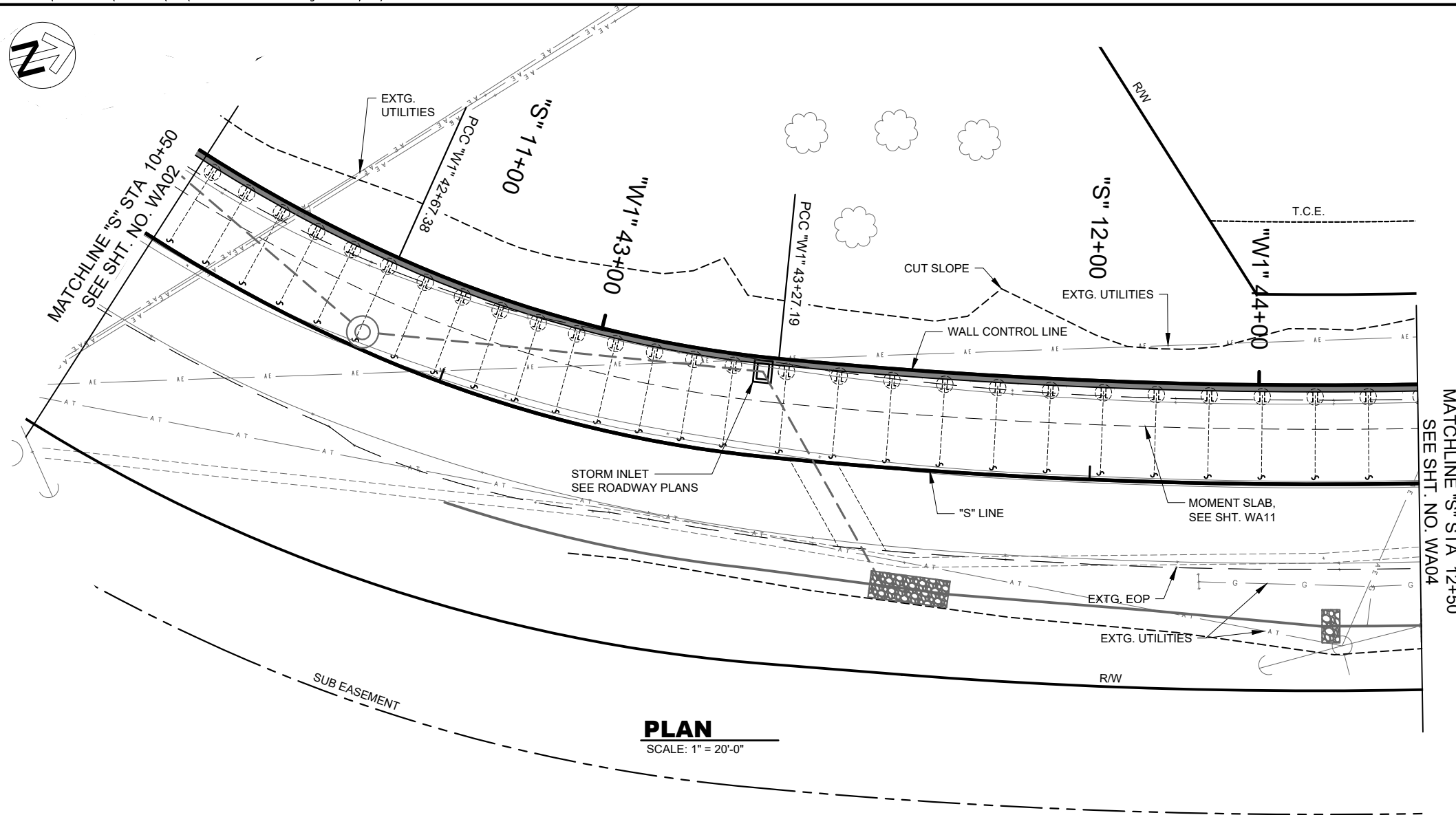
NOTE: *CONTRACTOR TO VERIFY LOCATION OF COFFEE CREEK CULVERT, VERTICALLY AND HORIZONTALLY, BEFORE CONSTRUCTION



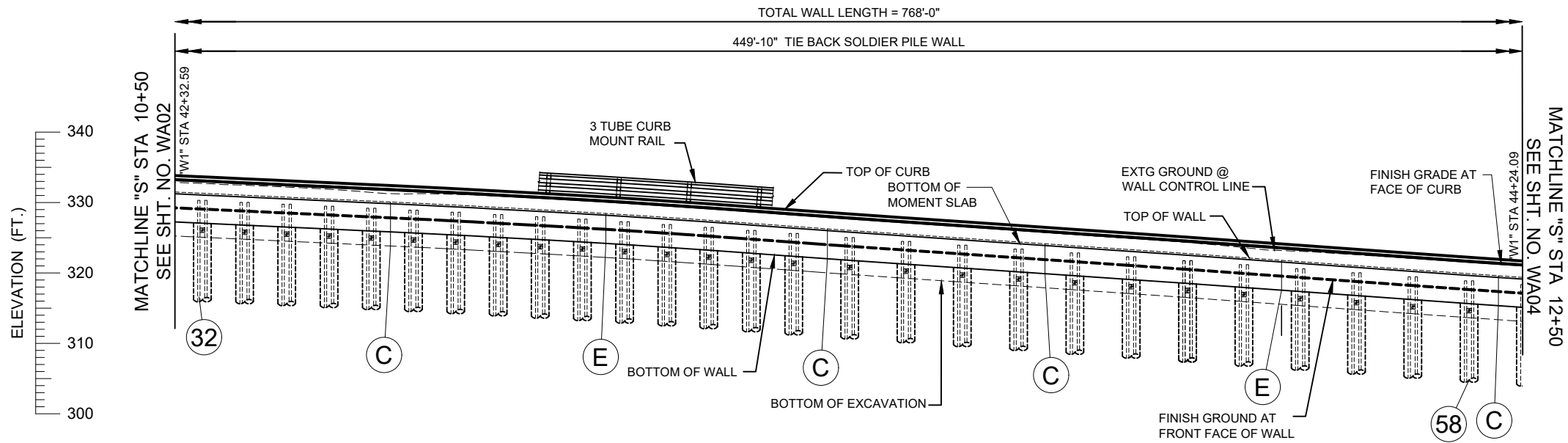
REFLECTIVE DEVELOPED ELEVATION
SCALE 1" = 20'-0"

- # = SOLDIER PILE NUMBER, SEE PILE TABLE FOR SPACING
- C = CONTRACTION JOINT
- E = EXPANSION JOINT
- ⊗ = GROUND ANCHOR

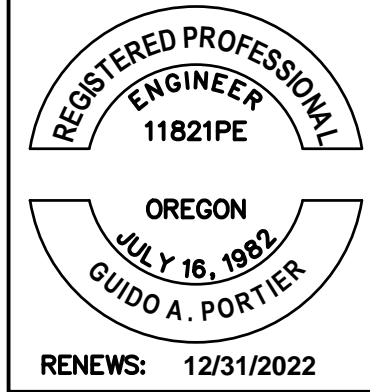
NOTES:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).



PLAN
SCALE: 1" = 20'-0"



REFLECTIVE DEVELOPED ELEVATION
SCALE 1" = 20'-0"



RETAINING WALL PLAN AND ELEVATION

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON DIRECTOR

DESIGNED BY: JJDZ
DRAFTED BY: SXGO
CHECKED BY: GAP

REVISIONS

NO.	DATE	DESCRIPTION

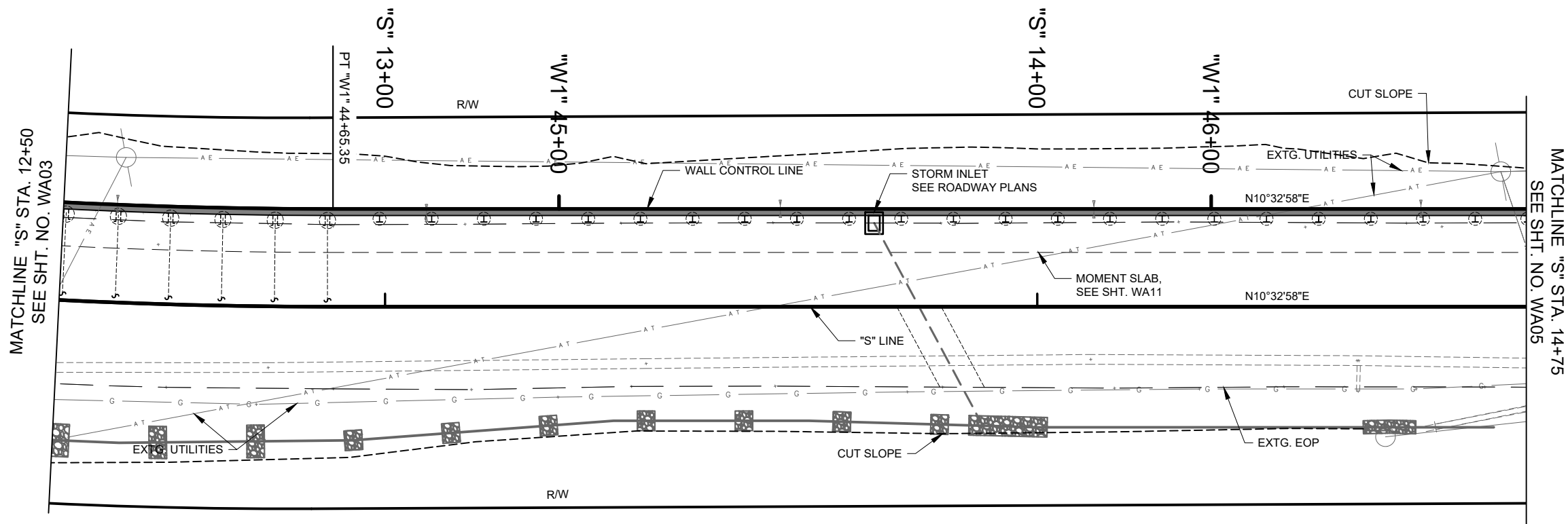
Sheet No. WA03

NOTES:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).

- # = SOLDIER PILE NUMBER, SEE PILE TABLE FOR SPACING
- C = CONTRACTION JOINT
- E = EXPANSION JOINT
- ⊗ = GROUND ANCHOR

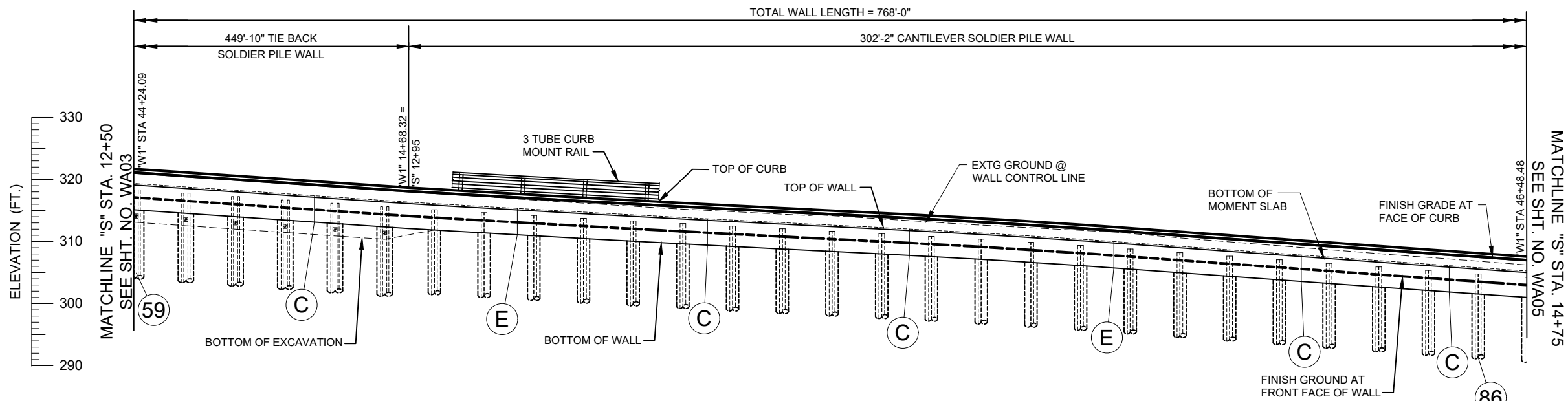


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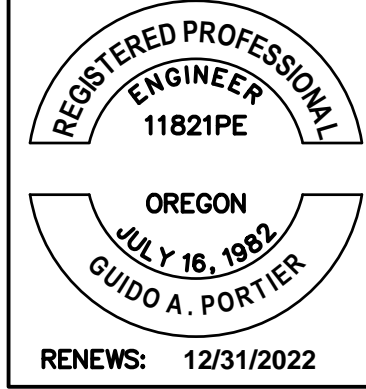


PLAN
SCALE: 1" = 20'-0"

SUB EASEMENT



REFLECTIVE DEVELOPED ELEVATION
SCALE 1" = 20'-0"



RETAINING WALL PLAN AND ELEVATION

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON
DIRECTOR

DESIGNED BY: JJDZ
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REVISIONS

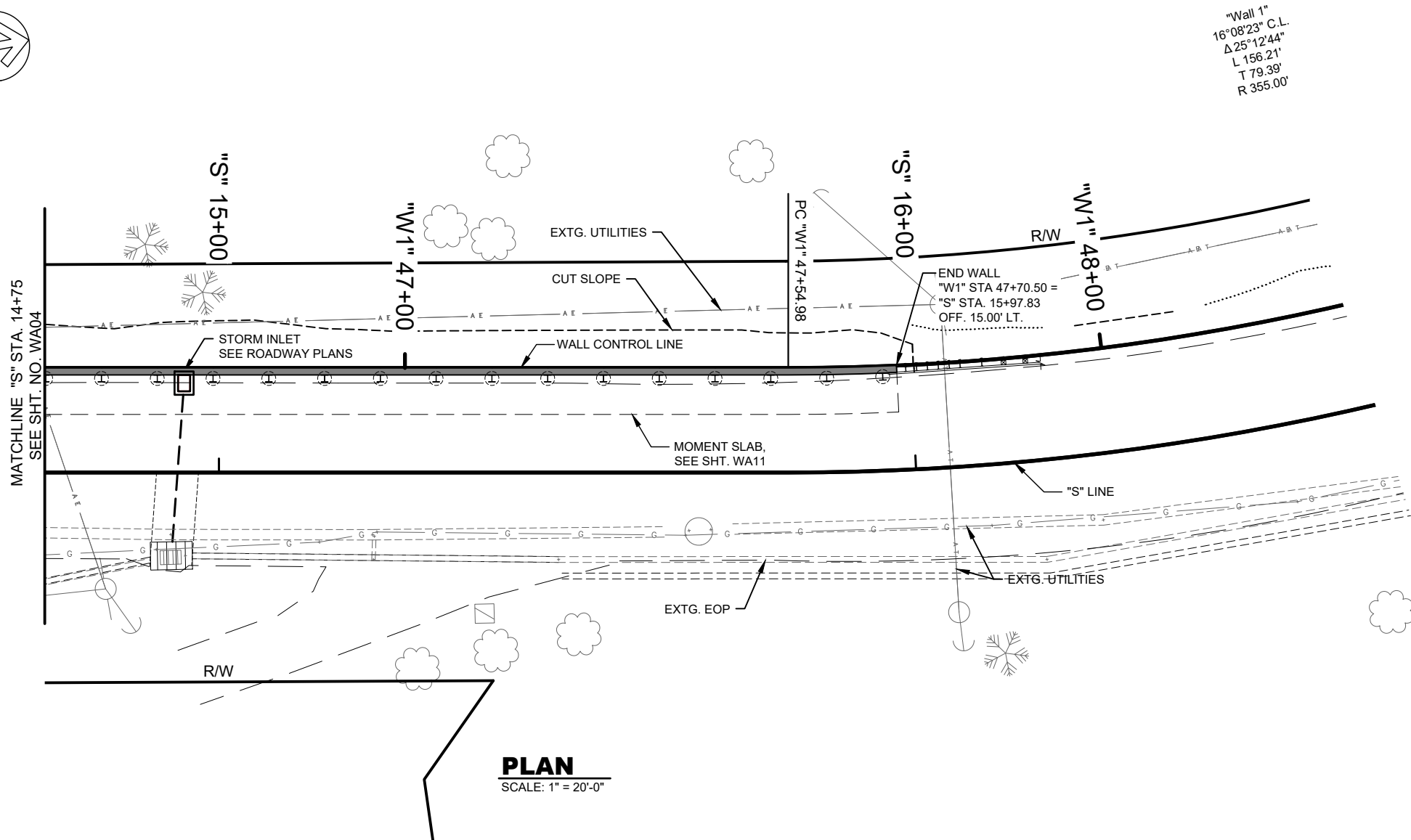
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Sheet No. WA04

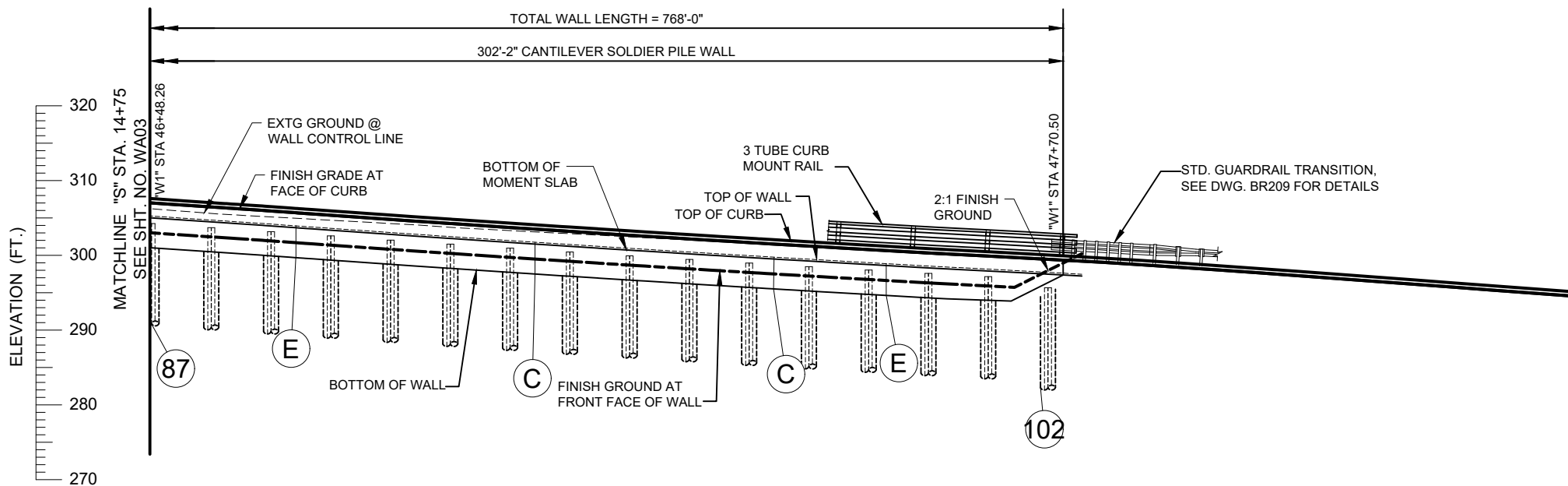
NOTES:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).

- # = SOLDIER PILE NUMBER, SEE PILE TABLE FOR SPACING
- C = CONTRACTION JOINT
- E = EXPANSION JOINT
- ⊗ = GROUND ANCHOR

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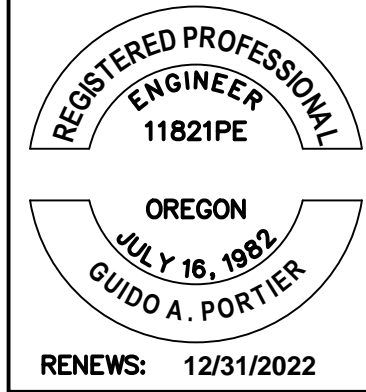
PLAN
SCALE: 1" = 20'-0"



REFLECTIVE DEVELOPED ELEVATION
SCALE 1" = 20'-0"

NOTES:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).

