



DAN JOHNSON
DIRECTOR

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

June 29, 2023,

BCC Agenda Date/Item: _____

Board of County Commissioners
Clackamas County

Approval of a Contract with Dirt and Aggregate Interchange, Inc. for the Redland Rd Turn Lanes at Ferguson and Bradley Improvement Project. Contract value is \$2,142,905.00 until project completion. Funding through Rural Surface Transportation Block Grant, Community Road Funds, and Clackamas River Water contribution. No County General Funds are involved.

Previous Board Action/Review	06/27/23: Request for consent 05/04/23: BCC Approval of an Intergovernmental Agreement between Clackamas River Water and Clackamas County DTD 09/22/22: BCC approval of Resolution Declaring the Public Necessity and Purpose for Acquisition of Rights of Way, Easements, and Fee Property 11/17/20: BCC Approval of a design contract with PBS Engineering & Environmental, Inc.		
Performance Clackamas	The project will build a strong infrastructure.		
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Bob Knorr, PM	Contact Phone	503-742-4680

EXECUTIVE SUMMARY: The Department of Transportation and Development is utilizing Rural Surface Transportation Block Grant and Community Road Funds to construct improvements along Redland Road; a two-lane rural major arterial, lacking left-turn lanes at both Ferguson and Bradley Roads. The improvements include constructing designated turn lanes at its intersection with Ferguson and Bradley Roads, both two-way stop-controlled minor arterials. A Road Safety Audit indicated that adding dedicated left-turn lanes will help remove conflicts between left-turning vehicles and high-speed traffic. This in turn is expected to improve safety, relieve congestion, and increase the capacity of Redland Road by reducing the speed differential between the through and left turn vehicles while providing a location for turning vehicles to reside.

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An additional part of this project includes constructing Clackamas River Water's (CRW) waterline improvements to create efficiency in the construction of the project. Adding CRW's improvements to the County's project provides for a shorter duration of the overall construction and makes the work appear seamless when interacting with the public. Clackamas County will be responsible for \$1,858,488.00 of the construction contract and CRW will be responsible for \$284,417.00 of the construction contract.

PROCUREMENT PROCESS: This project was advertised in accordance with ORS and LCRB Rules on April 18, 2023, through Invitation to Bid 2023-33. Proposals were publicly opened on May 17, 2023. The County received four (4) bid proposals in response and Dirt and Aggregate Interchange was the apparent low bidder. After a review of the bid proposals, contracting with Dirt and Aggregate Interchange was determined to be in the best interest of the county based on an evaluation of the bid proposals.

RECOMMENDATION: Staff respectfully recommends the Board of County Commissioners approve and sign this contract with Dirt and Aggregate Interchange, Inc. for the Redland Rd Turn Lanes at Ferguson and Bradley Improvement Project.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director of Transportation & Development



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
Contract #8070

This Public Improvement Contract (the "Contract"), is made by and between the Clackamas County, a political subdivision of the State of Oregon, hereinafter called "Owner," and **Dirt and Aggregate Interchange, Inc.**, 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: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

1. Contract Price, Contract Documents and Work.

The Contractor, in consideration of the sum of **Two Million One Hundred Forty-Two Thousand Nine Hundred Five Dollars (\$2,142,905.00)** (the "Contract Price"), to be paid to the Contractor by Owner 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 the project specifications) referenced within the Instructions to Bidders), 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 amount contemplated by the Base Bid, as indicated in the accepted Bid.

The following documents are incorporated by reference in this Contract and made a part hereof:

- Notice of Contract Opportunity
- Supplemental Instructions to Bidders
- Bid Form
- Prevailing Wage Rates
- Plans, Specifications and Drawings
- Instructions to Bidders
- Bid Bond
- Performance Bond and Payment Bond
- Payroll and Certified Statement Form
- Addenda 1-3

The Plans, Specifications and Drawings expressly incorporated by reference into this Contract includes, but is not limited to, the Special Provisions for Redland Rd Turn Lanes at Ferguson and Bradley Intersection Improvements Clackamas County Department of Transportation and Development Clackamas County, Oregon (the "Specifications"), together with the provisions of the Oregon Standard Specifications for Construction (2021) referenced therein.