- # = SOLDIER PILE NUMBER, SEE PILE TABLE FOR SPACING
- C = CONTRACTION JOINT
- E = EXPANSION JOINT
- ⊗ = GROUND ANCHOR



RETAINING WALL PLAN AND ELEVATION

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



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DIRECTOR

DESIGNED BY: JJDZ
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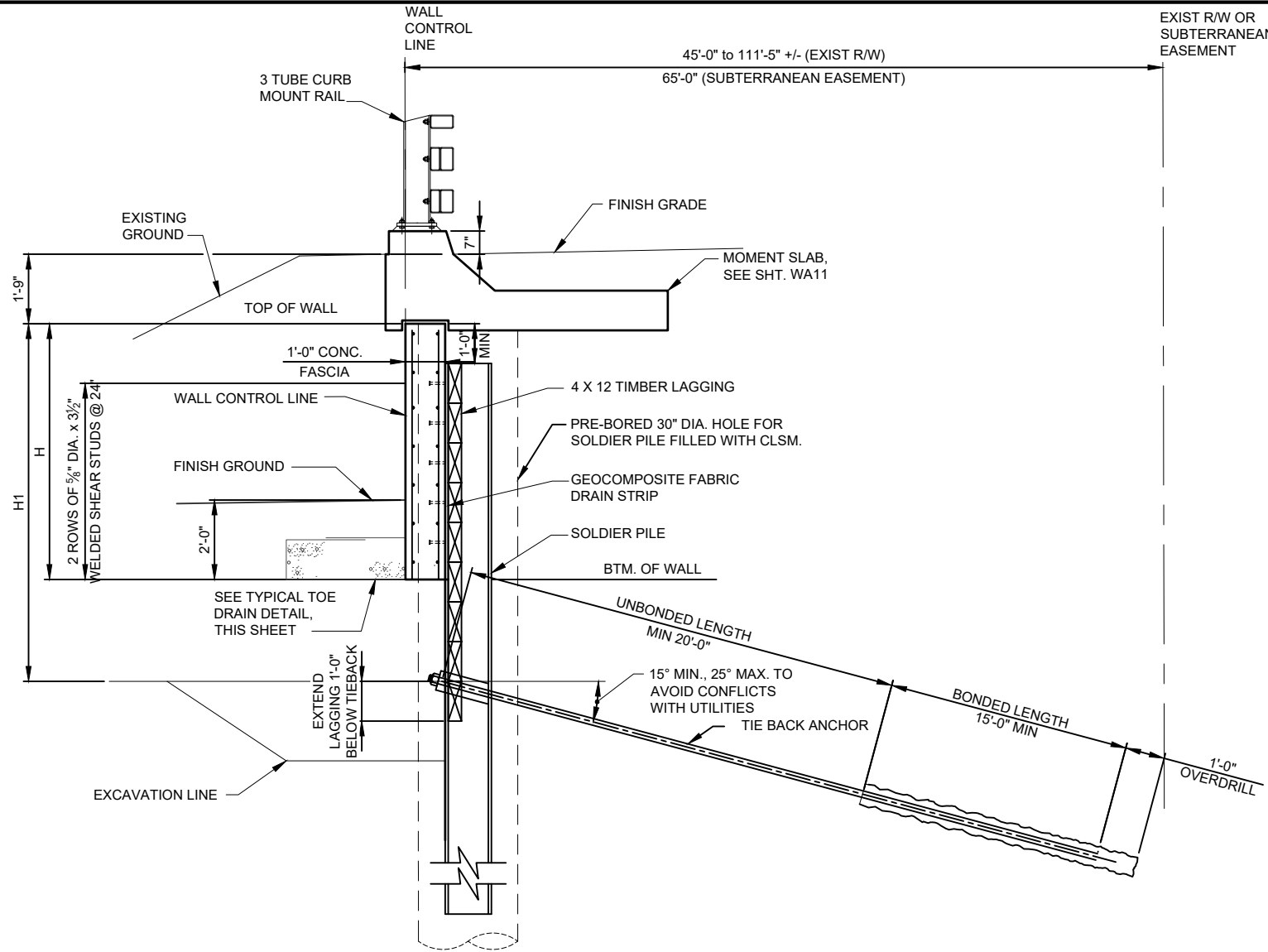
REVISIONS

NO.	DATE

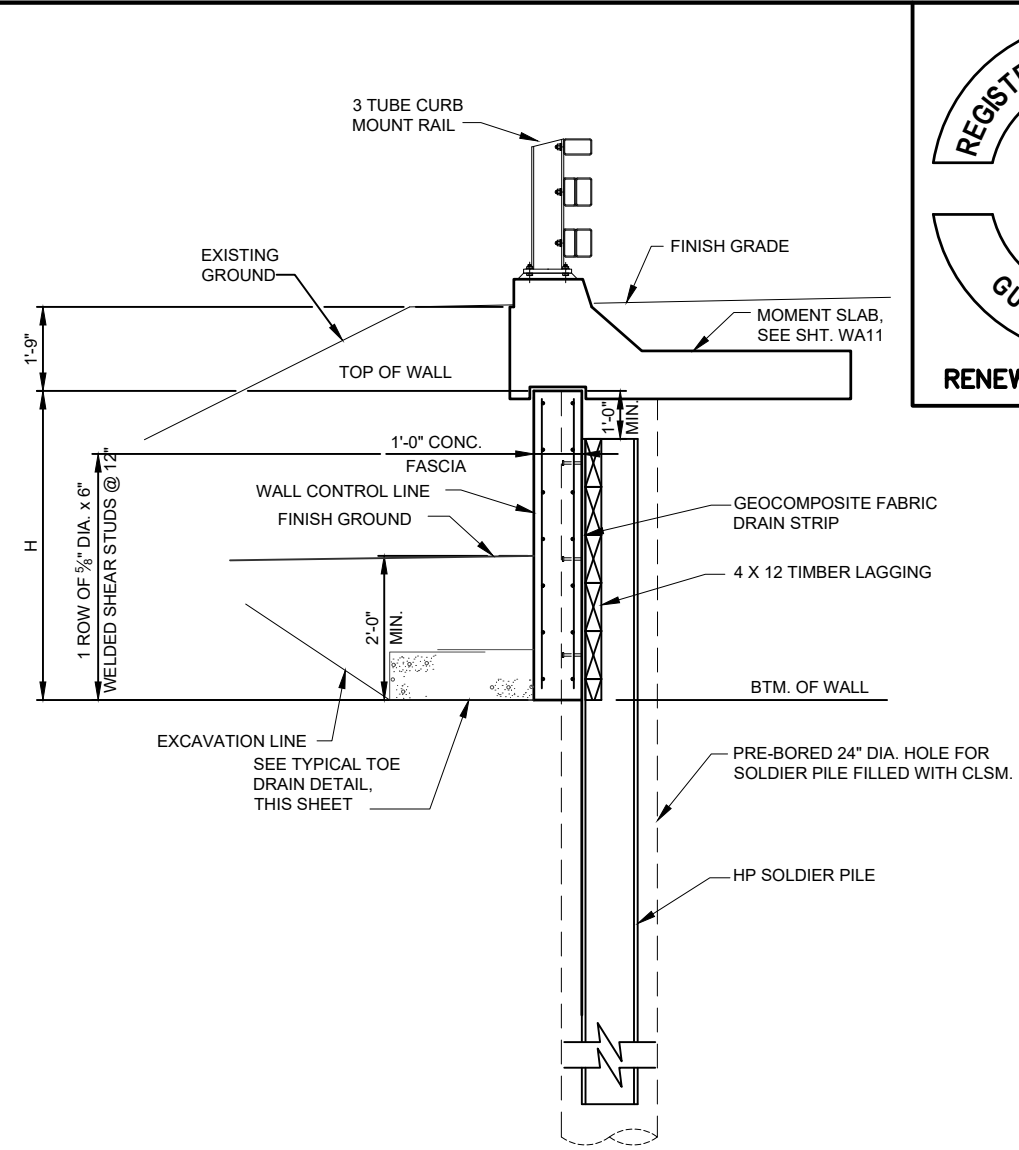
Sheet No.
WA05



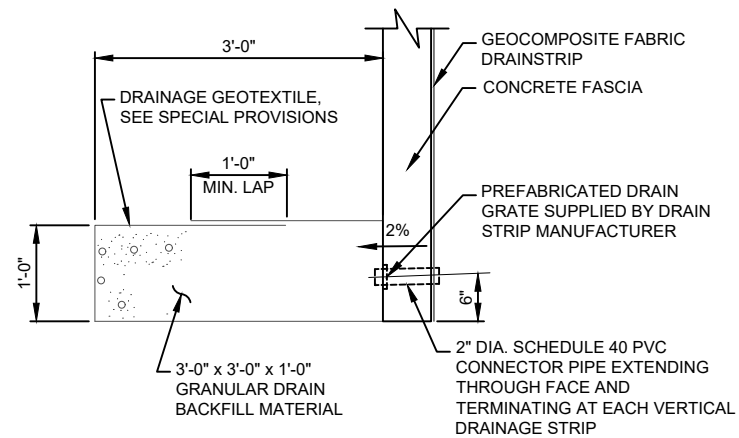
**DAVID EVANS
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2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663



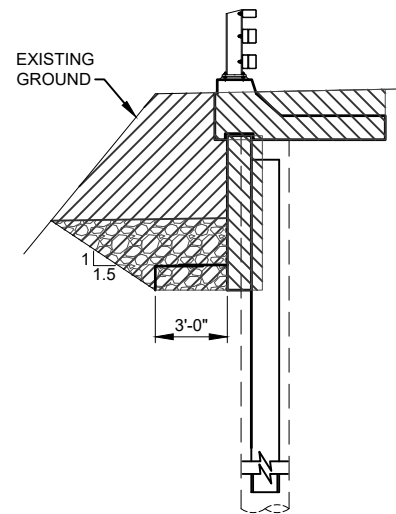
TYPICAL SECTION SOLDIER PILE W/ TIE BACK
NO SCALE



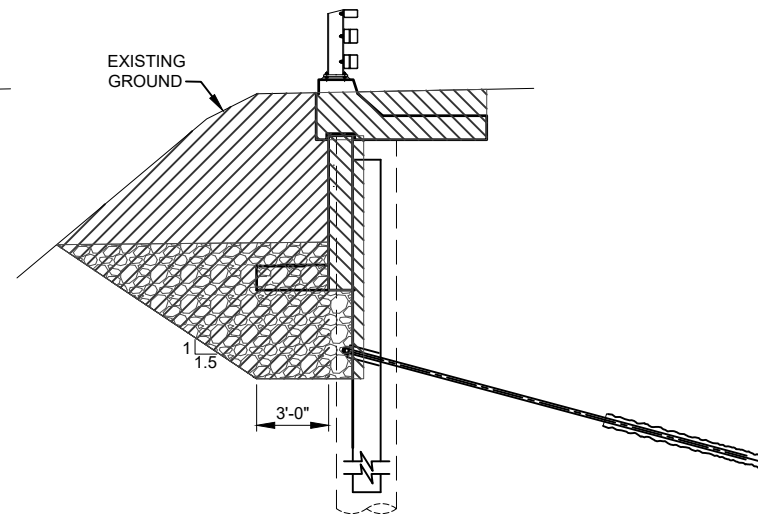
TYPICAL SECTION SOLDIER PILE WALL
NO SCALE



TYPICAL TOE DRAIN DETAIL
NO SCALE



TYPICAL SECTION

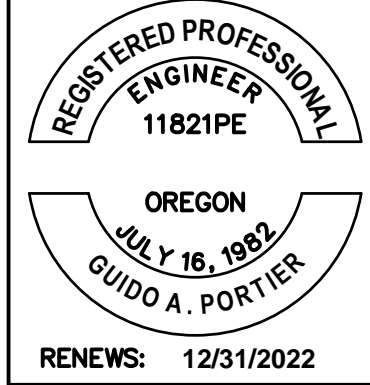


TYPICAL SECTION W/ TIEBACK

- GENERAL EXCAVATION
- STRUCTURAL EXCAVATION
- BORROW MATERIAL

NOTES:

1. FINISHED GROUND IN FRONT OF WALL SHALL BE FLAT OR SLOPE DOWN TO DAYLIGHT POINT.
2. REFERENCE SOLDIER PILE SCHEDULE ON SHEET WA09 & WA10 FOR VALUES OF H, H1 AND UNBONDED LENGTHS.



SOLDIER PILE WALL DETAILS

SOUTH END ROAD AT MP 3.8

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
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150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON

DIRECTOR

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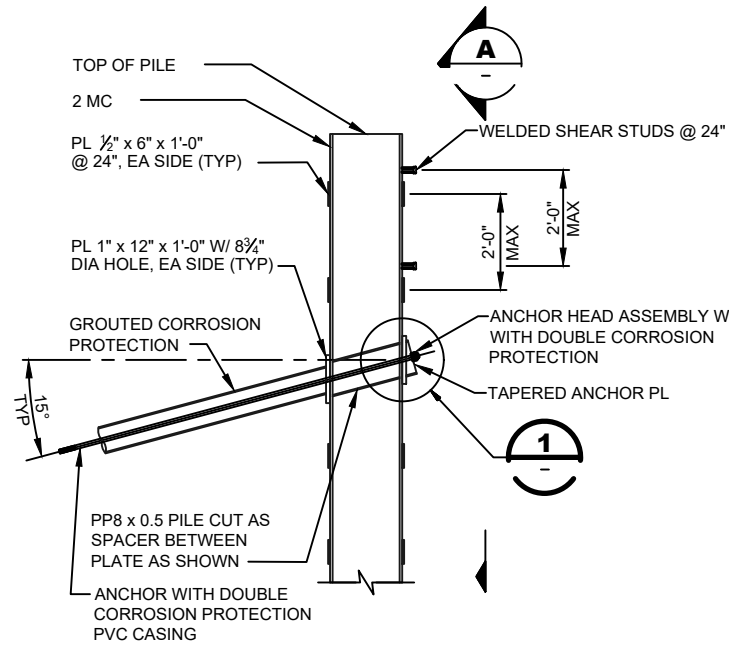
REVISIONS

NO.	DATE	DESCRIPTION

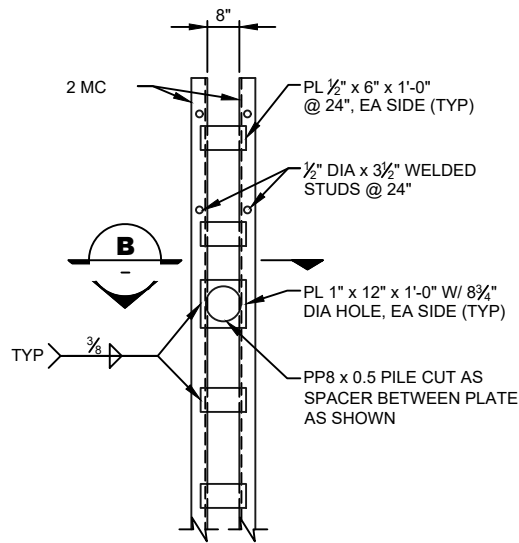
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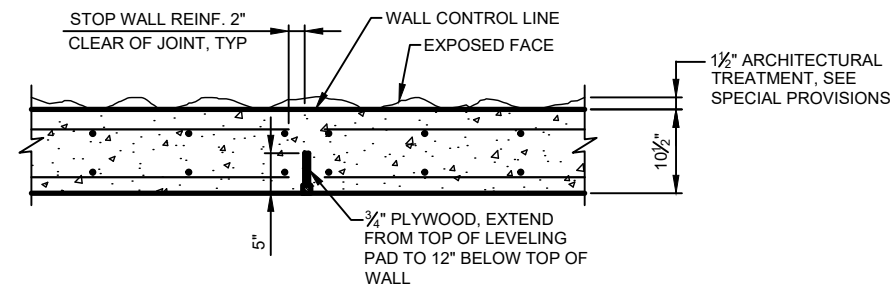
PAY LIMITS
NO SCALE



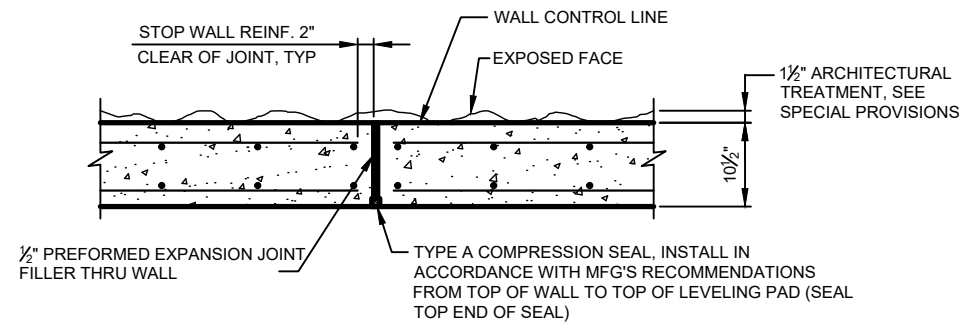
TYPICAL SECTION AT SOLDIER PILE
SCALE: 1/4" = 1'-0"



SECTION A
SCALE: 1/4" = 1'-0"

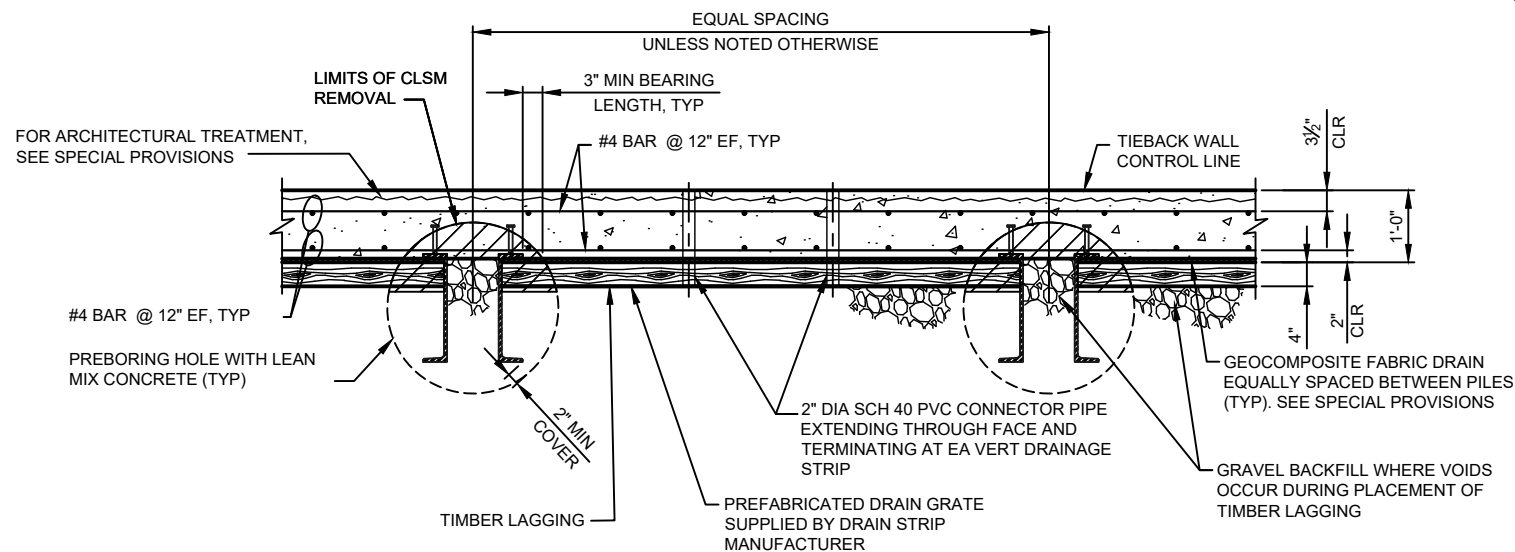


CONTRACTION JOINT DETAIL
SCALE: 1" = 1'-0"

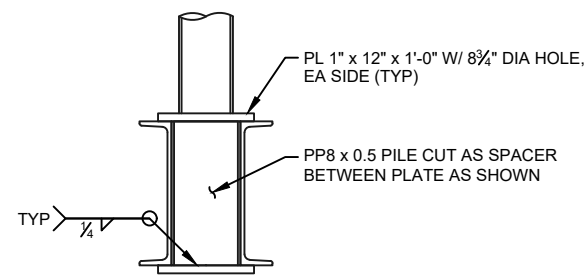


EXPANSION JOINT DETAIL
SCALE: 1" = 1'-0"

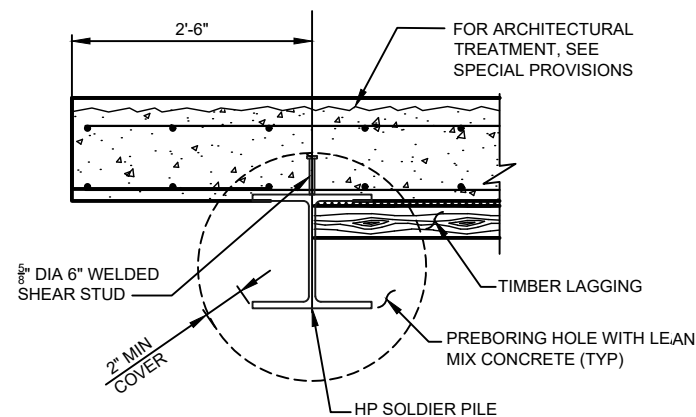
PLACE EXPANSION JOINT AT 96FT CENTERS AND CONTRACTION JOINTS AT APPROX 32FT CENTERS UNLESS SHOWN OTHERWISE



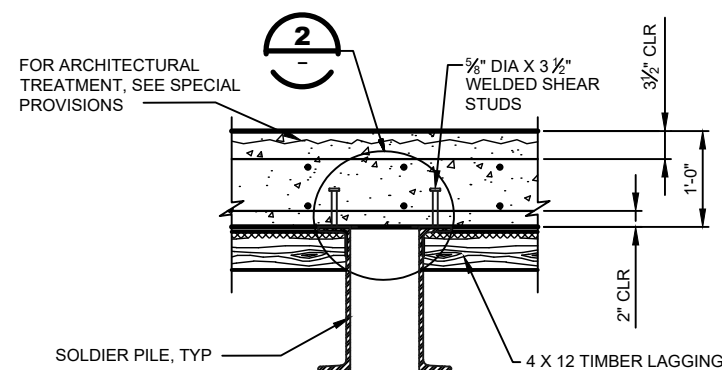
TYPICAL PLAN AT SOLDIER PILE WALL
SCALE: 3/8" = 1'-0"



SECTION B
SCALE: 1/2" = 1'-0"

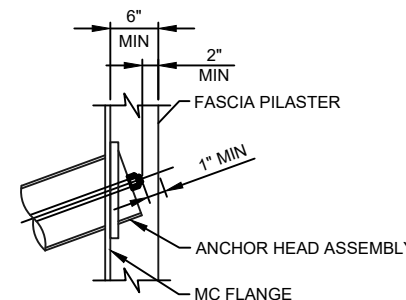


TYPICAL END OF SOLDIER PILE CONNECTION
SCALE: 1/2" = 1'-0"

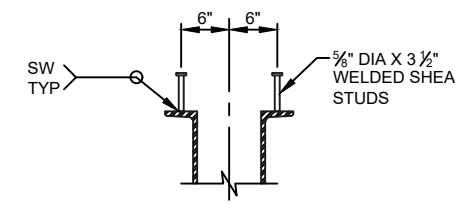


TYPICAL PANEL TO PANEL SOLDIER PILE CONNECTION
SCALE: 1/2" = 1'-0"

NOTE: HP SOLDIER IS SIMILAR.