The Contractor shall comply 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.

2. Representatives.

Contractor has named Corey Pelfrey as its Authorized Representative to act on its behalf. Owner designates, or shall designate, its Authorized Representative as indicted below (check one):

Unless otherwise specified in the Contract Documents, the Owner designates Robert Knorr 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 Owner.

Name of Owner's Authorized Representative shall be submitted by Owner in a separate writing.

3. Key Persons.

The Contractor's personnel identified below shall be considered Key Persons and shall not be replaced during the project without the written permission of Owner, which shall not be unreasonably withheld. If the Contractor intends to substitute personnel, a request must be given to Owner at least 30 days prior to the intended time of substitution. When replacements have been approved by Owner, 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 written permission of Owner. The Contractor's project staff shall consist of the following personnel:

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

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

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

4. Contract Dates.

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

SUBSTANTIAL COMPLETION DATE: October 27, 2023

FINAL COMPLETION DATE: May 17, 2024

Time is of the essence for this Contract. It is imperative that the Work in this Contract reach Substantial Completion and Final Completion by the above specified dates.

5. Insurance Certificates and Required Performance and Payment Bonds.

5.1 In accordance with Section 00170.70 of the Specifications, Contractor shall furnish proof of the required insurance naming Clackamas County as an additional insured. Insurance certificates may be returned with the signed Contract or may be emailed to the County Contract Analyst.

5.2 Primary Coverage: Insurance carried by Contractor under the Contract shall be the primary coverage. The coverages indicated are minimums unless otherwise specified in the Contract Documents.

5.2.1 Workers' Compensation: All employers, including Contractor, that employ subject workers who work under the Contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than the minimum amount required by statute for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation coverage by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

5.3 Builder's Risk Insurance: During the term of the Contract, for new construction the Contractor shall obtain and keep in effect Builder's Risk insurance on an all risk forms, including earthquake and flood, for an amount equal to the full amount of the Contract, plus any changes in values due to modifications, Change Orders and loss of materials added. Such Builder's Risk shall include, in

addition to earthquake and flood, theft, vandalism, mischief, collapse, transit, debris removal, and architect's fees "soft costs" associated with delay of Project due to insured peril. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible which shall not exceed 2 percent of each loss or \$50,000, whichever is greater. The deductible shall be paid by Contractor. The policy will include as loss payees Owner, the Contractor and its Subcontractors as their interests may appear.

5.4 Builder's Risk Installation Floater: For Work other than new construction, Contractor shall obtain and keep in effect during the term of the Contract, a Builder's Risk Installation Floater for coverage of 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 Contract. The policy will include as loss payees Owner, the Contractor and its Subcontractors as their interests may appear. Owner may waive this requirement at its sole and absolute discretion.

5.4.1 Such insurance shall be maintained until Owner has occupied the facility.

5.4.2 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner as loss payee. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

5.5 "Tail" Coverage: If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of the Contract for a duration of 36 months or the maximum time period available in the marketplace if less than 36 months. Contractor shall furnish certification of "tail" coverage as described or continuous "claims made" liability coverage for 36 months following Final Completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of the Contract. Owner's receipt of the policy endorsement evidencing such coverage shall be a condition precedent to Owner's obligation to make final payment and to Owner's final acceptance of Work or services and related warranty (if any).

5.6 Notice of Cancellation or Change: If the Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify Owner by fax within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. When notified by Owner, the Contractor agrees to stop Work pursuant to the Contract at Contractor's expense, unless all required insurance remain in effect. Any failure to comply with the reporting provisions of this insurance, except for the potential exhaustion of aggregate limits, shall not affect the coverages provided to the Owner and its institutions, divisions, officers, and employees.

Owner shall have the right, but not the obligation, of prohibiting Contractor from entering the Project Site until a new certificate(s) of insurance is provided to Owner evidencing the replacement coverage. The Contractor agrees that Owner reserves the right to withhold payment to Contractor until evidence of reinstated or replacement coverage is provided to Owner.

5.7 Before execution of the Contract, the Contractor shall file with the Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by Oregon Revised Statutes, Chapter 279C.830 and 279C.836, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring the Subcontractor to have

a public works bond filed with the Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the Subcontractor has filed a public works bond before permitting any Subcontractor to start Work.

5.8 When the Contract Price is \$50,000 or more, the Contractor shall furnish and maintain in effect at all times during the Contract Period a performance bond in a sum equal to the Contract Price and a separate payment bond also in a sum equal to the Contract Price. Contractor shall furnish such bonds even if the Contract Price is less than the above thresholds if otherwise required by the Contract Documents.

5.9 Bond forms furnished by the Owner and notarized by Contractor's surety company authorized to do business in Oregon are the only acceptable forms of performance and payment security, unless otherwise specified in the Contract Documents.

6. Responsibility for Damages/Indemnity.

6.1 Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay that may be caused by, or result from, the carrying out of the Work to be done under the Contract, or from any act, omission or neglect of the Contractor, its Subcontractors, employees, guests, visitors, invitees and agents.

6.2 To the fullest extent permitted by law, Contractor shall indemnify, defend (with counsel approved by Owner) and hold harmless the Owner and its elected officials, officers, directors, agents, and employees (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses, demands and actions of any nature whatsoever which arise out of, result from or are related to: (a) any damage, injury, loss, expense, inconvenience or delay described in this Section 6.1; (b) any accident or occurrence which 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; (c) any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents which is to be observed or performed by the Contractor, or any breach of any agreement, representation or warranty of the Contractor contained in the Contract Documents or in any subcontract; (d) the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder (except to the extent otherwise void under ORS 30.140); and (e) any lien filed upon the Project or bond claim in connection with the Work. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 6.2.

6.3 In claims against any person or entity indemnified under Section 6.2 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 Section 6.2 shall not be limited 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.

7. 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.

8. 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 Owner. 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 Owner ("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.

9. 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.

10. Integration.

All provisions of state law required to be part of this Contract, whether listed in the General or Special Conditions or otherwise, are hereby integrated and adopted herein. Contractor acknowledges the obligations thereunder and that failure to comply with such terms is a material breach of this Contract.

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.

11. Liquidated Damages

The Contractor acknowledges that the Owner will sustain damages as a result of the Contractor's failure to substantially complete the Project in accordance with the Contract Documents. 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.

- 11.1 Liquidated Damages shall be as follows if the actual Substantial Completion exceeds the required date of Substantial Completion:
 - 11.1.1. \$ 800 per Calendar day past the Substantial Completion date, as set forth in section 00180.85 (b)
- 11.2 Liquidated damages shall also include the following:
 - 11.2.1. \$500 per 15 minutes, or for a portion of 15 minutes, per lane, as set forth in 00180.85 (c)

12. 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.

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

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.

Signature page to follow.

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

Contractor DATA:

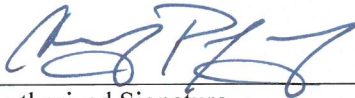
Dirt and Aggregate Interchange, Inc.
20905 NE Sandy Blvd
Fairview, Oregon 97024

Contractor CCB # 26599 Expiration Date: 5/2/2024
Oregon Business Registry # 113857-13 Entity Type: DBC State of Formation: Oregon

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

Dirt and Aggregate Interchange, Inc.

Clackamas County



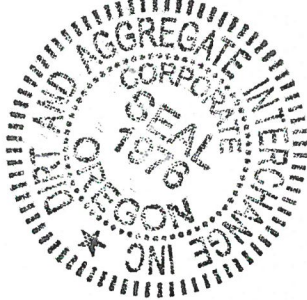
Authorized Signature 6.9.2023 Date

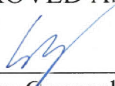
Chair Date

Corey Pelfrey, President

Name / Title Printed

Recording Secretary



APPROVED AS TO FORM


County Counsel 06/13/2023 Date



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY**

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**CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY**

**INVITATION TO BID #2023-33
Redland Rd Turn Lanes at Ferguson and Bradley Project
April 18, 2023**

Clackamas County (“County”) through its Board of County Commissioners is accepting sealed bids for the **Redland Rd Turn Lanes at Ferguson and Bradley Project** until **May 17, 2023, 2:00 PM**, Pacific Time, (“Bid Closing”) at the following location:

Bidding Documents can be downloaded from the state of Oregon procurement website (“OregonBuys”) at the following address: <https://oregonbuys.gov/bsv/view/login/login.xhtml>, Document No.S-C01010-00006546.