DETAIL 1
SCALE: 1/2" = 1'-0"



DETAIL 2
SCALE: 1/2" = 1'-0"

REGISTERED PROFESSIONAL
ENGINEER
11821PE
OREGON
JULY 16, 1982
GUIDO A. PORTIER
RENEWS: 12/31/2022

SOLDIER PILE DETAILS

SOUTH END ROAD AT MP 3.8

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON

DIRECTOR

DESIGNED BY: JJDZ

DRAFTED BY: SXGO

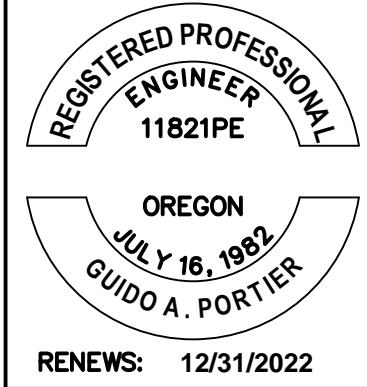
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REVISIONS

NO. DATE:

Sheet No. WA07

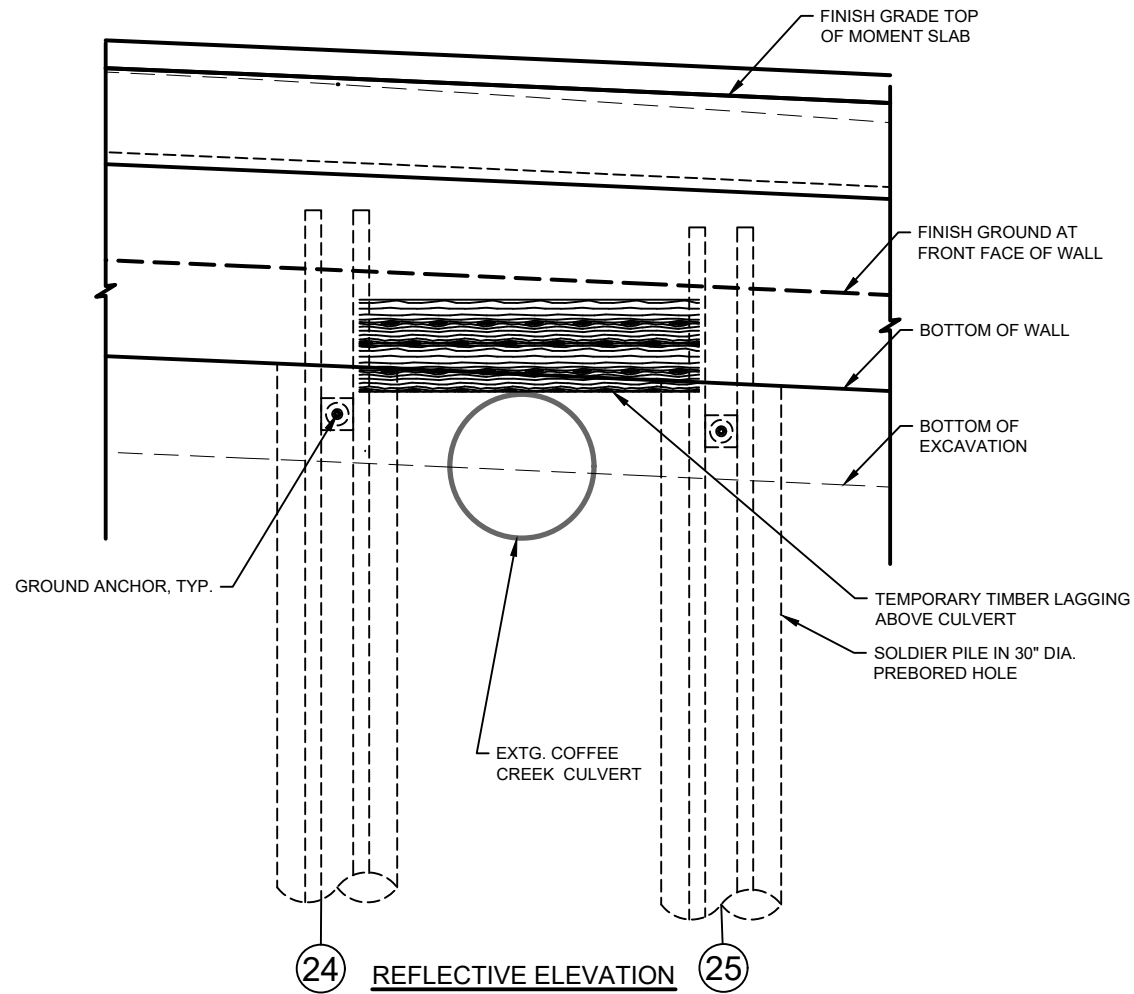
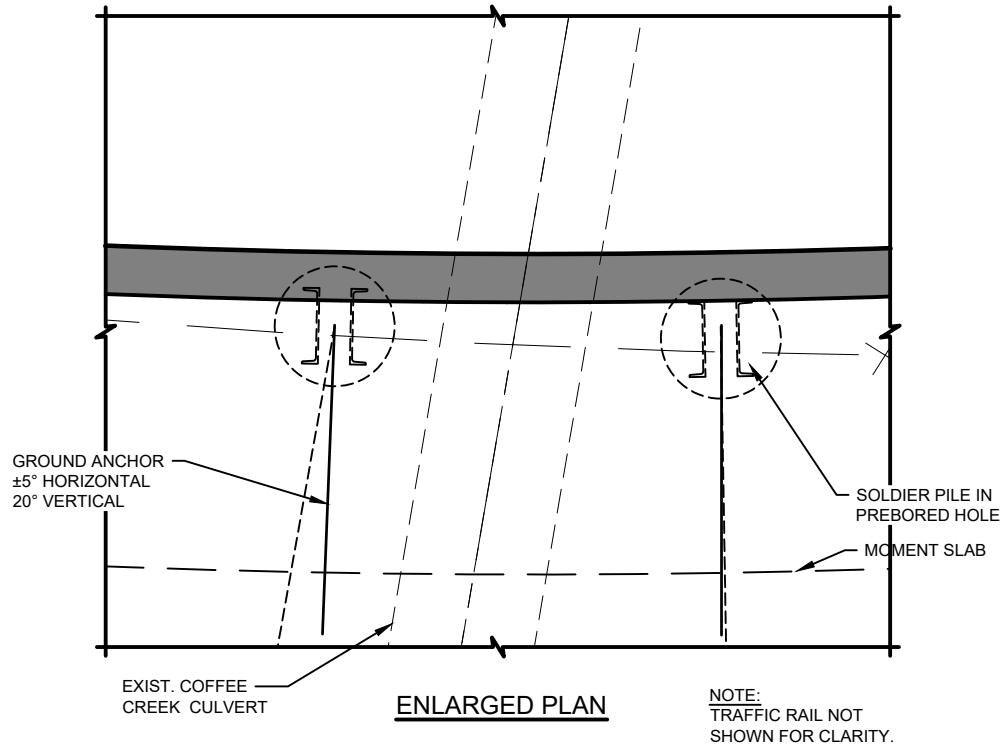
DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663



CANTILEVER SOLDIER PILE WALL DETAILS

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111



WALL AT EXISTING CULVERT
NO SCALE

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

DESIGNED BY: JJDZ
DRAFTED BY: SXGO
CHECKED BY: GAP

REVISIONS

NO.	DATE	DESCRIPTION

Sheet No. WA08

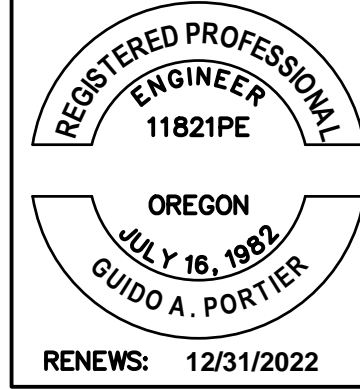


SOLDIER PILE SCHEDULE

WALL INFORMATION														FIRST ANCHOR FROM TOP			
WALL NO.	PILE NO.	WALL STATION	SOLDIER PILE SIZE	SHAFT DIAMETER (FT.)	TOP OF WALL EL.	TOP OF PILE EL.	BOT. OF CONC. FASCIA EL.	FINISH GRADE EL.	BOT. OF WALL EL.	FASCIA HEIGHT, H (FT.)	PILE TIP EL.	PILE LENGTH (FT.)	NUMBER OF ANCHORS	DISTANCE, H1 (FT.)	UNBONDED LENGTH (FT)	TEST LOAD (KIP)	LOCK-OFF LOAD (KIP)
	1	40+05.50	HP12x74	2	344.85	343.85	342.60	346.60	342.60	2.25	316.60	27.25	-	-	-	-	-
	2	40+12.00	HP12x74	2	344.40	343.40	340.15	346.15	340.15	4.25	316.15	27.25	-	-	-	-	-
	3	40+19.99	2MC10x33.6	2.5	343.81	342.81	339.56	345.56	339.56	4.25	306.56	36.25	1	5.25	20	139	139
	4	40+27.99	2MC10x33.6	2.5	343.20	342.20	338.95	344.95	338.95	4.25	305.95	36.25	1	5.25	20	139	139
	5	40+36.00	2MC10x33.6	2.5	342.57	341.57	338.32	344.32	338.32	4.25	305.32	36.25	1	5.25	20	139	139
	6	40+44.00	2MC10x33.6	2.5	341.93	340.93	337.68	343.68	337.68	4.25	304.68	36.25	1	5.25	20	139	139
	7	40+52.00	2MC10x33.6	2.5	341.27	340.27	337.02	343.02	337.02	4.25	304.02	36.25	1	5.25	20	139	139
	8	40+60.00	2MC10x33.6	2.5	340.60	339.60	336.35	342.35	336.35	4.25	303.35	36.25	1	5.25	20	139	139
	9	40+68.00	2MC10x33.6	2.5	339.92	338.92	335.67	341.67	335.67	4.25	302.67	36.25	1	5.25	20	139	139
	10	40+76.00	2MC10x33.6	2.5	339.24	338.24	334.99	340.99	334.99	4.25	301.99	36.25	1	5.25	20	139	139
	11	40+84.00	2MC10x33.6	2.5	338.60	337.60	334.35	340.35	334.35	4.25	301.35	36.25	1	5.25	20	139	139
	12	40+92.00	2MC10x33.6	2.5	338.02	337.02	333.77	339.77	333.77	4.25	300.77	36.25	1	5.25	20	139	139
	13	41+00.00	2MC10x33.6	2.5	337.47	336.47	333.22	339.22	333.22	4.25	300.22	36.25	1	5.25	20	139	139
	14	41+08.00	2MC10x33.6	2.5	336.99	335.99	332.74	338.74	332.74	4.25	299.74	36.25	1	5.25	20	139	139
	15	41+16.00	2MC10x33.6	2.5	336.55	335.55	332.30	338.30	332.30	4.25	299.30	36.25	1	5.25	20	139	139
	16	41+22.50	2MC10x33.6	2.5	336.24	335.24	331.99	337.99	331.99	4.25	298.99	36.25	1	5.25	20	139	139
	17	41+30.48	2MC10x33.6	2.5	335.89	334.89	331.64	337.64	331.64	4.25	298.64	36.25	1	5.25	20	139	139
	18	41+38.48	2MC10x33.6	2.5	335.58	334.58	331.33	337.33	331.33	4.25	298.33	36.25	1	5.25	20	139	139
	19	41+46.48	2MC10x33.6	2.5	335.25	334.25	331.00	337.00	331.00	4.25	298.00	36.25	1	5.25	20	139	139
	20	41+54.48	2MC10x33.6	2.5	334.93	333.93	330.68	336.68	330.68	4.25	297.68	36.25	1	5.25	20	139	139
	21	41+62.48	2MC10x33.6	2.5	334.59	333.59	330.34	336.34	330.34	4.25	297.34	36.25	1	5.25	20	139	139
	22	41+70.52	2MC10x33.6	2.5	334.28	333.28	330.03	336.03	330.03	4.25	297.03	36.25	1	5.25	20	139	139
	23	41+78.48	2MC10x33.6	2.5	333.96	332.96	329.71	335.71	329.71	4.25	296.71	36.25	1	5.25	20	139	139
	24	41+86.50	2MC10x33.6	2.5	333.62	332.62	329.37	335.37	329.37	4.25	296.37	36.25	1	5.25	20	139	139
	25	41+94.50	2MC10x33.6	2.5	333.29	332.29	329.04	335.04	329.04	4.25	296.04	36.25	1	5.25	20	139	139
	26	42+00.50	2MC18x45.8	2.5	332.98	331.98	328.73	334.73	328.73	4.25	285.73	46.25	1	5.25	20	158	158
	27	42+06.50	2MC18x45.8	2.5	332.71	331.71	328.46	334.46	328.46	4.25	285.46	46.25	1	5.25	20	158	158
	28	42+12.50	2MC18x45.8	2.5	332.43	331.43	328.18	334.18	328.18	4.25	285.18	46.25	1	5.25	20	158	158
	29	42+18.50	2MC18x45.8	2.5	332.15	331.15	327.90	333.90	327.90	4.25	284.90	46.25	1	5.25	20	158	158
	30	42+24.50	2MC18x45.8	2.5	331.87	330.87	327.62	333.62	327.62	4.25	284.62	46.25	1	5.25	20	158	158
	31	42+30.50	2MC18x45.8	2.5	331.59	330.59	327.34	333.34	327.34	4.25	284.34	46.25	1	5.25	20	158	158
	32	42+36.50	2MC18x45.8	2.5	331.32	330.32	327.07	333.07	327.07	4.25	284.07	46.25	1	5.25	20	158	158
	33	42+42.50	2MC18x45.8	2.5	331.04	330.04	326.79	332.79	326.79	4.25	283.79	46.25	1	5.25	20	158	158
	34	42+48.48	2MC18x45.8	2.5	330.76	329.76	326.51	332.51	326.51	4.25	283.51	46.25	1	5.25	20	158	158
	35	42+54.50	2MC18x45.8	2.5	330.48	329.48	326.23	332.23	326.23	4.25	283.23	46.25	1	5.25	20	158	158
	36	42+60.50	2MC18x45.8	2.5	330.20	329.20	325.95	331.95	325.95	4.25	282.95	46.25	1	5.25	20	158	158
	37	42+66.50	2MC18x45.8	2.5	329.92	328.92	325.67	331.67	325.67	4.25	282.67	46.25	1	5.25	20	158	158
	38	42+72.50	2MC18x45.8	2.5	329.63	328.63	325.38	331.38	325.38	4.25	282.38	46.25	1	5.25	20	158	158
	39	42+78.53	2MC18x45.8	2.5	329.37	328.37	325.10	331.10	325.10	4.25	282.10	46.25	1	5.25	20	158	158
	40	42+84.50	2MC18x45.8	2.5	329.11	328.11	324.82	330.82	324.82	4.25	281.82	46.25	1	5.25	20	158	158
	41	42+90.50	2MC18x45.8	2.5	328.84	327.84	324.54	330.54	324.54	4.25	281.54	46.25	1	5.25	20	158	158
	42	42+96.50	2MC18x45.8	2.5	328.58	327.58	324.26	330.26	324.26	4.25	281.26	46.25	1	5.25	20	158	158
	43	43+02.50	2MC18x45.8	2.5	328.31	327.31	323.98	330.00	323.98	4.25	280.98	46.25	1	5.25	20	158	158
	44	43+08.44	2MC18x45.8	2.5	328.05	327.05	323.70	329.74	323.70	4.25	280.74	46.25	1	5.25	20	158	158
	45	43+14.50	2MC18x45.8	2.5	327.79	326.79	323.42	329.48	323.42	4.25	280.48	46.25	1	5.25	20	158	158
	46	43+20.52	2MC18x45.8	2.5	327.52	326.52	323.14	329.22	323.14	4.25	280.22	46.25	1	5.25	20	158	158
	47	43+26.48	2MC10x33.6	2.5	327.26	326.26	322.86	328.96	322.86	4.25	279.96	36.25	1	5.25	20	139	139
	48	43+32.48	2MC10x33.6	2.5	327.00	326.00	322.58	328.70	322.58	4.25	279.70	36.25	1	5.25	20	139	139
	49	43+38.48	2MC10x33.6	2.5	326.74	325.74	322.30	328.44	322.30	4.25	279.44	36.25	1	5.25	20	139	139
	50	43+44.48	2MC10x33.6	2.5	326.48	325.48	322.02	328.18	322.02	4.25	279.18	36.25	1	5.25	20	139	139
	51	43+50.48	2MC10x33.6	2.5	326.22	325.22	321.74	327.92	321.74	4.25	278.92	36.25	1	5.25	20	139	139
	52	43+56.48	2MC10x33.6	2.5	325.96	324.96	321.46	327.66	321.46	4.25	278.66	36.25	1	5.25	20	139	139
	53	43+62.48	2MC10x33.6	2.5	325.70	324.70	321.18	327.40	321.18	4.25	278.40	36.25	1	5.25	20	139	139
	54	43+68.48	2MC10x33.6	2.5	325.44	324.44	320.90	327.14	320.90	4.25	278.14	36.25	1	5.25	20	139	139
	55	43+74.48	2MC10x33.6	2.5	325.18	324.18	320.62	326.88	320.62	4.25	277.88	36.25	1	5.25	20	139	139
	56	43+80.48	2MC10x33.6	2.5	324.92	323.92	320.34	326.62	320.34	4.25	277.62	36.25	1	5.25	20	139	139
	57	43+86.48	2MC10x33.6	2.5	324.66	323.66	320.06	326.36	320.06	4.25	277.36	36.25	1	5.25	20	139	139
	58	43+92.48	2MC10x33.6	2.5	324.40	323.40	319.78	326.10	319.78	4.25	277.10	36.25	1	5.25	20	139	139
	59	44+00.48	2MC10x33.6	2.5	324.14	323.14	319.50	325.84	319.50	4.25	276.84	36.25	1	5.25	20	139	139
	60	44+06.48	2MC10x33.6	2.5	323.88	322.88	319.22	325.58	319.22	4.25	276.58	36.25	1	5.25	20	139	139
	61	44+12.48	2MC10x33.6	2.5	323.62	322.62	318.94	325.32	318.94	4.25	276.32	36.25	1	5.25	20	139	139
	62	44+18.48	2MC10x33.6	2.5	323.36	322.36	318.66	325.06	318.66	4.25	276.06	36.25	1	5.25	20	139	139
	63	44+24.48	2MC10x33.6	2.5	323.10	322.10	318.38	324.80	318.38	4.25	275.80	36.25	1	5.25	20	139	139
	64	44+30.48	2MC10x33.6	2.5	322.84	321.84	318.10	324.54	318.10	4.25	275.54	36.25	1	5.25	20	139	139
	65	44+36.48	2MC10x33.6	2.5	322.58	321.58	317.82	324.28	317.82	4.25	275.28	36.25	1	5.25	20	139	139
	66	44+42.48	2MC10x33.6	2.5	322.32	321.32	317.54	324.02	317.54	4.25	275.02	36.25	1	5.25	20	139	139
	67	44+48.48	2MC10x33.6	2.5	322.06	321.06	317.26	323.76	317.26	4.25	274.76	36.25	1	5.25	20	139	139
	68	44+54.48	2MC10x33.6	2.5	321.80	320.80	316.98	323.50	316.98	4.25	274.50	36.25	1	5.25	20	139	139
	69	44+60.48	2MC10x33.6	2.5	321.54	320.54	316.70	323.24	316.70	4.25	2						

SOLDIER PILE SCHEDULE

WALL INFORMATION														FIRST ANCHOR FROM TOP			
WALL NO.	PILE NO.	WALL STATION	SOLDIER PILE SIZE	SHAFT DIAMETER (FT.)	TOP OF WALL EL.	TOP OF PILE EL.	BOT. OF CONC. FASCIA EL.	FINISH GRADE EL.	BOT. OF WALL EL.	FASCIA HEIGHT, H (FT.)	PILE TIP EL.	PILE LENGTH (FT.)	NUMBER OF ANCHORS	DISTANCE, H1 (FT.)	UNBONDED LENGTH (FT)	TEST LOAD (KIP)	LOCK-OFF LOAD (KIP)
W1	77	45+68.51	HP12x74	2	310.90	309.90	306.65	312.65	306.65	4.25	282.65	27.25	-	-	-	-	-
	78	45+76.48	HP12x74	2	310.38	309.38	306.13	312.13	306.13	4.25	282.13	27.25	-	-	-	-	-
	79	45+84.48	HP12x74	2	309.82	308.82	305.57	311.57	305.57	4.25	281.57	27.25	-	-	-	-	-
	80	45+92.48	HP12x74	2	309.24	308.24	304.99	310.99	304.99	4.25	280.99	27.25	-	-	-	-	-
	81	46+00.51	HP12x74	2	308.66	307.66	304.41	310.41	304.41	4.25	280.41	27.25	-	-	-	-	-
	82	46+08.48	HP12x74	2	308.09	307.09	303.84	309.84	303.84	4.25	279.84	27.25	-	-	-	-	-
	83	46+16.48	HP12x74	2	307.52	306.52	303.27	309.27	303.27	4.25	279.27	27.25	-	-	-	-	-
	84	46+24.48	HP12x74	2	306.94	305.94	302.69	308.69	302.69	4.25	278.69	27.25	-	-	-	-	-
	85	46+32.48	HP12x74	2	306.37	305.37	302.12	308.12	302.12	4.25	278.12	27.25	-	-	-	-	-
	86	46+40.48	HP12x74	2	305.80	304.80	301.55	307.55	301.55	4.25	277.55	27.25	-	-	-	-	-
	87	46+48.26	HP12x74	2	305.26	304.26	301.01	307.01	301.01	4.25	277.01	27.25	-	-	-	-	-
	88	46+56.48	HP12x74	2	304.71	303.71	300.46	306.46	300.46	4.25	276.46	27.25	-	-	-	-	-
	89	46+64.48	HP12x74	2	304.17	303.17	299.92	305.92	299.92	4.25	275.92	27.25	-	-	-	-	-
	90	46+72.48	HP12x74	2	303.60	302.60	299.35	305.35	299.35	4.25	275.35	27.25	-	-	-	-	-
	91	45+80.51	HP12x74	2	303.05	302.05	298.80	304.80	298.80	4.25	274.80	27.25	-	-	-	-	-
	92	46+88.51	HP12x74	2	302.50	301.50	298.25	304.25	298.25	4.25	274.25	27.25	-	-	-	-	-
	93	46+96.48	HP12x74	2	301.97	300.97	297.72	303.72	297.72	4.25	273.72	27.25	-	-	-	-	-
	94	47+04.54	HP12x74	2	301.44	300.44	297.19	303.19	297.19	4.25	273.19	27.25	-	-	-	-	-
	95	47+12.48	HP12x74	2	300.93	299.93	296.68	302.68	296.68	4.25	272.68	27.25	-	-	-	-	-
	96	47+20.48	HP12x74	2	300.44	299.44	296.19	302.19	296.19	4.25	272.19	27.25	-	-	-	-	-
	97	47+28.48	HP12x74	2	299.95	298.95	295.70	301.70	295.70	4.25	271.70	27.25	-	-	-	-	-
	98	47+36.48	HP12x74	2	299.48	298.48	295.23	301.23	295.23	4.25	271.23	27.25	-	-	-	-	-
	99	47+44.48	HP12x74	2	299.02	298.02	294.77	300.77	294.77	4.25	270.77	27.25	-	-	-	-	-
	100	47+52.48	HP12x74	2	298.56	297.56	294.31	300.31	294.31	4.25	270.31	27.25	-	-	-	-	-
	101	47+60.48	HP12x74	2	298.15	297.15	293.90	299.90	293.90	4.25	269.90	27.25	-	-	-	-	-
	102	47+68.48	HP12x74	2	297.72	296.72	293.47	299.47	293.47	2.25	269.47	27.25	-	-	-	-	-

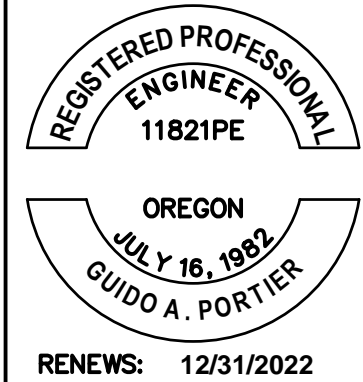


SOLDIER PILE SCHEDULE
 SOUTH END ROAD AT MP 3.8
 DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
 DEPT. OF TRANSPORTATION AND DEVELOPMENT
 150 BEAVERCREEK ROAD
 OREGON CITY, OR 97045
 DAN JOHNSON
 DIRECTOR

DESIGNED BY: JJDZ
 DRAFTED BY: SXGO
 CHECKED BY: GAP

NO.	DATE	REVISIONS



MOMENT SLAB AND INLET DETAIL

SOUTH END ROAD AT MP 3.8

FED. AID NO.: C005111

DIRECTOR

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON

DESIGNED BY:

JJDZ

DRAFTED BY:

SXGO

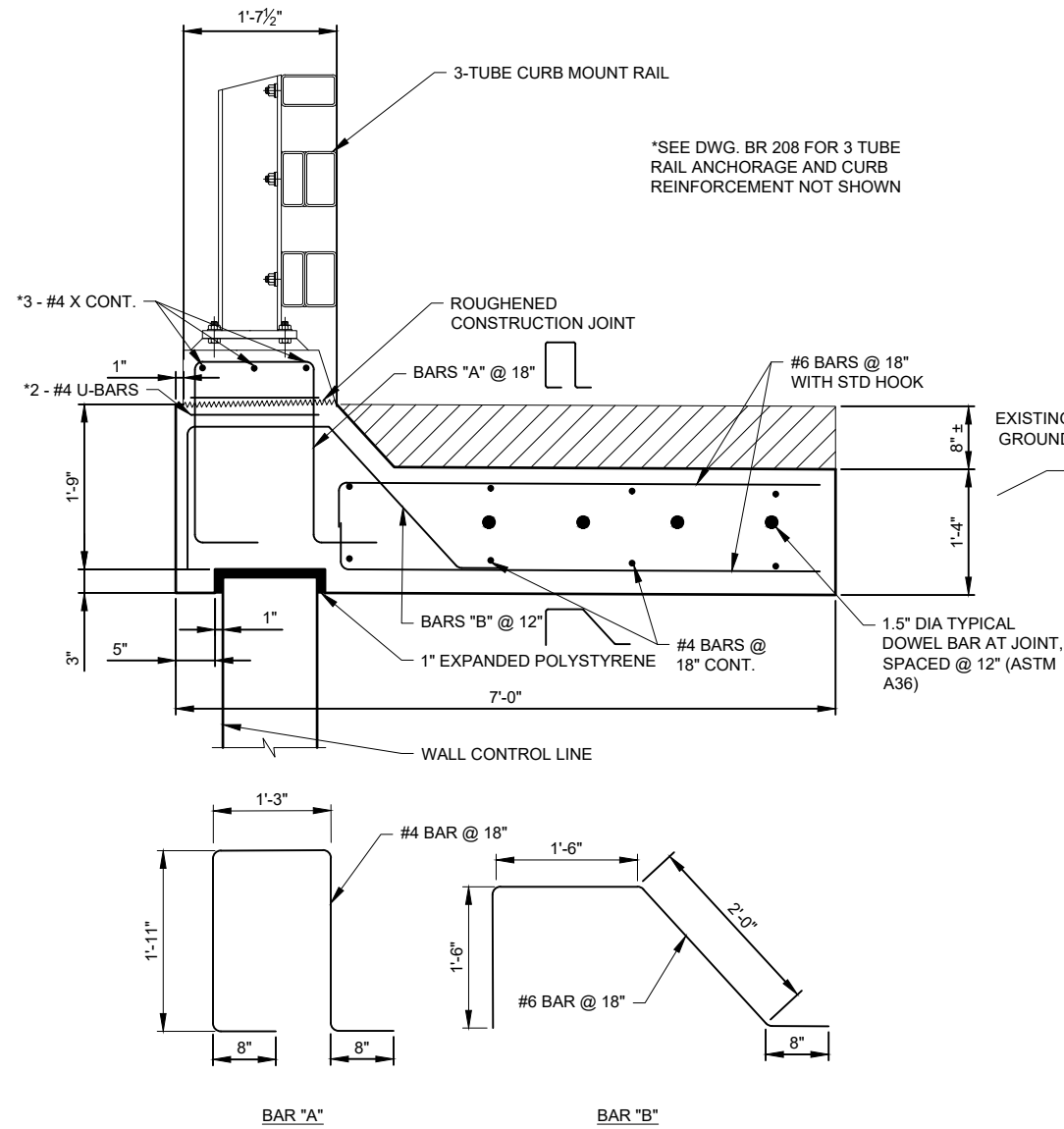
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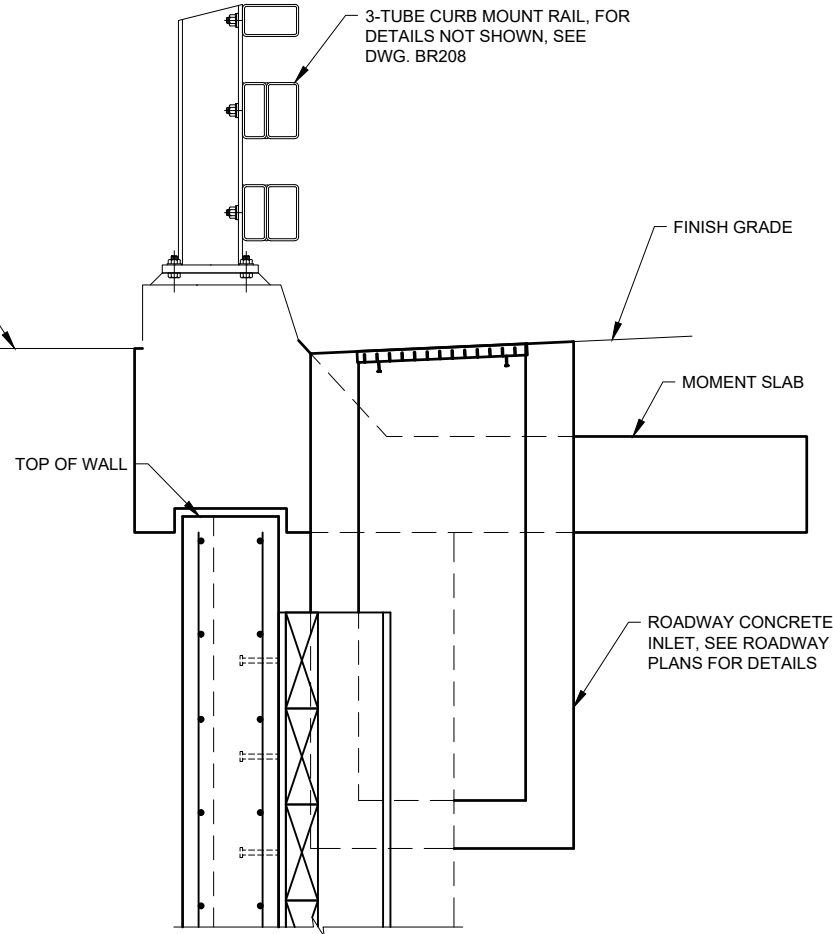
REVISIONS

NO. DATE:

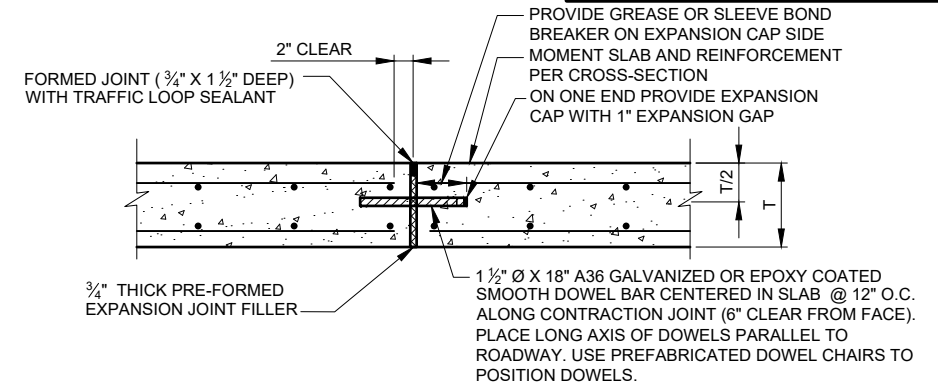
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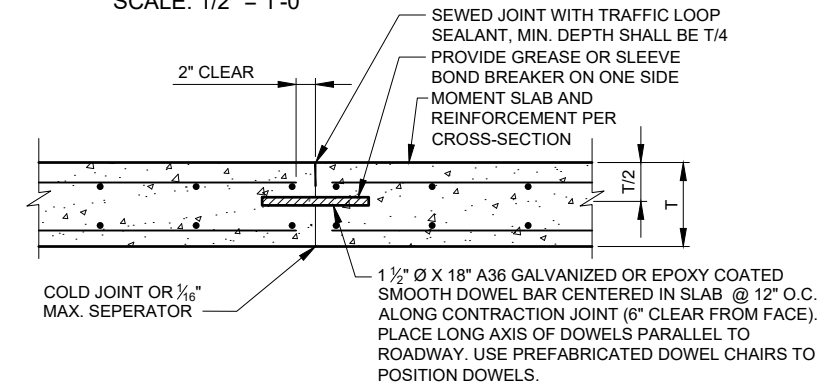
TYPICAL MOMENT SLAB SECTION
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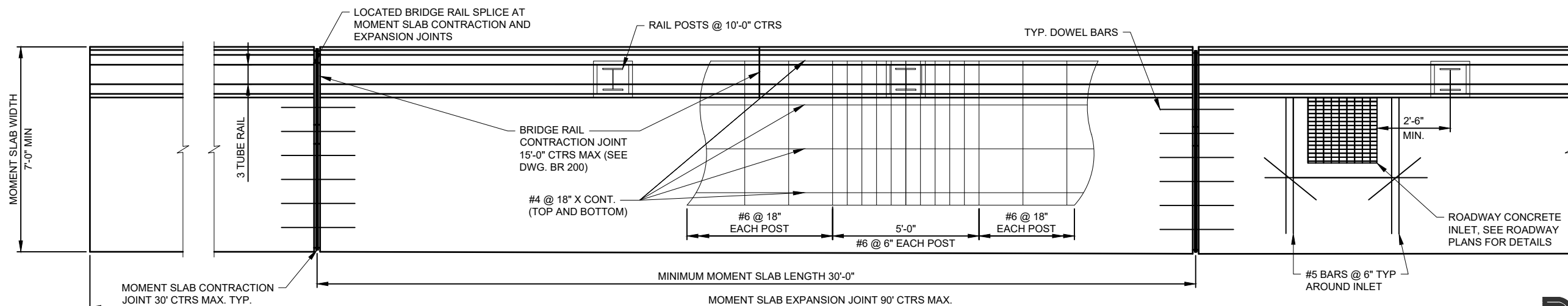
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EXPANSION JOINT DETAIL
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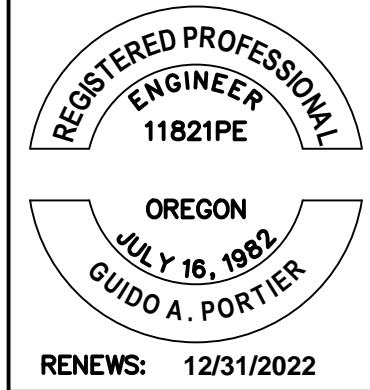
CONTRACTION JOINT DETAIL
SCALE: 1/2" = 1'-0"



PLAN VIEW (JOINT SCHEME)
NO SCALE



DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663



TIEBACK DETAILS

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR

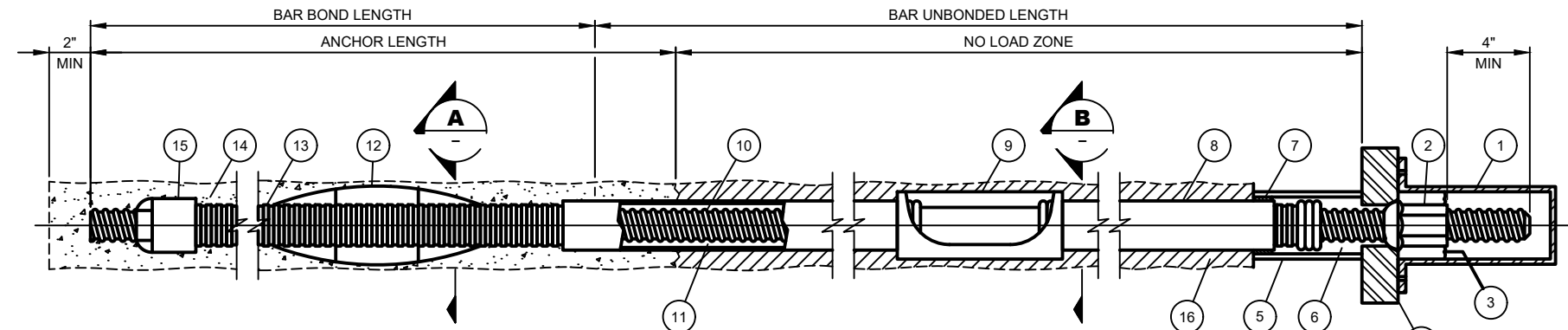
DAN JOHNSON

DESIGNED BY: JJDZ
DRAFTED BY: SXGO
CHECKED BY: GAP

REVISIONS

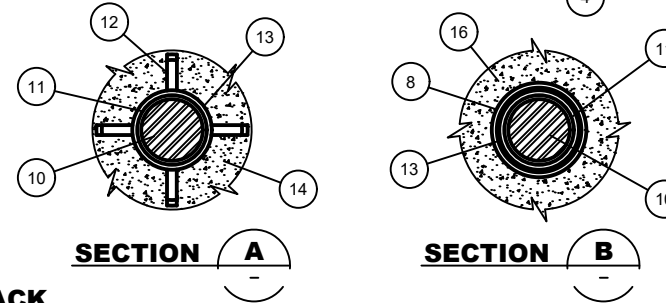
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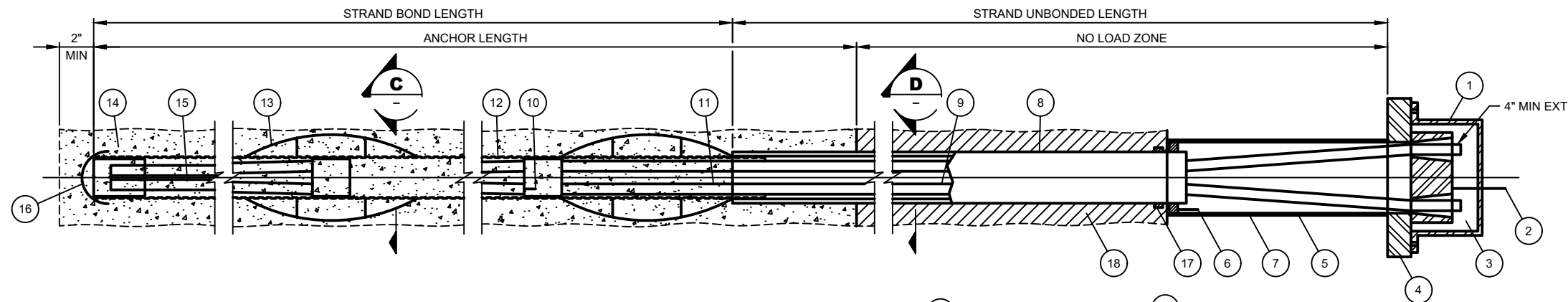


ENCAPSULATED BAR TIEBACK LEGEND

- | | |
|----------------------------|----------------------------|
| 1. ANCHORAGE COVER | 10. BAR TENDON |
| 2. NUT | 11. ENCAPSULATED GROUT |
| 3. ANTICORROSION GREASE | 12. CENTRALIZERS |
| 4. BEARING PLATE | 13. CORRUGATED PVC OR HDPE |
| 5. TRUMPET | 14. ANCHOR GROUT |
| 6. ANTICORROSION GREASE | 15. END CAP |
| 7. SEAL | 16. NON-STRUCTURAL FILLER |
| 8. SMOOTH PVC BOND BREAKER | |
| 9. PROTECTED BAR COUPLER | |

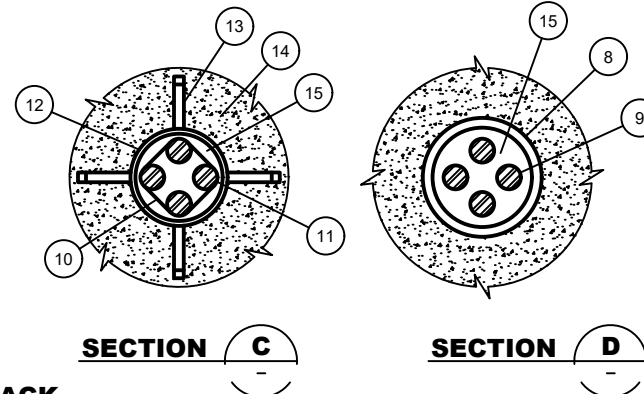


ENCAPSULATED BAR TIEBACK
NO SCALE



ENCAPSULATED STRAND TIEBACK LEGEND

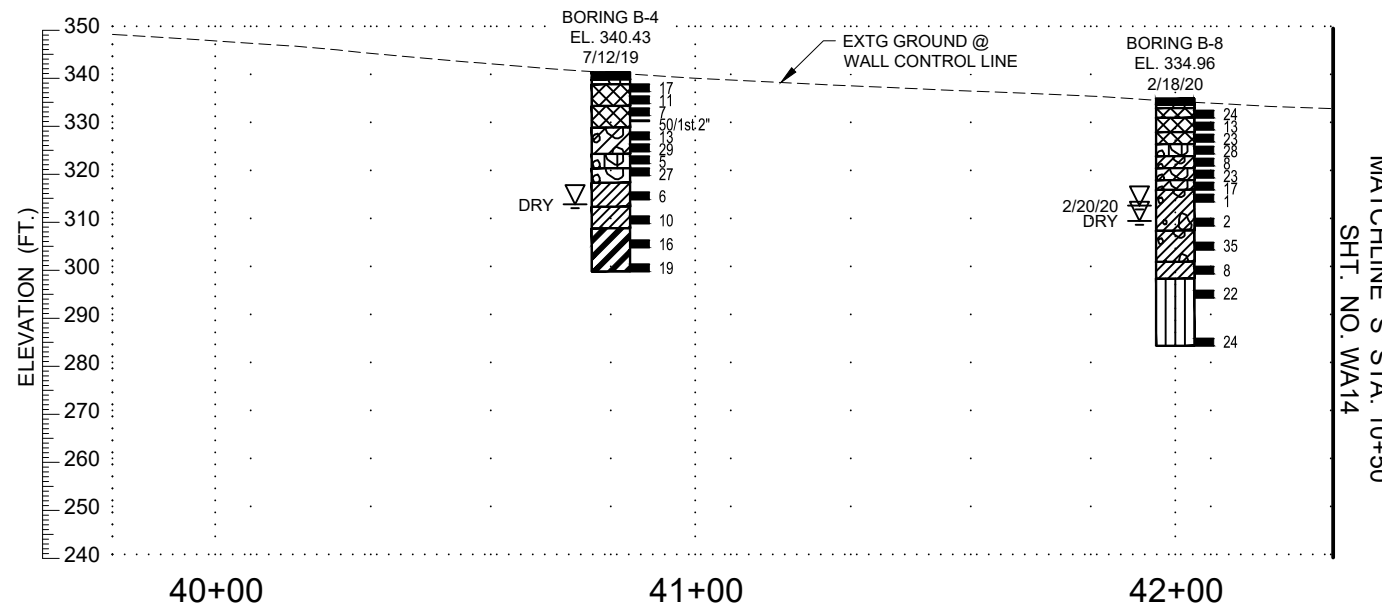
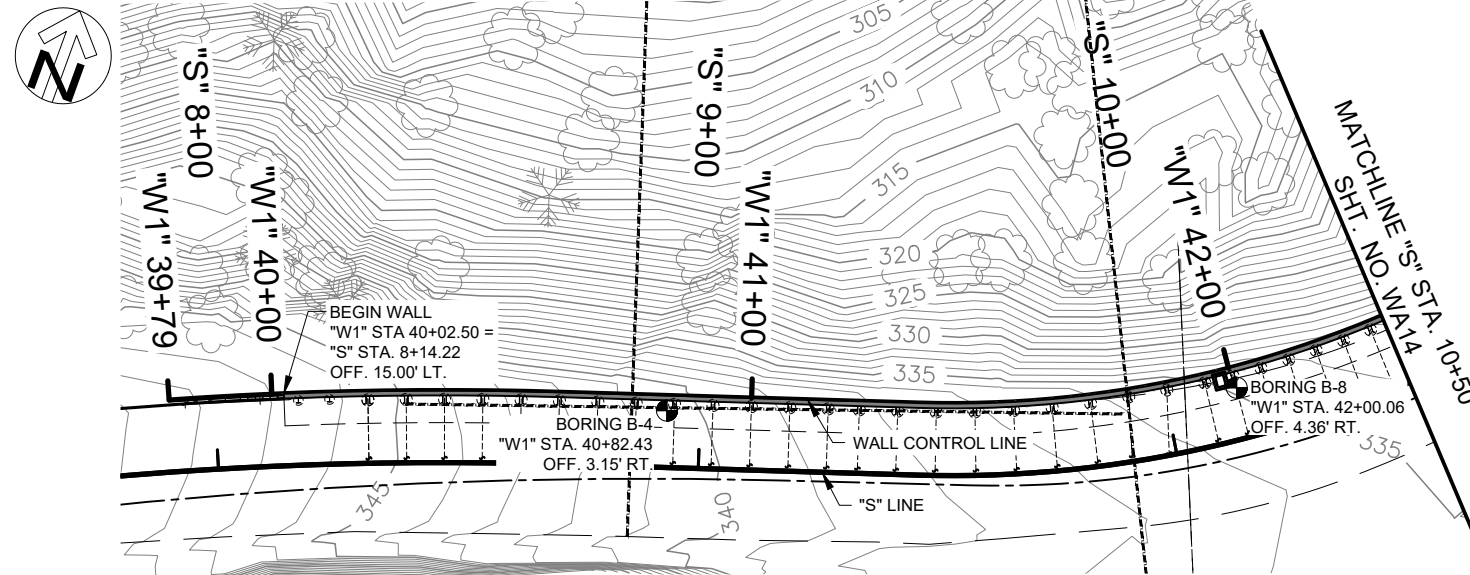
- | | |
|---|--|
| 1. ANCHORAGE COVER | 10. SPACER |
| 2. ANCHOR HEAD AND WEDGES | 11. STRAND TENDON (BARE) |
| 3. ANTICORROSION GREASE | 12. CORRUGATED PVC OR HDPE |
| 4. BEARING PLATE | 13. CENTRALIZERS |
| 5. TRUMPET | 14. ANCHOR GROUT |
| 6. SEAL | 15. ENCAPSULATED GROUT |
| 7. ANTICORROSION GREASE | 16. END CAP |
| 8. PVC OR POLYETHYLENE TUBE | 17. TENSION RING TO RESIST SPLITTING
FORCE OF DEFLECTED STRANDS |
| 9. INDIVIDUALLY GREASED &
SHEATHED STRANDS | 18. NON-STRUCTURAL FILLER |



ENCAPSULATED STRAND TIEBACK
NO SCALE



**DAVID EVANS
AND ASSOCIATES INC.**
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663



UNIT DESCRIPTIONS

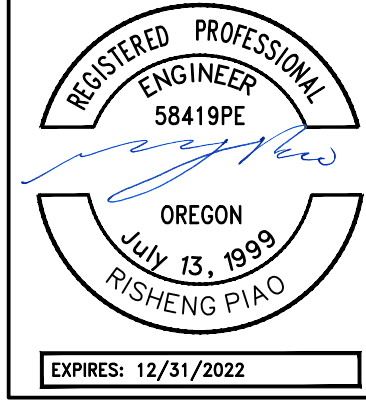
- ASPHALT CONCRETE
- BASE AGGREGATE
- GRAVEL WITH SOME SAND AND TRACE SILT TO SANDY CLAYEY GRAVEL AND GRAVELLY CLAYEY SAND, WITH COBBLES AND BOULDERS; GP, GP-GC, GC, SC; GRAY AND BROWN; NONPLASTIC TO HIGH PLASTICITY FINES; MOIST TO WET; LOOSE TO MEDIUM DENSE; (FILL)
- CLAYEY GRAVEL WITH SOME SAND, WITH COBBLES AND BOULDERS; GC; BROWN TO GRAY AND RED-BROWN; LOW TO HIGH PLASTICITY FINES; MOIST; MEDIUM DENSE
- SILTY GRAVEL WITH SOME SAND TO SANDY SILTY GRAVEL, WITH COBBLES; GM; BROWN TO GRAY; LOW PLASTICITY FINES; MOIST TO WET; LOOSE TO MEDIUM DENSE
- GRAVELLY SILTY CLAY WITH SOME SAND WITH COBBLES; CL; RED-BROWN AND GRAY; LOW TO MEDIUM PLASTICITY; MOIST; VERY SOFT TO HARD
- GRAVEL WITH SOME SAND, WITH COBBLES; GP; GRAY WITH AN ORANGE MATRIX; MOIST; MEDIUM DENSE
- SILTY CLAY TO SILT WITH TRACE SAND; CL, CL/ML; DARK GRAY-BROWN, BLUE-GRAY, AND LIGHT BROWN; LOW TO MEDIUM PLASTICITY; MOIST TO WET; MEDIUM STIFF TO STIFF
- CLAY WITH TRACE TO SOME SAND; CH; BLUE-GRAY; MEDIUM TO HIGH PLASTICITY; MOIST; VERY STIFF
- SILT; ML; BLUE-GRAY; LOW TO MEDIUM PLASTICITY; MOIST; VERY STIFF

LEGEND OF SYMBOLS

- BOREHOLE LOCATION
- 'N'-VALUE; UNCORRECTED (RAW) STANDARD PENETRATION RESISTANCE (ASTM D1586, SEE NOTE 2)
- UNDISTURBED SAMPLE (ASTM D1587)
- GEOPHYSICS LINE APPROXIMATE LOCATION (SEE NOTE 3)
- MEASURED GROUNDWATER LEVEL OR DEPTH OF DRY VIBRATING WIRE PIEZOMETER (SEE NOTE 6)

NOTES:

1. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (1988).
2. BORINGS WERE SAMPLED WITH A HAMMER EFFICIENCY OF 81.1%.
3. SEE GEOTECHNICAL AND PAVEMENT DESIGN REPORT FOR DATA OBTAINED THROUGH GEOPHYSICAL TESTING.
4. GEOTECHNICAL DATA SHOWN ON THIS DRAWING ARE A CONSOLIDATION OF INFORMATION AND/OR REVISION IN TERMINOLOGY FROM DRILL LOGS. THE DRILL LOGS AND ANY OTHER EXPLORATION DATA USED IN COMPILING THIS DRAWING ARE AVAILABLE UPON REQUEST FROM THE COUNTY OR THE ENGINEER.
5. REFER TO THE ODOT SOIL AND ROCK CLASSIFICATION MANUAL (1987) FOR A DESCRIPTION OF THE TERMS USED IN THIS DRAWING.
6. BOREHOLES WERE DRILLED USING MUD ROTARY TECHNIQUES, WHICH MAKE IT DIFFICULT TO DISCERN DEPTH TO GROUNDWATER DURING DRILLING, IF IT IS ENCOUNTERED, DUE TO THE USE OF DRILLING FLUID IN THE BOREHOLE. SEE GEOTECHNICAL AND PAVEMENT DESIGN REPORT FOR COMPLETE GROUNDWATER LEVEL DATA. PERCHED GROUNDWATER SHOULD BE ANTICIPATED.