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

Submitting Proposals: Bid Locker

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

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

Combined Engineers Estimate: \$2,022,103; (\$1,743,145 Roadway Construction; \$278,958 Waterline Construction)

Contact Information

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

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

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

State Prevailing Wage

Prevailing Wage Rates requirements apply to this Project because the maximum compensation for all Owner-contracted Work is more than \$50,000. Contractor and all subcontractors shall comply with the provisions of ORS 279C.800 through 279C.870, relative to Prevailing Wage Rates. The Bureau of Labor

and Industries (BOLI) wage rates and requirements set forth in the following BOLI booklet (and any listed amendments to that booklet), which are incorporated herein by reference, apply to the Work authorized under this Agreement:

PREVAILING WAGE RATES for Public Works Contracts in Oregon, April 5, 2023, which can be downloaded at the following web address: http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx
The Work will take place in Clackamas County, Oregon.

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



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 Oregonbuys 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 OregonBuys 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 email, 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 the Contract Information Analyst listed on the Notice of Contract Opportunity.



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project Name: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

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

- 1. To be eligible for award under this Invitation to Bid, bidders (prime contractors) must submit a prequalification application (either ODOT or County) to the County at least two business days prior to the Bid Closing. County will reject bids from bidders who are not prequalified for the class of work indicated prior to the Bid Closing. **Bidders must be prequalified in Earthwork and Drainage, and Asphalt Concrete Paving and Oiling (ACP).****
- 2. Electronic Submissions: The County is requiring all bids for this project be electronically submitted. Complete Bids (including all attachments) will only be accepted electronically thru a secure online bid submission service, Bid Locker. Email submissions to Clackamas County email addresses will no longer be accepted. <https://bidlocker.us/a/clackamascounty/BidLocker>.**

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

ZOOM LINKS.

Join Zoom Meeting

<https://clackamascounty.zoom.us/j/89440733192>

Meeting ID: 894 4073 3192

One tap mobile

+12532158782,,89440733192# US (Tacoma)

+13462487799,,89440733192# US (Houston)

Dial by your location

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 408 638 0968 US (San Jose)

+1 669 444 9171 US

+1 669 900 6833 US (San Jose)

+1 719 359 4580 US

+1 253 205 0468 US
+1 312 626 6799 US (Chicago)
+1 360 209 5623 US
+1 386 347 5053 US
+1 507 473 4847 US
+1 564 217 2000 US
+1 646 876 9923 US (New York)
+1 646 931 3860 US
+1 689 278 1000 US
+1 301 715 8592 US (Washington DC)
+1 305 224 1968 US
+1 309 205 3325 US

Meeting ID: 894 4073 3192

Find your local number: <https://clackamascounty.zoom.us/j/89440733192>

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

- 3. Good Faith Effort:** Clackamas County encourages participation in contracts by Historically Underrepresented Businesses. “Historically Underrepresented Businesses” are State of Oregon-certified and self-identified minority, women and emerging small business as well as firms that are certified federally or by another state or entity with substantially similar requirements as the State of Oregon.

Bidders must perform Good Faith Effort (defined below) and submit **Form 1 and Form 2** for the Bidders Bid to be considered responsive. **Form 1 and Form 2** must be submitted within **two (2) hours** after the Closing Date and Time. Form 1 and Form 2 may be submitted to either the Contact Information Analyst listed on Notice of Contract Opportunity or via the <https://bidlocker.us/a/clackamascounty/BidLocker> listing.

“Good Faith Effort” is a requirement of a prime contractor to reach out to at least three Historically Underrepresented Business Subcontractors for each division of work that will be subcontracted out and to complete the required forms. If fewer than three Historically Underrepresented Business Subcontractors are reasonably available for a particular division of work, the Bidder must specifically note the reason for there being fewer than three contacts. The outreach should be performed with sufficient time to give the subcontractors at least 5 calendar days to respond to the opportunity. Form 3, which documents the actual amount of subcontractors on the project, must be submitted with the project final pay application. Compliance with the Good Faith Effort and submission of Forms 1, 2 and 3 is a contractual requirement for final payment.