RETAINING WALL GEOTECHNICAL DATA

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



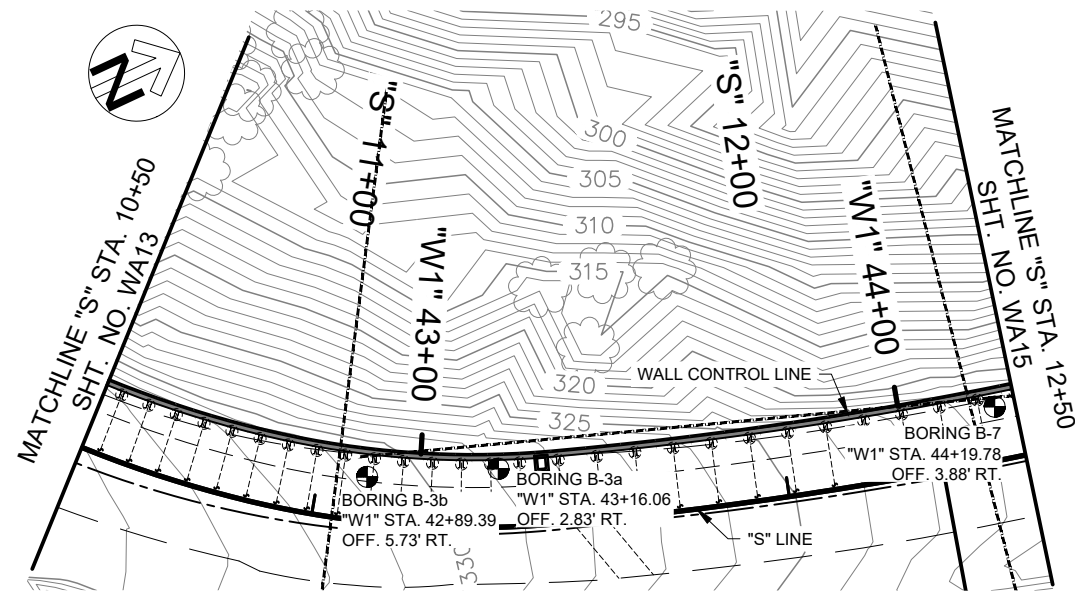
DAN JOHNSON
DIRECTOR

DESIGNED BY: PTO
DRAFTED BY: AEH
CHECKED BY: RPP

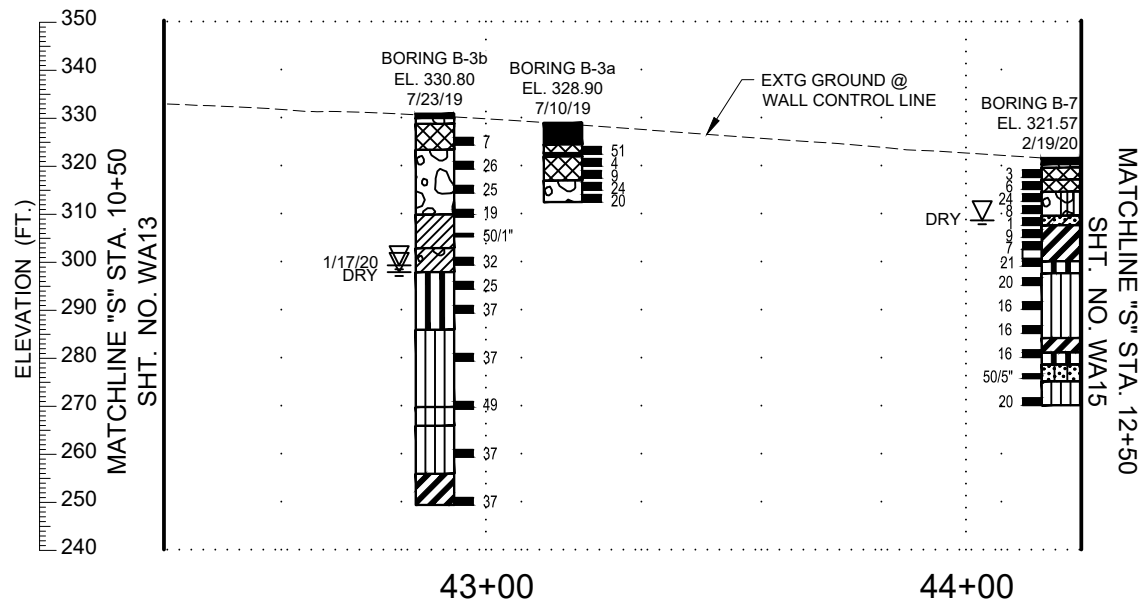
REVISIONS

NO.	DATE:		

Sheet No. WA13



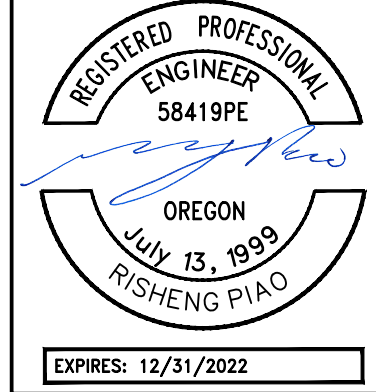
PLAN
SCALE: 1" = 40'-0"



PROFILE AT "W1" LINE
SCALE: 1" = 40'-0"

UNIT DESCRIPTIONS

- ASPHALT CONCRETE
- BASE AGGREGATE
- GRAVEL WITH SOME SAND AND TRACE CLAY TO SANDY CLAYEY GRAVEL AND SILTY GRAVEL WITH SOME SAND, WITH COBBLES; GP, GP-GC, GC, GM; GRAY AND BROWN; NONPLASTIC TO LOW PLASTICITY FINES; MOIST; VERY LOOSE TO VERY DENSE; (FILL)
- GRAVEL WITH SOME SILT AND SAND, WITH COBBLES; GP-GM; GRAY; NONPLASTIC TO LOW PLASTICITY FINES; LOOSE TO MEDIUM DENSE
- GRAVEL WITH SOME SAND AND NO TO TRACE SILT, WITH COBBLES AND BOULDERS; GP; GRAY AND BROWN; NONPLASTIC FINES; MOIST TO WET; MEDIUM DENSE
- CLAYEY SAND WITH SOME GRAVEL WITH COBBLES; SC; ORANGE-BROWN; LOW PLASTICITY FINES; MOIST; VERY LOOSE
- CLAY TO CLAY WITH TRACE SAND; CH; BLUE-GRAY, BROWN MOTTLED, AND LIGHT BROWN MOTTLED; MEDIUM TO HIGH PLASTICITY; MOIST; MEDIUM STIFF TO HARD
- SILTY CLAY WITH TRACE TO SOME GRAVEL AND TRACE SAND, WITH COBBLES AND BOULDERS; CL; BROWN MOTTLED; MEDIUM PLASTICITY; MOIST; VERY STIFF
- CLAYEY SILT TO CLAY; MH, CH; BLUE-GRAY AND LIGHT BROWN MOTTLED; MEDIUM TO HIGH PLASTICITY; MOIST; VERY STIFF TO HARD
- GRAVELLY SILTY CLAY WITH SOME SAND, WITH COBBLES AND BOULDERS; CL; BROWN MOTTLED; LOW TO MEDIUM PLASTICITY; MOIST; DENSE
- SILT TO SILT WITH SOME SAND; ML; BLUE-GRAY, GREEN-GRAY, AND LIGHT BROWN; NONPLASTIC TO LOW PLASTICITY; MOIST; DENSE/VERY STIFF TO HARD
- GRAVELLY SILTY SAND; SM; BROWN TO GRAY; NONPLASTIC FINES; MOIST TO WET; VERY DENSE



RETAINING WALL GEOTECHNICAL DATA
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DAN JOHNSON
DIRECTOR

DESIGNED BY: PTO
DRAFTED BY: AEH
CHECKED BY: RPP

NO.	DATE	REVISIONS

Sheet No. WA14

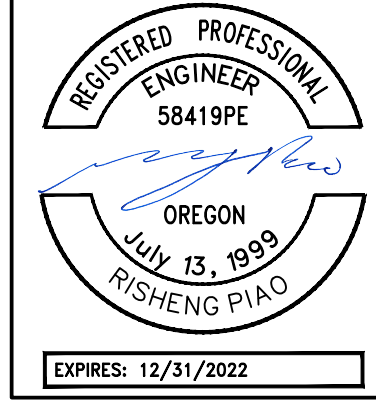


LEGEND OF SYMBOLS

- BOREHOLE LOCATION
- 'N'-VALUE; UNCORRECTED (RAW) STANDARD PENETRATION RESISTANCE (ASTM D1586, SEE NOTE 2)
- UNDISTURBED SAMPLE (ASTM D1587)
- GEOPHYSICS LINE APPROXIMATE LOCATION (SEE NOTE 3)
- MEASURED GROUNDWATER LEVEL OR DEPTH OF DRY VIBRATING WIRE PIEZOMETER (SEE NOTE 6)

NOTES:

1. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (1988).
2. BORINGS B-3a AND B-7 WERE SAMPLED WITH A HAMMER EFFICIENCY OF 81.1% AND BORING B-3b WAS SAMPLED WITH A HAMMER EFFICIENCY OF 83.2%.
3. SEE GEOTECHNICAL AND PAVEMENT DESIGN REPORT FOR DATA OBTAINED THROUGH GEOPHYSICAL TESTING.
4. GEOTECHNICAL DATA SHOWN ON THIS DRAWING ARE A CONSOLIDATION OF INFORMATION AND/OR REVISION IN TERMINOLOGY FROM DRILL LOGS. THE DRILL LOGS AND ANY OTHER EXPLORATION DATA USED IN COMPILING THIS DRAWING ARE AVAILABLE UPON REQUEST FROM THE COUNTY OR THE ENGINEER.
5. REFER TO THE ODOT SOIL AND ROCK CLASSIFICATION MANUAL (1987) FOR A DESCRIPTION OF THE TERMS USED IN THIS DRAWING.
6. BOREHOLES WERE DRILLED USING MUD ROTARY TECHNIQUES, WHICH MAKE IT DIFFICULT TO DISCERN DEPTH TO GROUNDWATER DURING DRILLING, IF IT IS ENCOUNTERED, DUE TO THE USE OF DRILLING FLUID IN THE BOREHOLE. SEE GEOTECHNICAL AND PAVEMENT DESIGN REPORT FOR COMPLETE GROUNDWATER LEVEL DATA. PERCHED GROUNDWATER SHOULD BE ANTICIPATED.



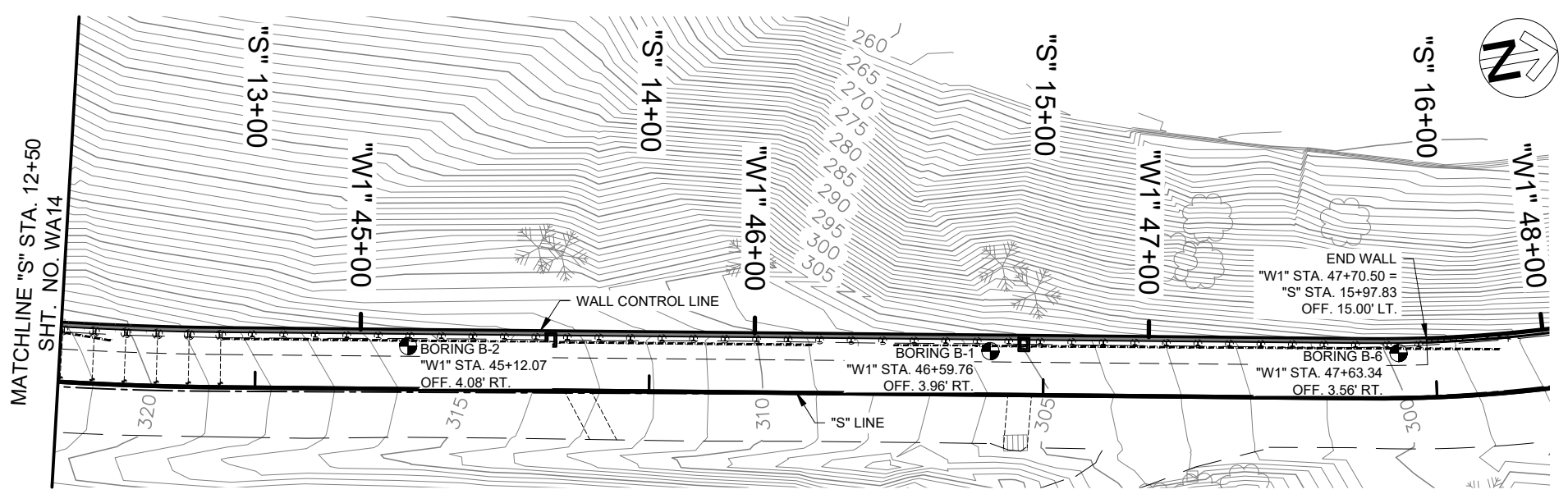
RETAINING WALL GEOTECHNICAL DATA
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DAN JOHNSON
DIRECTOR

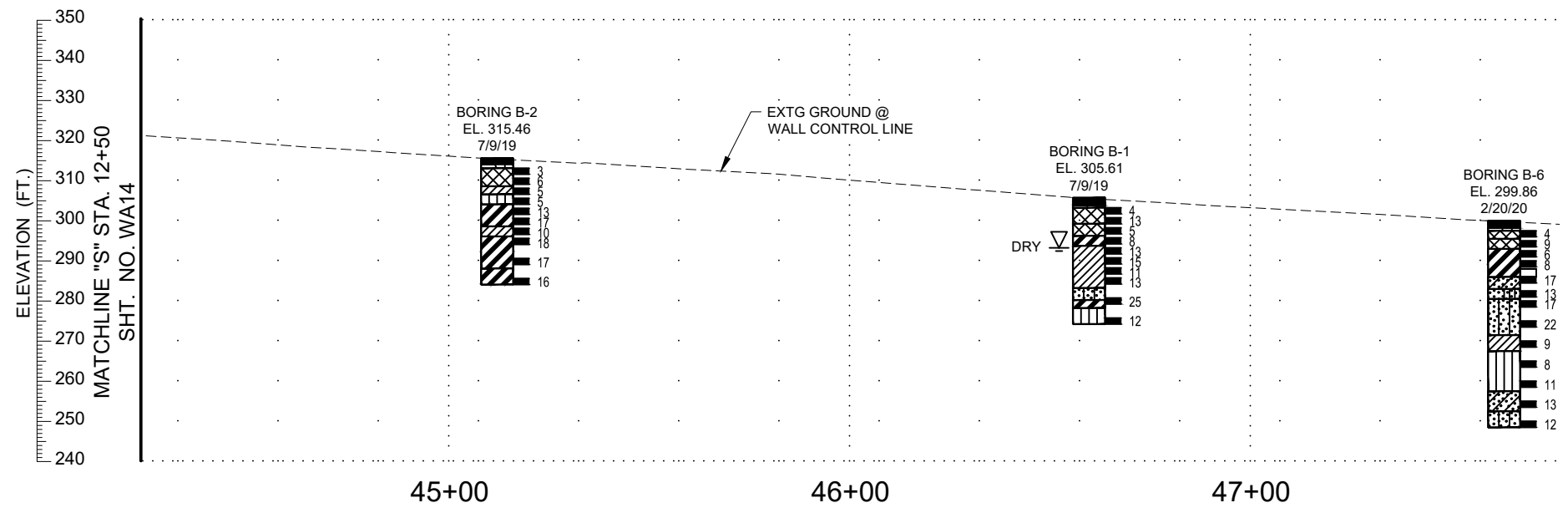
DESIGNED BY: PTO
DRAFTED BY: AEH
CHECKED BY: RPP

NO.	DATE	REVISIONS

Sheet No. WA15



PLAN
SCALE: 1" = 40'-0"



PROFILE AT "W1" LINE
SCALE: 1" = 40'-0"

UNIT DESCRIPTIONS

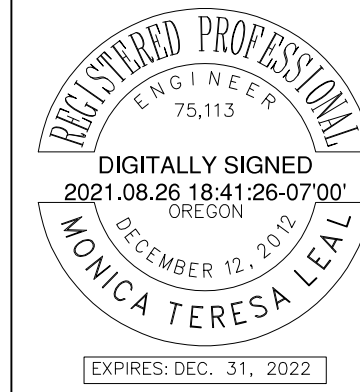
- ASPHALT CONCRETE
- BASE AGGREGATE
- SILTY CLAY WITH SOME SAND AND NO TO SOME GRAVEL TO CLAYEY GRAVEL WITH TRACE TO SOME SAND, WITH COBBLES; CL, GC, CL/GC; GRAY TO BROWN; LOW TO MEDIUM PLASTICITY FINES; MOIST; MEDIUM STIFF TO STIFF/VERY LOOSE TO MEDIUM DENSE; (FILL)
- CLAY TO SANDY CLAY; CH; BROWN, LIGHT BROWN, RED AND BROWN MOTTLED; MEDIUM TO HIGH PLASTICITY; MOIST; MEDIUM STIFF TO VERY STIFF
- SILTY CLAY TO SILTY CLAY WITH TRACE SAND AND GRAVEL; CL; LIGHT BROWN MOTTLED; LOW TO MEDIUM PLASTICITY; MOIST; MEDIUM STIFF TO VERY STIFF
- SAND WITH SOME SILT AND TRACE GRAVEL; SP-SM; BROWN; NONPLASTIC FINES; MOIST; MEDIUM DENSE
- SILT TO SILTY CLAY WITH SOME SAND TO SANDY SILT; ML, ML/CL; RED, BLUE-GRAY, AND LIGHT BROWN TO BROWN MOTTLED; NONPLASTIC TO MEDIUM PLASTICITY; MOIST; LOOSE TO MEDIUM DENSE/STIFF
- CLAYEY SAND; SC; BROWN AND LIGHT BROWN; LOW PLASTICITY FINES; MOIST TO WET; MEDIUM DENSE
- SILTY SAND TO GRAVELLY SILTY SAND; SM; BROWN AND LIGHT BROWN; NONPLASTIC TO LOW PLASTICITY FINES; MOIST TO WET; MEDIUM DENSE

LEGEND OF SYMBOLS

- BOREHOLE LOCATION
- 'N'-VALUE; UNCORRECTED (RAW) STANDARD PENETRATION RESISTANCE (ASTM D1586, SEE NOTE 2)
- UNDISTURBED SAMPLE (ASTM D1587)
- GEOPHYSICS LINE APPROXIMATE LOCATION (SEE NOTE 3)
- MEASURED GROUNDWATER LEVEL OR DEPTH OF DRY VIBRATING WIRE PIEZOMETER (SEE NOTE 6)

NOTES:

1. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (1988).
2. BORINGS WERE SAMPLED WITH A HAMMER EFFICIENCY OF 81.1%.
3. SEE GEOTECHNICAL AND PAVEMENT DESIGN REPORT FOR DATA OBTAINED THROUGH GEOPHYSICAL TESTING.
4. GEOTECHNICAL DATA SHOWN ON THIS DRAWING ARE A CONSOLIDATION OF INFORMATION AND/OR REVISION IN TERMINOLOGY FROM DRILL LOGS. THE DRILL LOGS AND ANY OTHER EXPLORATION DATA USED IN COMPILING THIS DRAWING ARE AVAILABLE UPON REQUEST FROM THE COUNTY OR THE ENGINEER.
5. REFER TO THE ODOT SOIL AND ROCK CLASSIFICATION MANUAL (1987) FOR A DESCRIPTION OF THE TERMS USED IN THIS DRAWING.
6. BOREHOLES WERE DRILLED USING MUD ROTARY TECHNIQUES, WHICH MAKE IT DIFFICULT TO DISCERN DEPTH TO GROUNDWATER DURING DRILLING, IF IT IS ENCOUNTERED, DUE TO THE USE OF DRILLING FLUID IN THE BOREHOLE. SEE GEOTECHNICAL AND PAVEMENT DESIGN REPORT FOR COMPLETE GROUNDWATER LEVEL DATA. PERCHED GROUNDWATER SHOULD BE ANTICIPATED.



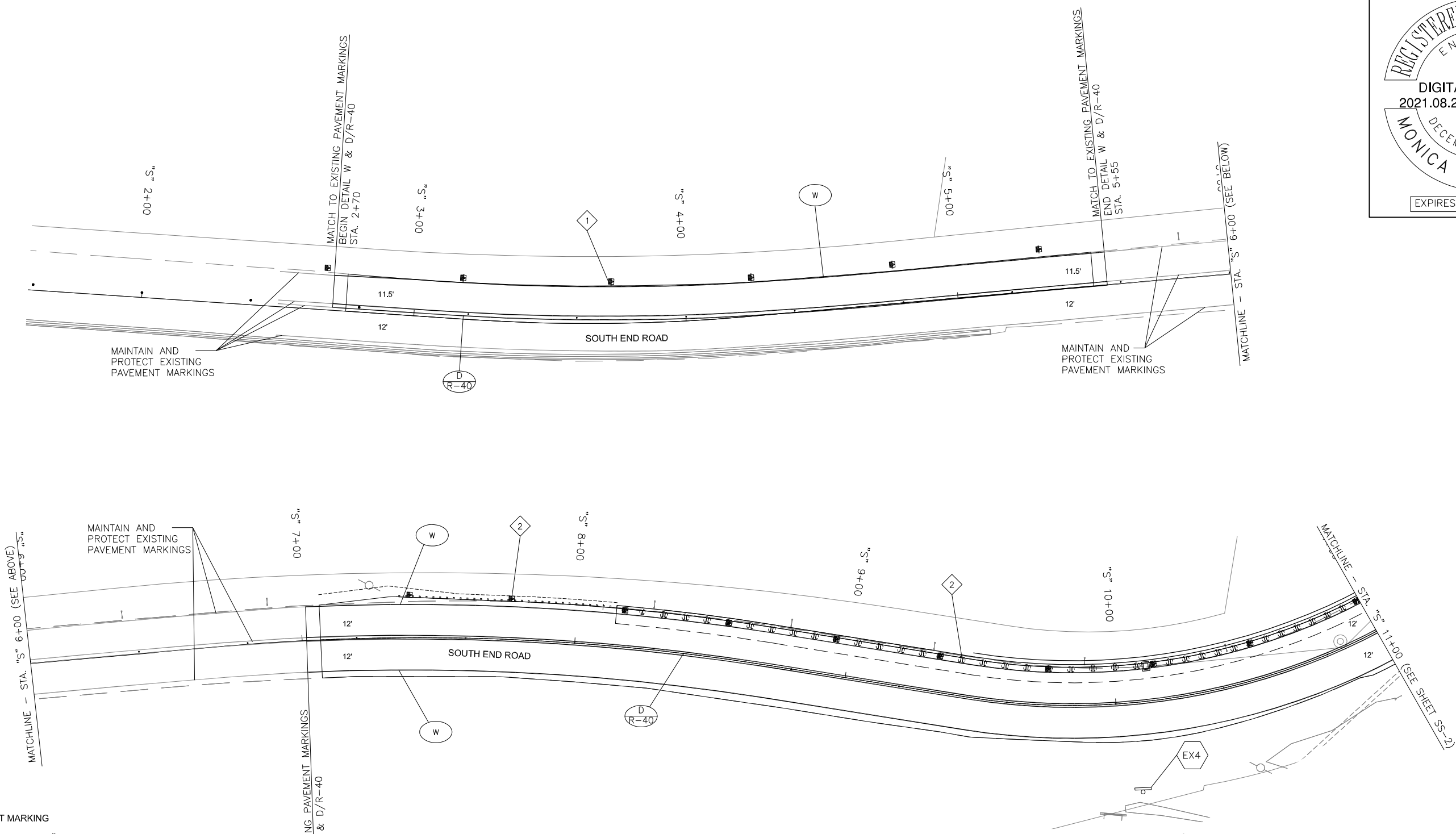
SIGNING AND STRIPING PLAN
SOUTH END ROAD AT MP 3.8

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DAN JOHNSON
DIRECTOR

DESIGNED BY:
DRAFTED BY:
CHECKED BY:

REVISIONS	
NO.	DATE

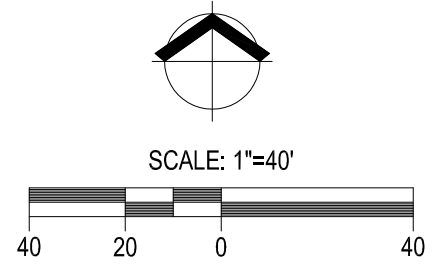
Sheet No. **SS-1**



- LEGEND**
- PAVEMENT MARKING**
- (W) INSTALL 4" WHITE LINE
 - (D R-40) INSTALL 4" DOUBLE YELLOW NO-PASS LINES WITH GUIDE REFLECTORS SPACED AT 40' O.C.
- SIGNING**
- (EXN) MAINTAIN AND PROTECT EXISTING SIGN (N) AND SIGN SUPPORT
 - (N) INSTALL NEW SIGN (N)
 - (N M) INSTALL NEW SIGN (N) ON NEW (M) SIGN SUPPORT
 - (RXN M) REMOVE EXISTING SIGN (N) AND (M) SIGN SUPPORT
- N = SIGN NUMBER
M = MATERIAL
MATERIAL OPTIONS:
P = STEEL PIPE POST
ST = PERFORATED STEEL SQUARE TUBE SIGN SUPPORT

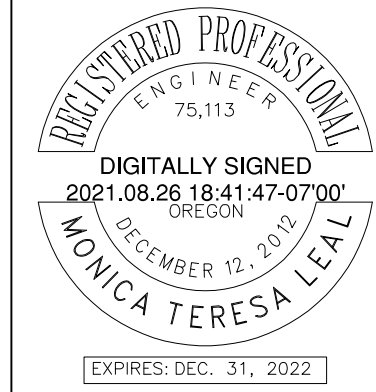
- GENERAL NOTES**
1. THE LOCATION OF SIGN INSTALLATIONS SHOWN ARE APPROX. WITH EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.
 2. EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 3. SEE SHEET SS-3 FOR PERMANENT SIGN DETAILS AND SIGN AND POST DATA TABLE.
 4. SEE SHEET SS-4 FOR ADDITIONAL DELINEATOR INSTALLATION DETAILS.
 5. STRIPING TO BE THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED MATERIAL.
 6. ACCOMPANIED BY ODOT STANDARD DRAWINGS: TM200, TM206, TM500, TM502, TM521, TM560, TM570, TM576, TM635, TM671, TM681, TM687, TM688, AND BR206.

- CONSTRUCTION NOTES**
1. REPLACE EXISTING DELINEATORS BETWEEN APPROXIMATELY STA. 2+70 AND STA. 5+55 WITH NEW TYPE-2 FLEXIBLE PLASTIC DELINEATORS (W-1) PER ODOT STANDARD DRAWING TM570.
 2. REMOVE EXISTING DELINEATORS BETWEEN APPROXIMATELY STA. 7+05 AND STA. 18+65. INSTALL TYPE-4, ALTERNATE 2 U-FLANGE POST TRAFFIC DELINEATORS ON PROPOSED GUARDRAIL AND CURB MOUNT RAIL. SEE ODOT STANDARD DRAWING TM570 AND SHEET SS-4 FOR ADDITIONAL DETAILS.



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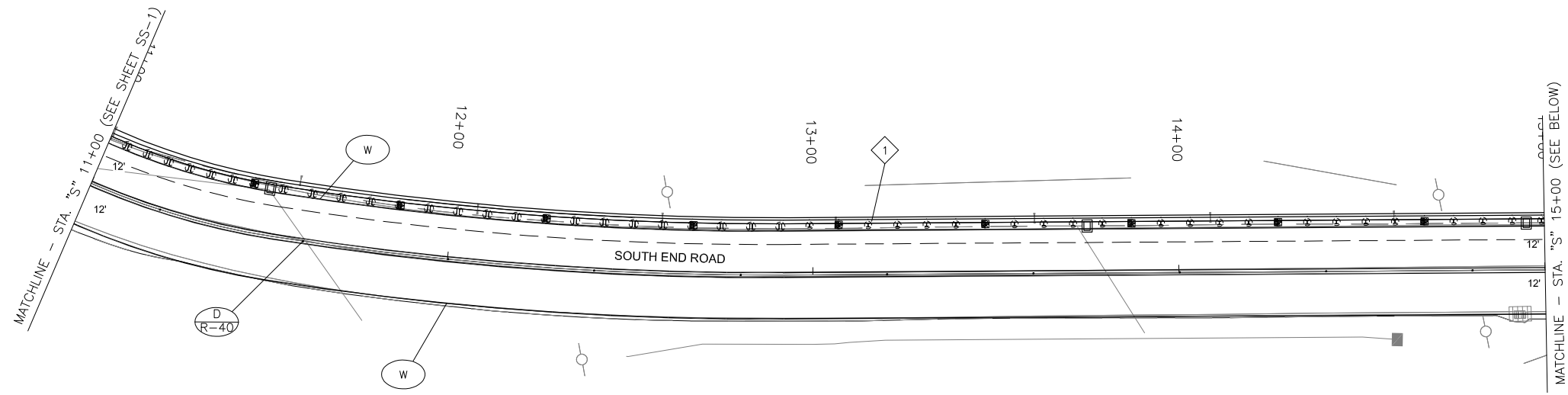
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111



SIGNING AND STRIPING PLAN

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111



GENERAL NOTES

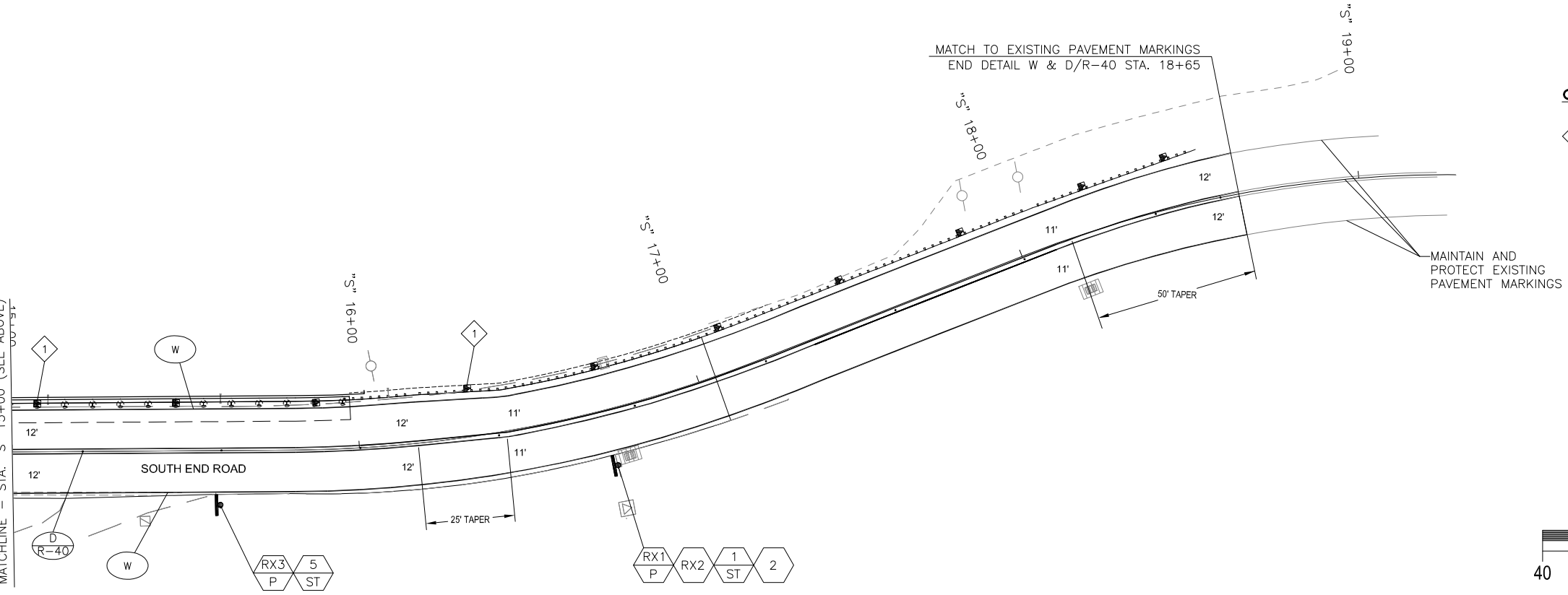
1. THE LOCATION OF SIGN INSTALLATIONS SHOWN ARE APPROX. WITH EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.
2. EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SEE SHEET SS-3 FOR PERMANENT SIGN DETAILS AND SIGN AND POST DATA TABLE.
4. SEE SHEET SS-4 FOR ADDITIONAL DELINEATOR INSTALLATION DETAILS.
5. STRIPING TO BE THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED MATERIAL.
6. ACCOMPANIED BY ODOT STANDARD DRAWINGS: TM200, TM206, TM500, TM502, TM521, TM560, TM570, TM576, TM635, TM671, TM681, TM687, TM688, AND BR206.

LEGEND

- PAVEMENT MARKING**
- (W) INSTALL 4" WHITE LINE
 - (D/R-40) INSTALL 4" DOUBLE YELLOW NO-PASS LINES WITH GUIDE REFLECTORS SPACED AT 40' O.C.
- SIGNING**
- (N) INSTALL NEW SIGN (N)
 - (N/M) INSTALL NEW SIGN (N) ON NEW (M) SIGN SUPPORT
 - (RXN) REMOVE EXISTING SIGN (N)
 - (RXN/M) REMOVE EXISTING SIGN (N) AND (M) SIGN SUPPORT
- N = SIGN NUMBER
M = MATERIAL
P = STEEL PIPE POST
ST = PERFORATED STEEL SQUARE TUBE SIGN SUPPORT

CONSTRUCTION NOTES

- 1 REMOVE EXISTING DELINEATORS BETWEEN APPROXIMATELY STA. 7+05 AND STA. 18+65. INSTALL TYPE-4, ALTERNATE 2 U-FLANGE POST TRAFFIC DELINEATORS ON PROPOSED GUARDRAIL AND CURB MOUNT RAIL. SEE ODOT STANDARD DRAWING TM570 AND SHEET SS-4 FOR ADDITIONAL DETAILS.



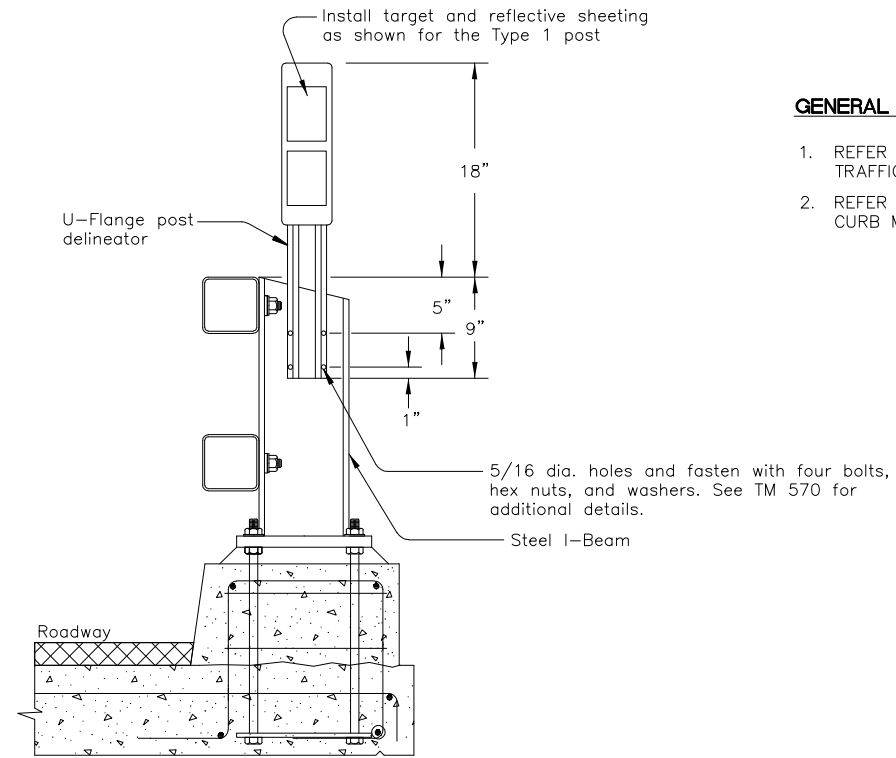
CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

NO.	DATE	REVISIONS

DESIGNED BY: _____
DRAFTED BY: _____
CHECKED BY: _____

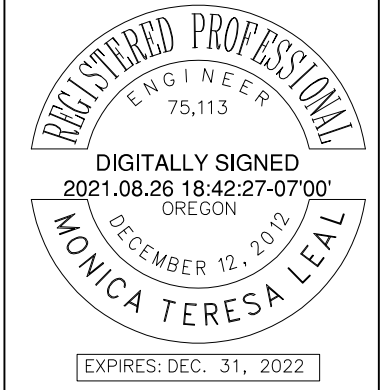
Sheet No. **SS-2**



**TRAFFIC DELINEATOR INSTALLATION
CURB MOUNT RAIL AREAS**

GENERAL NOTES

1. REFER TO ODOT STANDARD DRAWING TM570 FOR ADDITIONAL TRAFFIC DELINEATORS DETAILS.
2. REFER TO ODOT STANDARD DRAWING BR206 FOR ADDITIONAL CURB MOUNT DETAILS.



STRIPING DETAILS

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY

DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DAN JOHNSON
DIRECTOR

DESIGNED BY:

DRAFTED BY:

CHECKED BY:

REVISIONS

NO. DATE:

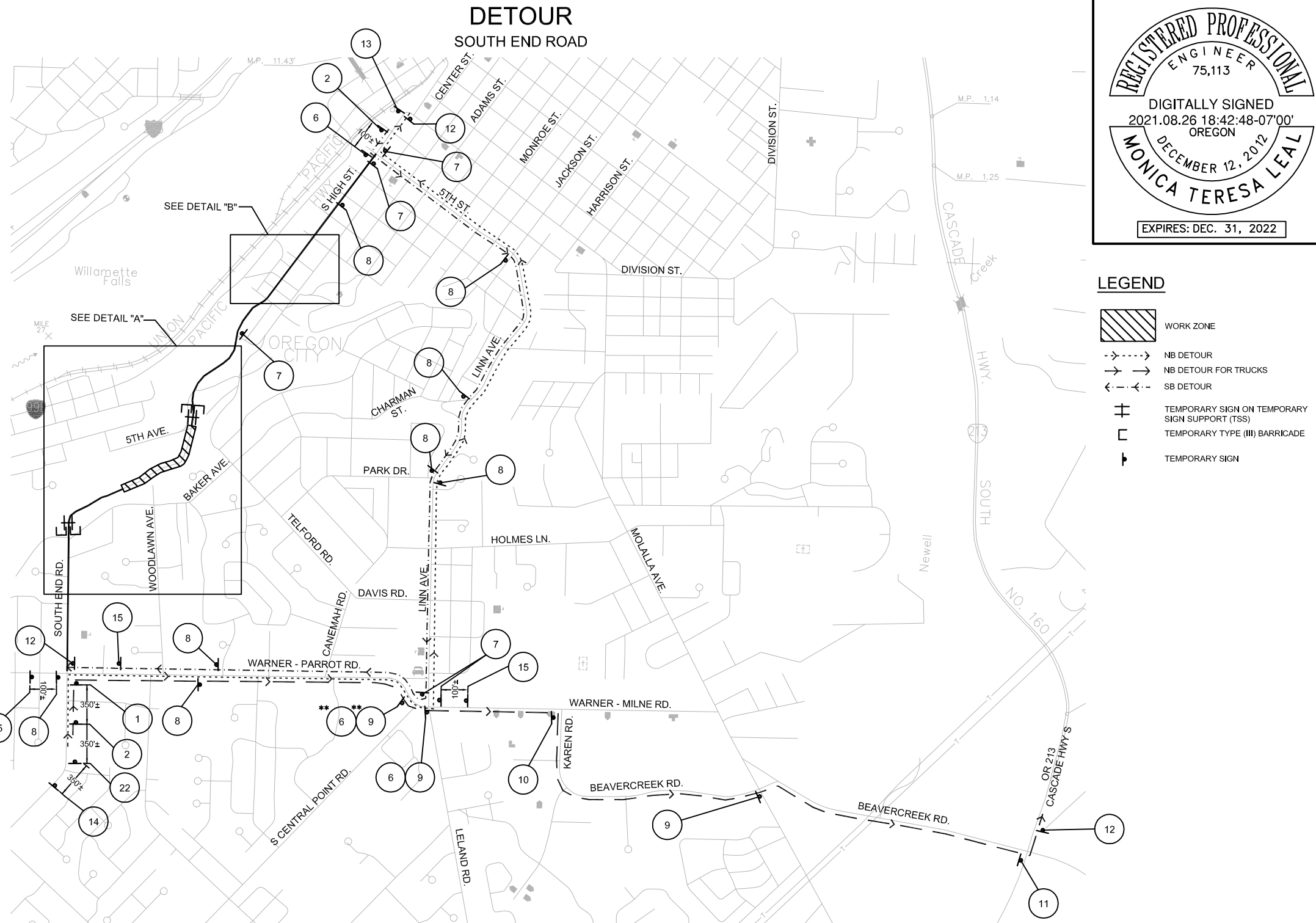
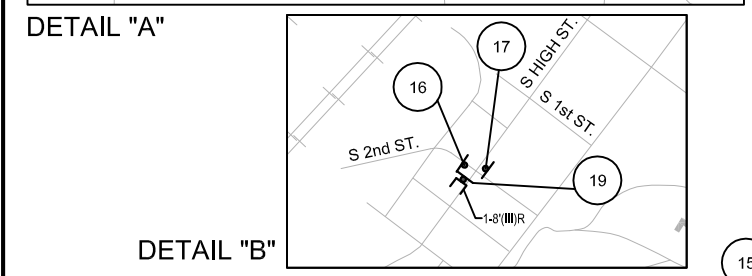
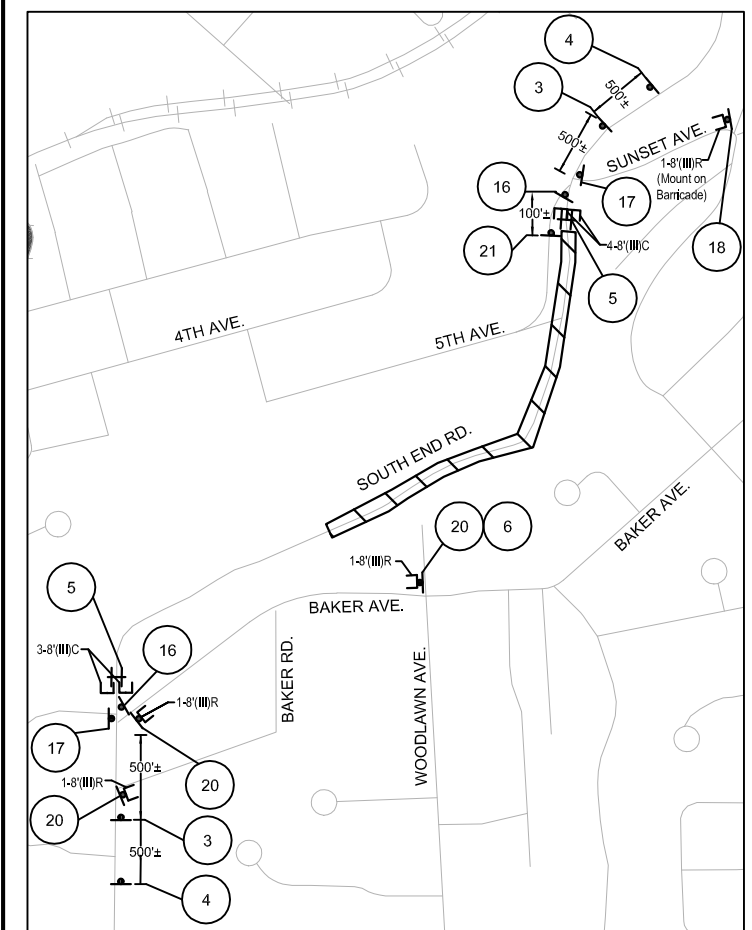
Sheet No.

SS-4

DETOUR SOUTH END ROAD

REGISTERED PROFESSIONAL ENGINEER
75,113
DIGITALLY SIGNED
2021.08.26 18:42:48-07'00'
OREGON
MONICA TERESA LEAL
DECEMBER 12, 2012
EXPIRES: DEC. 31, 2022

DETOUR PLAN
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

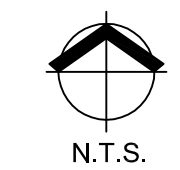


LEGEND

- WORK ZONE
- NB DETOUR
- NB DETOUR FOR TRUCKS
- SB DETOUR
- TEMPORARY SIGN ON TEMPORARY SIGN SUPPORT (TSS)
- TEMPORARY TYPE (III) BARRICADE
- TEMPORARY SIGN

- GENERAL NOTES**
1. ACCOMPANIED BY ODOT STANDARD DRAWINGS TM200, TM206, TM230, TM670, TM671, TM681, TM687, TM688, TM800, TM820, TM821, TM822, TM840, TM844, AND TM850.
 2. SEE SPECIAL PROVISIONS FOR ADDITIONAL CLOSURE DETAILS.
 3. CONTRACTOR TO COORDINATE IN ADVANCE OF CLOSURE WITH OREGON CITY.
 4. ALLOW EMERGENCY VEHICLES IMMEDIATE PASSAGE AT ALL TIMES.
 5. PROVIDE AND MAINTAIN SAFE ACCESS TO EXISTING DRIVEWAY AT ALL TIMES. COORDINATE IN ADVANCE WITH PROPERTY OWNERS.

1	2	3	4	5	6	7	8	9	10	11	12	13
ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY DETOUR	DETOUR AHEAD	ROAD CLOSED 500 FT	ROAD CLOSED 1000 FT	ROAD CLOSED	DETOUR	DETOUR	DETOUR	TRUCK DETOUR	TRUCK DETOUR	TRUCK DETOUR	END DETOUR	SOUTH END RD. CLOSED 3/4 MILE
R11-3a 60"x30" (MOD.) M4-10R 48"x18"	W20-2 48"x48"	W20-3 48"x48"	W20-3 48"x48"	R11-2 48"x30"	51"x12" South End Rd. 6"C M4-9L 30"x24"	51"x12" South End Rd. 6"C M4-9R 30"x24"	51"x12" South End Rd. 6"C CG20-6 30"x36"	M4-4 24"x12" CG20-6 30"x36"	M4-4 24"x12" M4-9R 30"x24"	M4-4 24"x12" M4-9L 30"x24"	CG20-5 30"x24"	57"x30" 6"C 6"C 6"C * MMM-DD TO MMM-DD 4"C 54"x9"
14	15	16	17	18	19	20	21	22				
SOUTH END RD. CLOSED 1/2 MILE * MMM-DD TO MMM-DD 4"C 54"x9"	SOUTH END RD. CLOSED NORTH OF BAKER * MMM-DD TO MMM-DD 4"C 54"x9"	R3-1 24"x24"	R3-2 24"x24"	R11-3a 60"x30" (MOD.)	R11-3a 60"x30" (MOD.)	R11-4 60"x30"	ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY	ROAD CLOSED TO THRU TRAFFIC	ROAD CLOSED AHEAD	ROAD CLOSED AHEAD	
M4-9L 30"x24"	M4-9R 30"x24"	M4-9L 30"x24"	M4-9R 30"x24"									



* INSTALL SIGN TWO WEEKS IN ADVANCE OF CLOSURE. DATES TO BE FILLED OUT BASED ON CONSTRUCTION SCHEDULE.
** INSTALL SIGNS IN ADVANCE OF THE BEGINNING OF THE LEFT TURN LANE WEST OF S CENTRAL POINT ROAD.

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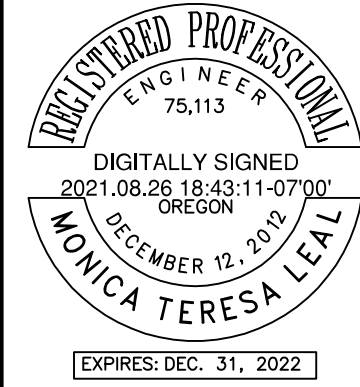
CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

DESIGNED BY:	DRAFTED BY:	CHECKED BY:
NO. DATE:		

ONE LANE CLOSURE

SOUTH END ROAD - SB LANE



TRAFFIC CONTROL PLAN

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

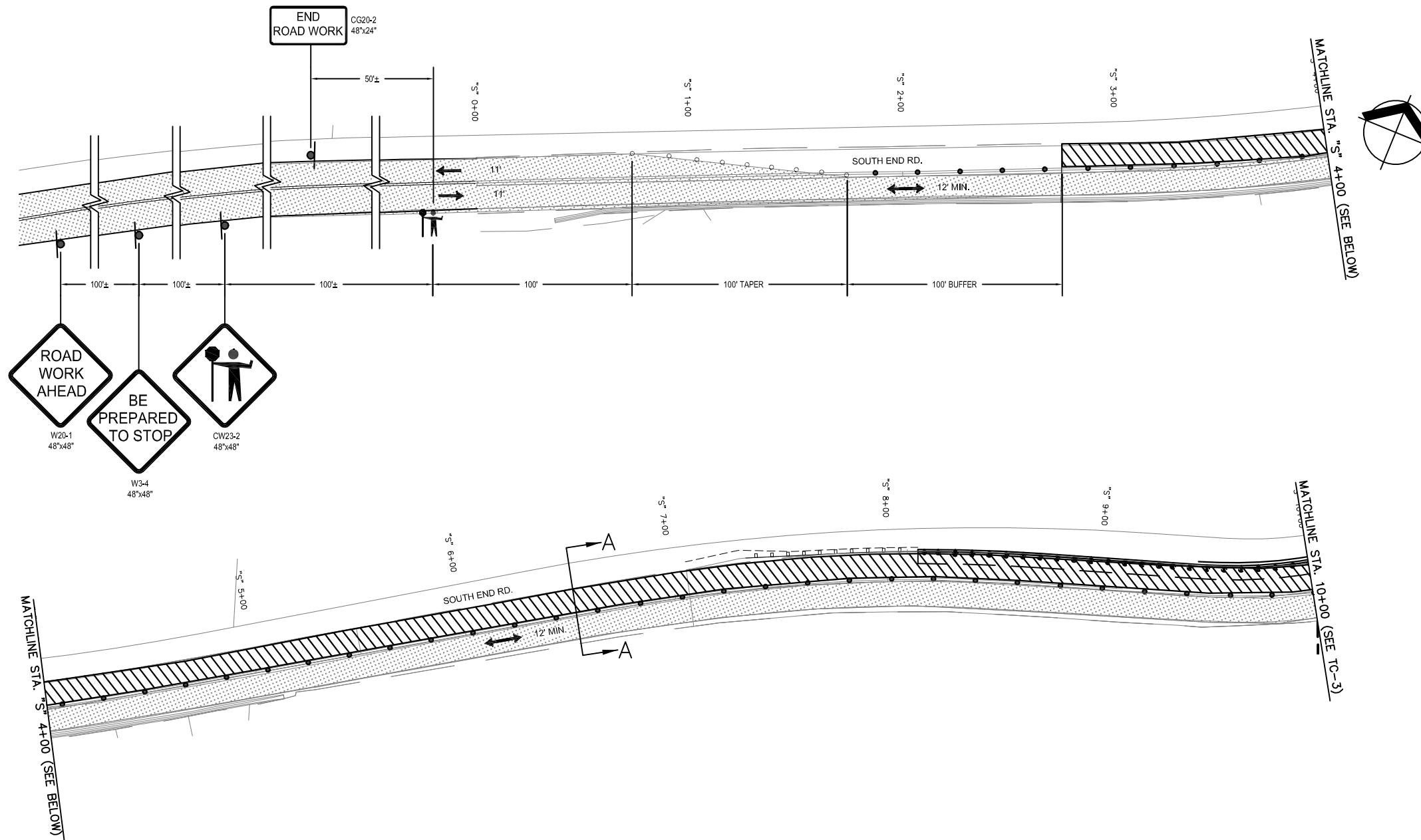
DAN JOHNSON
DIRECTOR

DESIGNED BY:
DRAFTED BY:
CHECKED BY:

REVISIONS

NO. DATE:

Sheet No. TC-2

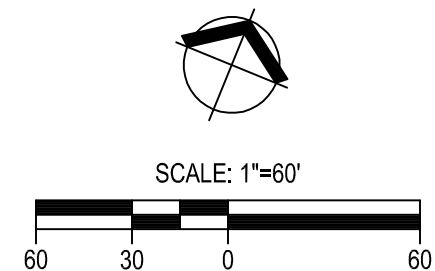
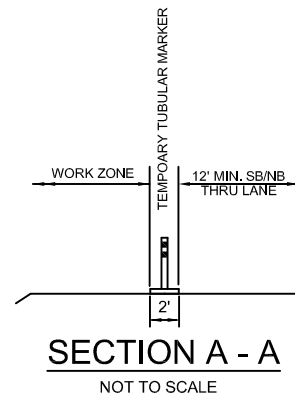


LEGEND

- WORK ZONE
- UNDER TRAFFIC
- 28" TEMPORARY TUBULAR MARKERS ON 20 FT. MAX SPACING
- TEMPORARY PLASTIC DRUMS ON 10 FT. MAX SPACING
- TEMPORARY SIGN
- FLAGGER

GENERAL NOTES

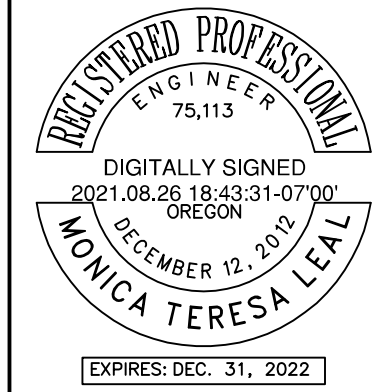
1. SEE SHEET TC-1 FOR APPLICABLE ODOT STANDARD DRAWINGS.
2. SEE SPECIAL PROVISIONS FOR LANE CLOSURE RESTRICTIONS.
3. FLAGGERS TO MONITOR AND STOP TRAFFIC FOR PEDESTRIANS AND BIKES.
4. IF AN ABRUPT EDGE IS CREATED BY CONSTRUCTION, PROVIDE ABRUPT EDGE SIGNING PER ODOT STANDARD DRAWING TM800.
5. ALLOW EMERGENCY VEHICLES IMMEDIATE PASSAGE AT ALL TIMES.



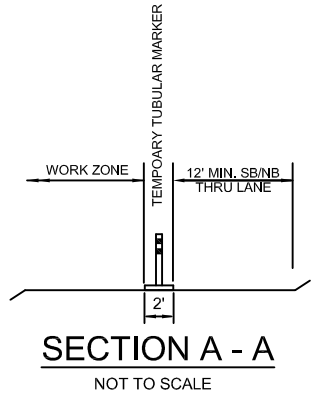
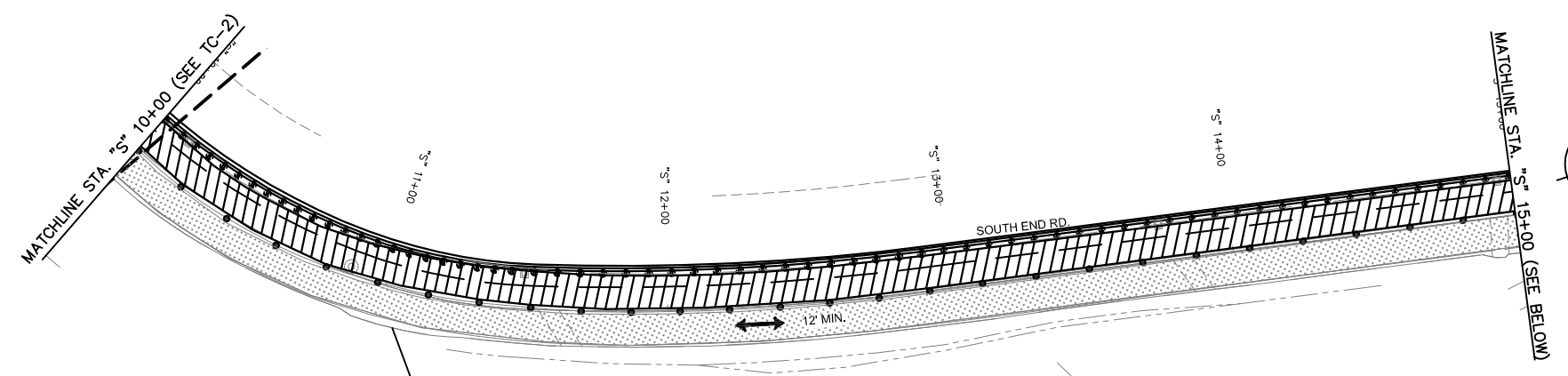
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Portland, Oregon 97204

ONE LANE CLOSURE

SOUTH END ROAD - SB LANE



TRAFFIC CONTROL PLAN
SOUTH END ROAD AT MP 3.8
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

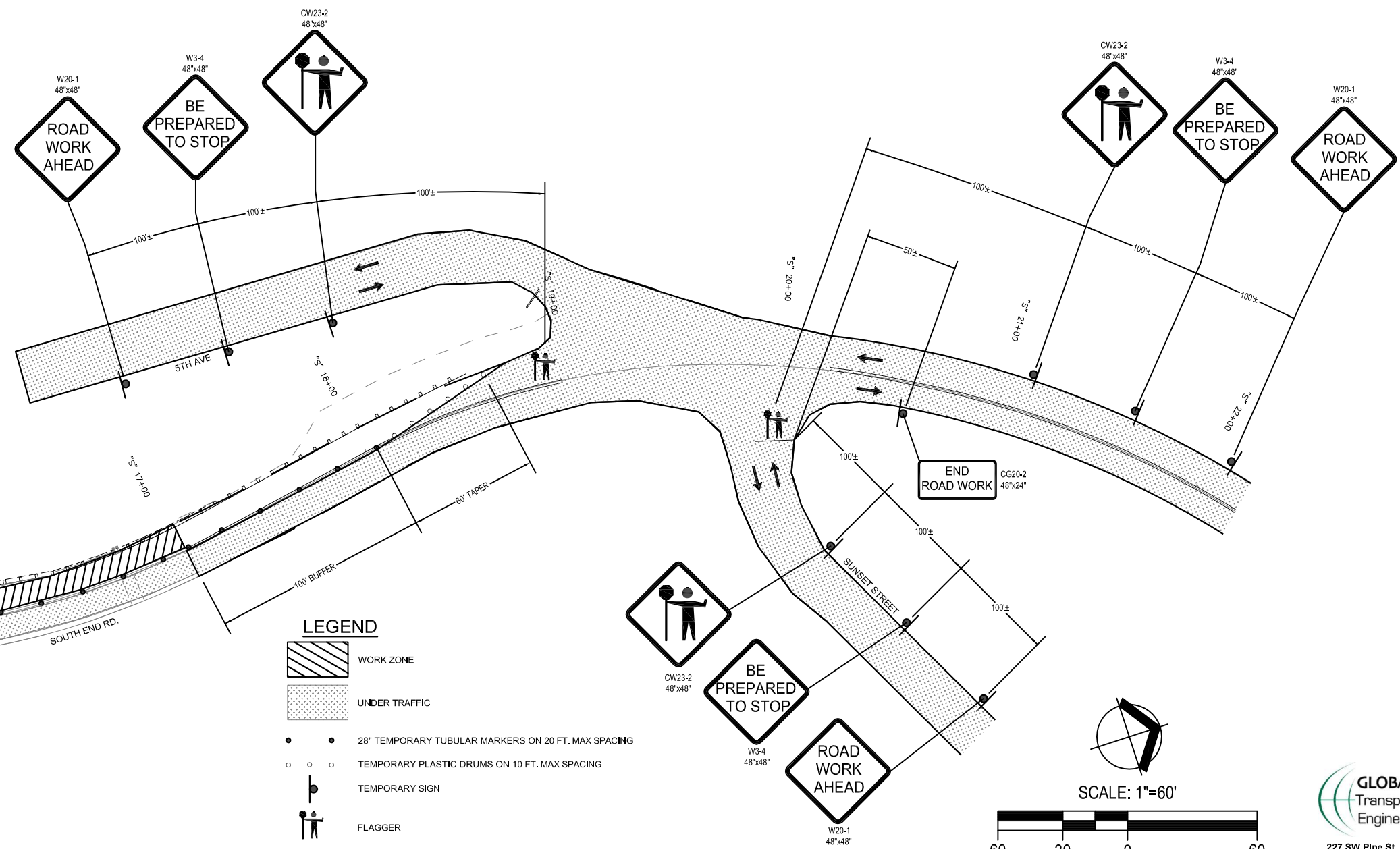


GENERAL NOTES

1. SEE SHEET TC-1 FOR APPLICABLE ODOT STANDARD DRAWINGS.
2. SEE SPECIAL PROVISIONS FOR LANE CLOSURE RESTRICTIONS.
3. FLAGGERS TO MONITOR AND STOP TRAFFIC FOR PEDESTRIANS AND BIKES.
4. IF AN ABRUPT EDGE IS CREATED BY CONSTRUCTION, PROVIDE ABRUPT EDGE SIGNING PER ODOT STANDARD DRAWING TM800.
5. ALLOW EMERGENCY VEHICLES IMMEDIATE PASSAGE AT ALL TIMES.

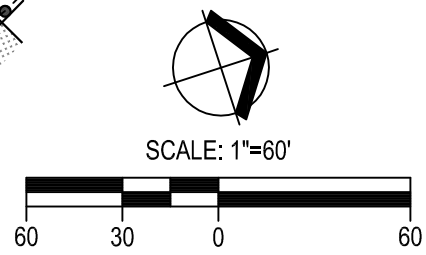
CONSTRUCTION NOTES

1. EXISTING RESIDENTIAL DRIVEWAY. PROVIDE AND MAINTAIN SAFE ACCESS TO EXISTING DRIVEWAY AT ALL TIMES. MONITOR AND PROVIDE A FLAGGER TO DIRECT RESIDENTIAL TRAFFIC DURING FLAGGING OPERATIONS. COORDINATE IN ADVANCE WITH PROPERTY OWNERS.



LEGEND

- WORK ZONE
- UNDER TRAFFIC
- 28" TEMPORARY TUBULAR MARKERS ON 20 FT. MAX SPACING
- TEMPORARY PLASTIC DRUMS ON 10 FT. MAX SPACING
- TEMPORARY SIGN
- FLAGGER



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Transportation
Engineering
227 SW Pine St, Suite 220
Portland, Oregon 97204

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DAN JOHNSON
DIRECTOR

DESIGNED BY:	DRAFTED BY:	CHECKED BY:

NO.	DATE:	REVISIONS

Sheet No. TC-3

ONE LANE CLOSURE

SOUTH END ROAD - NB LANE

REGISTERED PROFESSIONAL ENGINEER
75,113
DIGITALLY SIGNED
2021.08.26 18:43:57-07'00"
OREGON
DECEMBER 12, 2012
MONICA TERESA LEAL
EXPIRES: DEC. 31, 2022

TRAFFIC CONTROL PLAN

SOUTH END ROAD AT MP 3.8

DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

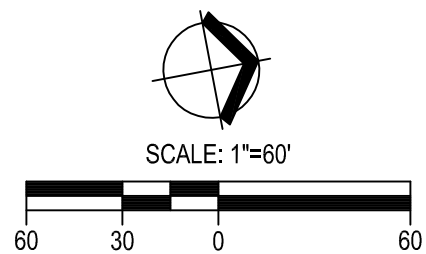
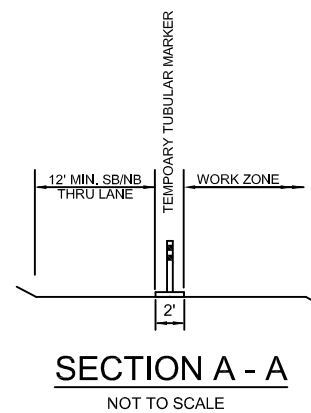
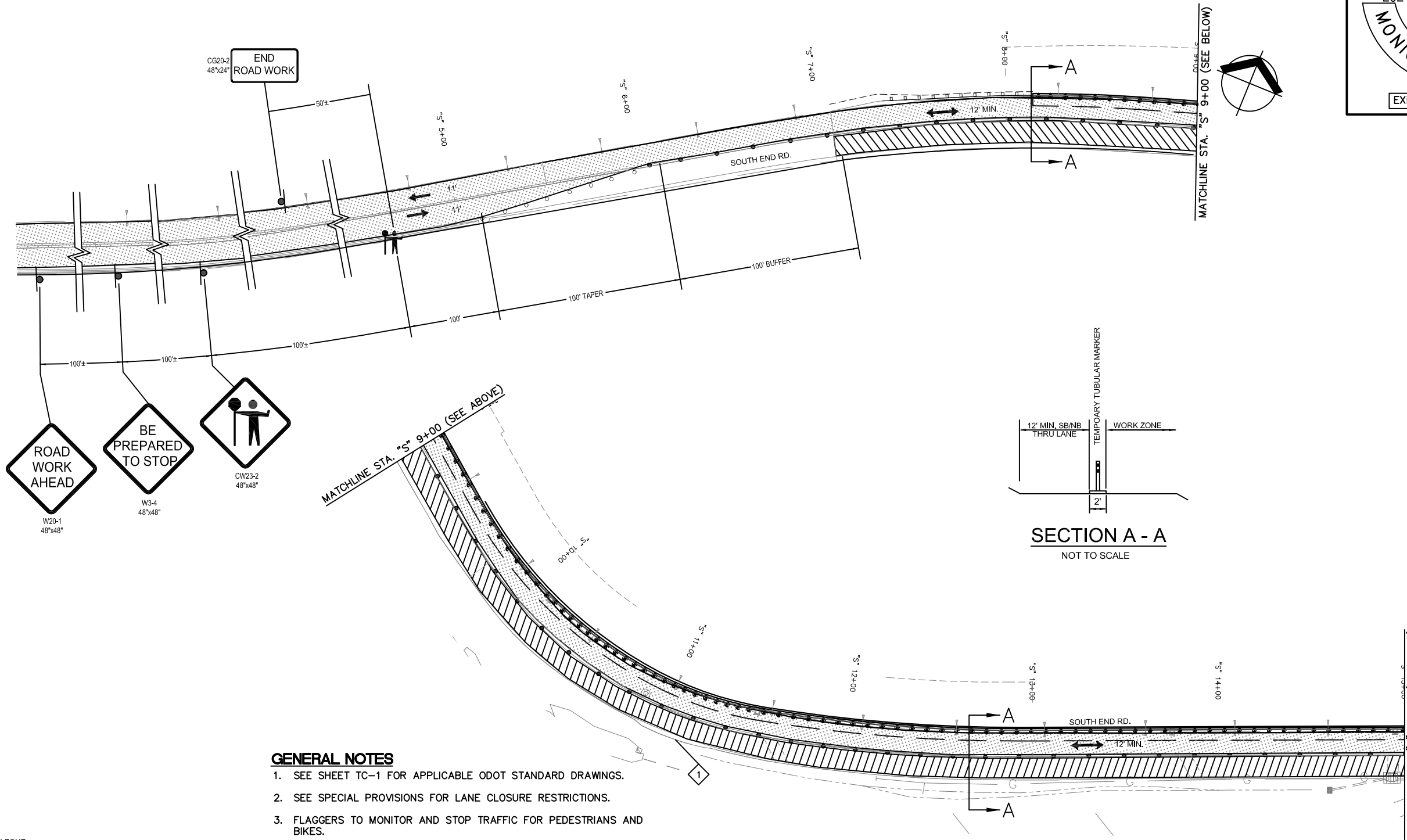
CLACKAMAS COUNTY
DAN JOHNSON
DIRECTOR

DESIGNED BY:
DRAFTED BY:
CHECKED BY:

REVISIONS

NO.	DATE	DESCRIPTION

Sheet No. TC-4



GENERAL NOTES

1. SEE SHEET TC-1 FOR APPLICABLE ODOT STANDARD DRAWINGS.
2. SEE SPECIAL PROVISIONS FOR LANE CLOSURE RESTRICTIONS.
3. FLAGGERS TO MONITOR AND STOP TRAFFIC FOR PEDESTRIANS AND BIKES.
4. IF AN ABRUPT EDGE IS CREATED BY CONSTRUCTION, PROVIDE ABRUPT EDGE SIGNING PER ODOT STANDARD DRAWING TM800.
5. ALLOW EMERGENCY VEHICLES IMMEDIATE PASSAGE AT ALL TIMES.

CONSTRUCTION NOTES

1. EXISTING RESIDENTIAL DRIVEWAY. PROVIDE AND MAINTAIN SAFE ACCESS TO EXISTING DRIVEWAY AT ALL TIMES. MONITOR AND PROVIDE A FLAGGER TO DIRECT RESIDENTIAL TRAFFIC DURING FLAGGING OPERATIONS. COORDINATE IN ADVANCE WITH PROPERTY OWNERS.

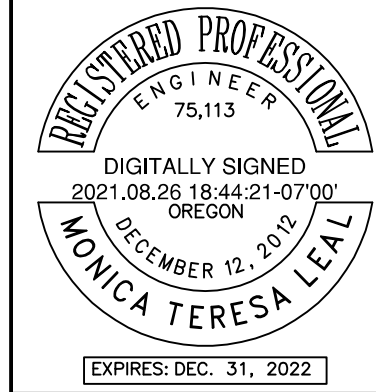
LEGEND

- WORK ZONE
- UNDER TRAFFIC
- 28" TEMPORARY TUBULAR MARKERS ON 20 FT. MAX SPACING
- TEMPORARY PLASTIC DRUMS ON 10 FT. MAX SPACING
- TEMPORARY SIGN
- FLAGGER

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ONE LANE CLOSURE

SOUTH END ROAD - NB LANE



TRAFFIC CONTROL PLAN

SOUTH END ROAD AT MP 3.8

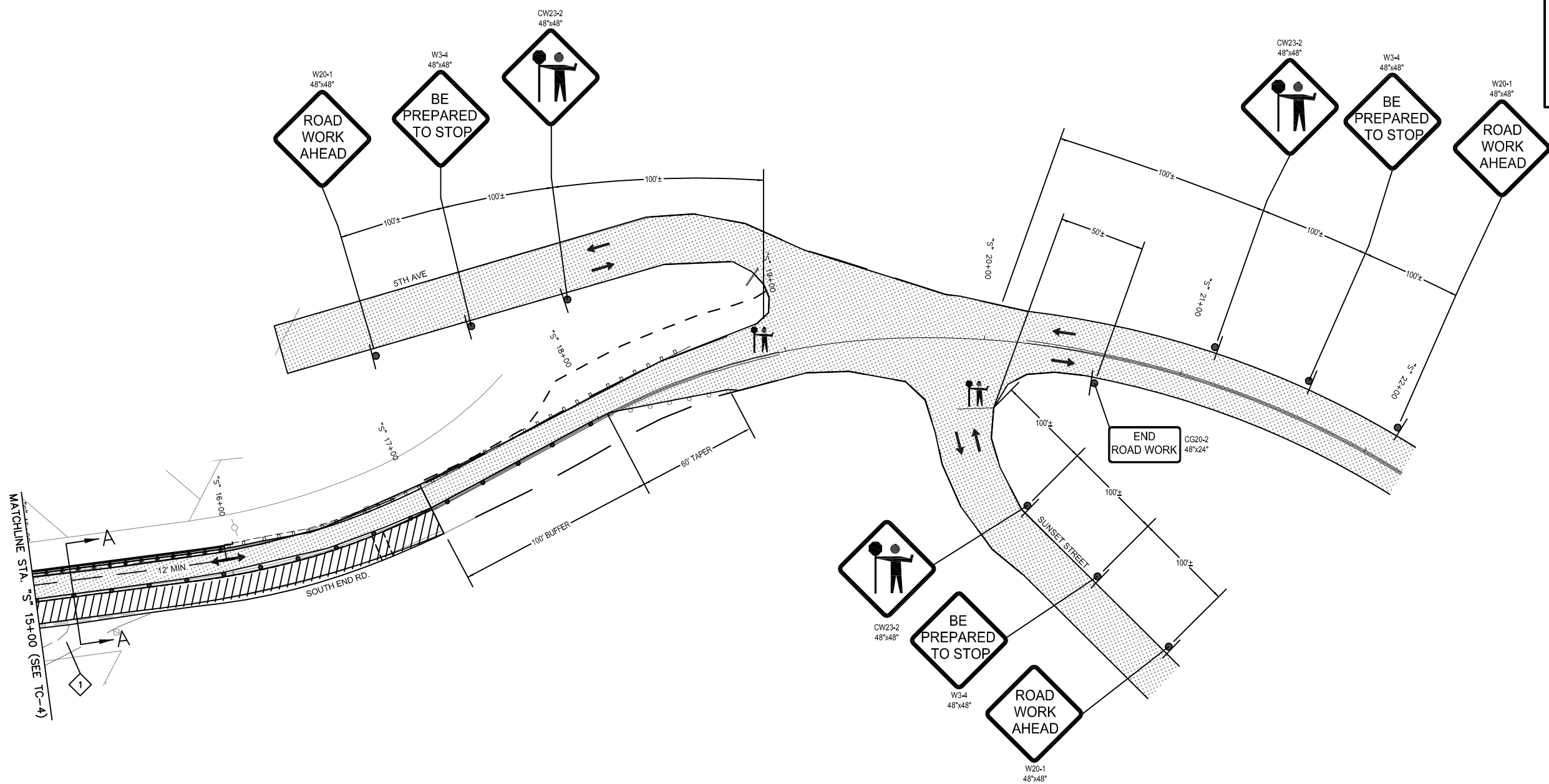
DATE: AUGUST 2021 PROJECT NO.: 22270 FED. AID NO.: C005111

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

DESIGNED BY: _____
DRAFTED BY: _____
CHECKED BY: _____

NO.	DATE	REVISIONS

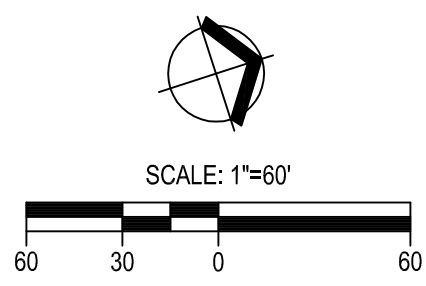
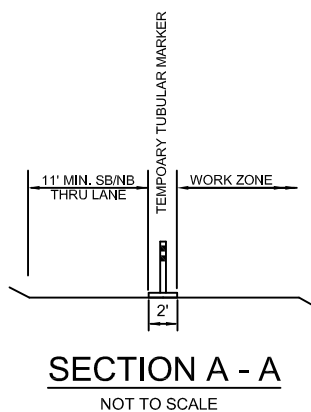


- GENERAL NOTES**
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 - FLAGGERS TO MONITOR AND STOP TRAFFIC FOR PEDESTRIANS AND BIKES.
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SECTION 13

Disadvantaged Business Enterprise (DBE) Commitment Requirements DBE Information Page/Subcontractor Solicitation and Utilization Report Instructions

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

Reimbursable Federal On-the-job and Apprenticeship Training

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

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.oregon4biz.com/How-We-Can-Help/COBID/>

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)(i), 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)(i) 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. 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, 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, suppliers, or service providers will be counted.

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 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, 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;
- (10) Evidence that the Bidder used the services of minority community organizations, minority contractor groups, local, state and federal minority business assistance offices and other

organizations identified by the Advocate for Minority, Women, and Emerging Small Business that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises; and

(11) Evidence that the Bidder used the services of ODOT's Supportive Services contractor(s).

(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 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 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.state.or.us.

Other requests may be directed to:

Oregon Department of Transportation
Office of Civil Rights MS 23
3930 Fairview Industrial Dr., S.E.
Salem, OR 97302
Phone: 503-986-4350
Fax: 503-986-6382
ocrinforequest@odot.state.or.us

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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 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/VendorSearchPublic.asp>

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

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

Project Name _____ Bid Opening Date _____

DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM

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's.

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 %	This section to be completed by Agency	
Subcontractor	100% (of subcontract amount)	ASSIGNED DBE CONTRACT GOAL %	
Supplier (Regular Dealer)	60% (of supply expenditure amount)	TOTAL DBE AMOUNT	\$
DBE Manufacturer	100% (of material expenditure amount)	TOTAL BID AMOUNT	\$
Service Provider	100% (of fee or commission)	DBE COMMITMENT	%
Broker	100% (of brokerage fee only)	(TOTAL DBE AMOUNT ÷ TOTAL BID AMOUNT) (calculated to two decimal places (0.01))	

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.

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.

South End Road at MP 3.8

ASSIGNED DBE CONTRACT GOAL

The minimum Assigned **DBE** Contract Goal for this Project is **5.00%**.

(Overall DBE program goal for ODOT is set at 15.37% for FHWA funded Contracts for federal fiscal years 2020, 2021 and 2022.)

A Certification Directory of DBEs is available from the Certification Office of Business Inclusion and Diversity (COBID) website at:
<https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.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
3930 Fairview Industrial Drive, MS-23
Salem, OR 97302
<https://www.oregon.gov/odot/Business/OCR/Pages/Disadvantaged-Business-Enterprise.aspx>

For questions or further information, please contact:
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Office of Civil Rights
(T) 503-986-4353
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Angela.M.Crain@odot.state.or.us



Kristopher Strickler, Director
Oregon Department of Transportation

6/4/2020

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 279.

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

(7) 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 ODOT 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 ODOT 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 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 Civil Rights (OCR) 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 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 Civil Rights. The DBE must be given 5 days to respond to the termination request, copying the ODOT Office of 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 Civil Rights. The DBE must be given 5 days to respond to the termination request, copying the ODOT Office of 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;
- Evidence that the Contractor used the services of minority community organizations, minority organizations identified by the Advocate for Minority and Women Business that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises; and
- Evidence that the Contractor used the services of ODOT's Supportive Services Contractor(s).

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.state.or.us.

Other requests may be directed to:

Oregon Department of Transportation
Office of Civil Rights MS 23
3930 Fairview Industrial Dr., S.E.
Salem, OR 97302
Phone: 503-986-4350
Fax: 503-986-6382
ocrinforequest@odot.state.or.us

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 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 matter.

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. Nonsegregated 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. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

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 (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).

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.

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). 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 bid proposal or request for proposal 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).

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.

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.

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, 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 who 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.

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, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. 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 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 contracting agency deems appropriate.

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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall 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. (1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.

(3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. 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, 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.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;

(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 of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. 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. 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 journeymen 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.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.

9. Disputes concerning labor standards. 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

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

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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 watchmen 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.

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. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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" 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:

(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.

2. 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. 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.

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

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 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.

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 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).

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 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 1, 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

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

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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.

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.

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.

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.

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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

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. 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

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

2. 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)

a. By signing and submitting this proposal, the prospective lower tier 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.

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 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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.

* * * * *

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall 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 20).

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.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

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.

REIMBURSABLE FEDERAL ON-THE-JOB and APPRENTICESHIP TRAINING

This Section for Reimbursable Federal On-the-Job Training and Apprenticeship Training supersedes subparagraph B(7-e) of the "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal Aid Contracts," and is in implementation of 23 U.S.C. 140(a). All other provisions apply.

SECTION 1: ABBREVIATIONS AND DEFINITIONS

(a) Abbreviations

BOLI - Bureau of Labor and Industries for the State of Oregon

EEO - Equal Employment Opportunity

OCR - Office of Civil Rights

OJT - On-the-Job Training

(b) Definitions

Affirmative Action - Contractor's efforts exerted towards achieving equal opportunity through positive, aggressive, and continuous result-oriented measures to correct past and present discriminatory practices and their effects on the conditions and privileges of employment. These measures include, but are not limited to, recruiting, hiring, promotion, upgrading, demotion, transfer, termination, compensation, and training.

Apprenticeship Training Program - A specific Apprenticeship Training Program, approved by BOLI, which provides a combination of field and classroom trade specific experience under the supervision of journey level workers. For this Contract, this is a Race and Gender Neutral program.

OJT Program - A specific on-the-job training program, approved by the Agency and FHWA, which provides a combination of field, and limited classroom, trade specific experience under the supervision of journey level workers. This is an Affirmative Action program that targets women and minorities.

Qualified Hours - Specific On-Site training hours (may include some classroom hours) completed by a properly registered and enrolled trainee consistent with the Contractor's OJT Program or an apprentice consistent with the Apprenticeship Training Program. The Contractor reports these Qualified Hours to the Agency for the OJT and Apprenticeship Training Goal.

Race and Gender Neutral - Employment and contracting practices where the ethnicity and the sex of a person are not considered in the evaluation of candidates for employment or bids for the Contract.

Training Goal - A fixed quantity of Qualified Hours set by the Agency and included in the bid schedule.

SECTION 2: POLICY STATEMENT

In order to increase the number of trained and skilled workers in highway construction the Agency will set a Training Goal for the Project.

It is the policy of the Agency that the Contractor shall take all necessary and reasonable steps to ensure that trainees and apprentices have the opportunity to participate on highway construction projects and to develop as journey-level workers in the given trade or job classification employed, and to meet this Training Goal.

The Contractor shall adopt the following policy:

It shall be the policy of the Contractor to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or 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 on-the-job training.

The Training Goal is not intended, and shall not be used to discriminate against any applicant, whether members of a minority group or not.

SECTION 3: APPRENTICESHIP TRAINING PROGRAM

(a) General

Apprentices shall be paid the appropriate rates approved in connection with their stage in the Apprenticeship Training Program.

A valid certification by an appropriate apprenticeship committee that the Contractor is an approved training agent shall be prima facie proof of compliance.

(b) EEO Requirements

The Contractor shall ensure that, without discrimination, minorities and women have an equal employment opportunity to compete for and participate as apprentices while supporting a diverse workforce that is representative of the population.

Apprenticeship training is Race and Gender Neutral, however, the Contractor is still obligated to comply with all applicable EEO requirements.

(c) Reports

The Contractor and each Subcontractor with an Apprenticeship Training Program shall complete and submit the following reports to the Engineer, according to the instructions provided in the respective forms:

- The "Training Program Approval Request (TPAR)" (Form 734-2880) shall be submitted prior to or at the preconstruction conference.
- Before an apprentice begins work, an "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878) shall be submitted.
- Each month the Contractor shall submit the "Monthly Employment Utilization Report" (Form 731-0668). This report is required of the Contractor and Subcontractors who have contracts that require certified payrolls, regardless of their participation in the apprenticeship.
- Each month the Contractor shall submit an "Apprentice/Trainee Monthly Progress Report (MPR)" (Form 734-2879) for each apprentice. This Form is used to report Qualified Hours for apprentices and will be the source document for estimated monthly progress payments to the Contractor.

Forms are published on the ODOT OCR website at:

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

SECTION 4: OJT PROGRAM

(a) EEO Requirements

The Contractor shall make every effort to enroll minority and women trainees by conducting systematic and direct, meaningful recruitment through public and private sources likely to yield minority and women trainees within a reasonable area of recruitment.

Whenever minorities or women are not placed in OJT positions, the Contractor shall provide documented evidence of Affirmative Action recruitment efforts. The Agency will review the documents of the Contractor's systematic and direct, meaningful recruitment efforts to determine whether the Contractor has complied with the criteria in "Required Contract Provisions Federal-Aid Construction Contracts" (FHWA Form 1273), Section II Nondiscrimination.

When filling OJT positions Contractors are encouraged to hire previously approved trainees who have not yet completed their training.

(b) Training Requirements

The intent of these provisions is to provide real and meaningful training in the construction crafts. Off-Site training is permissible only when it is an integral part of an approved training program and does not comprise a significant part of the overall training. In addition:

- A Contractor, not registered as a training agent, may choose to adopt a standardized OJT Program. Standardized OJT Programs are published at the OCR website at: <https://www.oregon.gov/ODOT/Business/OCR/Pages/Workforce-Development.aspx>
- Some job classifications such as flagger, bookkeeper, clerk/typist or secretary are prohibited from OJT Programs.
- OJT Programs shall always maintain the approved ratio of trainees to journey level workers On-Site.

- OJT Programs shall always maintain the approved types and numbers of equipment On-Site.
- No employee shall be registered as a trainee in any job classification the employee has completed leading to journey level status, or for any job classification in which the employee has been employed as a journey level worker. The Contractor shall keep records, and provide to the Agency, if requested, documents on each trainee.
- Trainees shall be pre-approved by the Agency.

OJT Program trainees shall be paid the journey level rate specified in the contract for the type of work performed.

(c) Reports

The Contractor and each Subcontractor with an OJT Program shall complete and submit the following reports to the Engineer according to the instructions on their respective forms:

- The training program forecast using the "Training Program Approval Request (TPAR)" (Form 734-2880) shall be submitted prior to or at the preconstruction conference.
- Before the trainee begins work, an "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878) shall be submitted. Attach a copy of the "Training Program Approval Request (TPAR)" (Form 734-2880) to the "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878). The Contractor and trainee must sign and return a copy of the training program that will be utilized. The Contractor shall provide certification to the trainee upon completion of the OJT Program and also submit a copy to OCR. Upon completion of the Contract, a certification shall be given to each trainee and to the Agency to document the number of hours and training completed by the individual.
- Each month the Contractor shall submit the "Monthly Employment Utilization Report" (Form 731-0668). This report is required of the Contractor and Subcontractors (for contracts that require certified payrolls), regardless of their participation in the Apprenticeship or On-the-Job Training programs.
- Each month the Contractor shall submit an "Apprentice/Trainee Monthly Progress Report (MPR)" (Form 734-2879) for each trainee. This form is used to report Qualified Hours for trainees and will be the source document for estimated monthly progress payments to the Contractor.

Forms are published on the ODOT OCR website at:

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

SECTION 5: MONITORING AND COMPLIANCE

The Contractor has the primary responsibility to monitor compliance levels throughout the Contract and to ensure the Training Goal is met. If the Contractor decides any of the training hours are to be provided by a Subcontractor, the Contractor shall ensure that the Subcontract contains the appropriate training clauses that obligate the Subcontractor. This shall not relieve the Contractor of the Contractor's primary responsibility.

At the request of the Agency, the Contractor will meet with the Agency to review records related to training. The Agency, through meetings and progress records provided by the Contractor, will provide the Contractor with informational compliance and reimbursement data including:

- The Contractor's training forecasts compared with the actual Qualified Hours achieved.
- Total Qualified Hours and payment reimbursement summary.
- For information purposes only, consolidated summary reports by OJT craft and apprenticeship crafts.

The Agency will track training activities provided by Contractor for the OJT trainees and apprentices.

SECTION 6: MEASUREMENT AND PAYMENT

(a) General

The quantity of Qualified Hours will be paid for at the Contract unit price of \$20 per hour for the item "Training."

No separate or additional payment will be made for failure to achieve the Training Goal. See (b) below for Disincentive.

No separate or additional payment will be made for Qualified Hours achieved in excess of 150% of the Training Goal. No Disincentive applies.

If the Contractor achieves from 100% to 150% of the Training Goal, the Agency will reimburse the Contractor for Qualified Hours.

After the Second Notification, the Agency will review the final reports required and make adjustments. Any additional reimbursements will be paid on the next Contract payment voucher.

Examples of achieving the Training Goal:

Example A: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves 100% of the Qualified Hours (fulfilled the goal): therefore 1,000 hours x \$20.00/hr = \$20,000 reimbursed (during progress of the Contract).

Example B: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves 150% of the Qualified Hours or 1,500 hours (exceeded the goal): therefore 1,500 hours x \$20.00/hr = \$30,000 reimbursed (during progress of the Contract).

Example C: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves an actual 1,525 Qualified Hours (exceeded even 150% of the goal): therefore 1,500 hours x \$20.00/hr = pay of \$30,000 reimbursed (during progress of the Contract).

(b) Disincentive

If, at the Second Notification, the Contractor has not achieved the Training Goal there will be no payment (disincentive) to the Contractor and no Qualified Hours as follows:

Regardless of all prior partial payments for the Pay Item "Training," a correction equal to 100% of the Pay Item goal times the Pay Item price will be subtracted from the final payment due the Contractor on the next Contract payment voucher.

Examples of *not* achieving the Training Goal:

Example A: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves an actual 500 Qualified Hours (failed to meet the goal): A disincentive applies; therefore $1,000 \text{ hours} \times \$20.00/\text{hr} = \text{line item deduction}$ of \$20,000 will show on the next Contract payment voucher. The previously paid qualified hours ($500 \times \$20 = \$10,000$) under the pay item on vouchers will remain and the net impact in this example will be the \$20,000 deduction offset by the \$10,000 qualified and paid hours for a net reduction of \$10,000.

Example B: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves zero Qualified Hours (failed to meet the goal): A disincentive applies; therefore $1,000 \text{ hours} \times \$20.00/\text{hr} = \text{line item deduction}$ of \$20,000 will show on the next Contract payment voucher.

If, as a result of a line item deduction, a net amount is due the Agency, the Contractor shall pay the Agency within 45 Calendar Days of notice of such deficiency.