The sufficiency of the documentation or the performance of Good Faith Effort shall be in the sole and absolute determination of Clackamas County. Only those Bidders that Clackamas County has determined have not sufficiently performed Good Faith Effort shall have protest rights of the determination for such Bidder. No Bidder shall have protest rights of the sufficiency of any other Bidder completing Good Faith Effort.

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
SUBCONTRACTOR AND SELF-PERFORMED WORK LIST
(FORM 1)**

Prime Contractor Name: DIRT AND AGGREGATE INTERCHANGE, INC.

Total Contract Amount: \$2,142,905.00

Project Name: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

DOW BIDDER WILL SELF-PERFORM (GFE not required)	
EXCAVATION	AGGREGATE BASE(S) & DRAIN ROCK
GRADING	Rock Gallery Detention
EROSION CONTROL	TRAFFIC CONTROL
PIPE	FLAGGING
	MILLING/COLD PLANE REMOVAL

PRIME CONTRACTOR SHALL DISCLOSE AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Emerging Small Businesses ("M/W/ESB") that you intend to use on the project. Delivery via bid locker <https://bidlocker.us/a/clackamascounty/BidLocker> within 2 hours of the BID/Quote Closing Date/Time.

LIST ALL SUBCONTRACTORS BELOW Use correct legal name of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Eagle -Elsner, Inc. Address PO Box 23294 City/St/Zip Tigard, OR 97281 Phone# 503.628.1137 OCCB# 27112	ASPHALT PAVING	\$458370.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Mountain View Tree Service Address PO Box 7530 City/St/Zip Salem, OR 97303 Phone# 503.363.0991 OCCB# 179875	CLEARING & GRUBBING (TREE REMOVAL)	\$85000.00	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name Crawford, Drummond & Associates, Inc. Address PO Box 2385 City/St/Zip Lebanon, OR 97355 Phone# 541.258.8833 OCCB# N/A Surveyors	SURVEY	\$28000.00	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name Brothers Concrete Cutting Address 1721 Fescue Street SE City/St/Zip Albany, OR 97322 Phone# 541.928.2502 OCCB# 48661	SAWCUT	\$7650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GFE SUBCONTRACTOR AND SELF-PERFORMED WORK LIST (FORM 1) cont'd

Prime Contractor Name:

Total Contract Amount:

Project Name: # 2023-33 Redland Rd Turn Lanes at
Ferguson and Bradley Project

LIST ALL SUBCONTRACTORS BELOW Use correct legal name of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Fox Erosion Control & Landscape Inc. Address 11901 Hwy 212 City/St/Zip Clackamas, OR 97015 Phone# 503.654.8816 OCCB# N/A Landscape 7393	Landscape/Seeding	\$49,682.50	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Name Specialized Pavement Markers Address 11095 SW Industrial Way City/St/Zip Tualatin, OR 97062 Phone# 503.885-0420 OCCB# 238621	Pavement Markers	\$40537.75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Egami Construction, Inc. Address PO Box 21541 City/St/Zip Keizer, OR 97307 Phone# 503.569.1416 OCCB# 133991	Signs	\$7800.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Name Cutter Construction Address 21410 S Levi Road City/St/Zip Beavercreek, OR 97004 Phone# 503.969.5116 OCCB# N/A Trucking Company	Trucking	\$82,500.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Name AIMS Companies Address 427 Wood Street City/St/Zip Hillsboro, OR 97214 Phone# 503.545.9640 OCCB# 204820	CCTV	\$900.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name ACS Testing Address 7409 SW Tech Center Dr, Suite 145 City/St/Zip Tigard, OR 97223 Phone# 503.443.3799 OCCB# N/A	Testing	\$20,000.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
SUBCONTRACTOR AND SELF-PERFORMED WORK LIST
(FORM 1)**

Prime Contractor Name: DIRT AND AGGREGATE INTERCHANGE, INC.

Total Contract Amount: \$2,142,905.00

Project Name: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

PRIME SELF-PERFORMING: Identify below ALL GFE Divisions of Work (DOW) to be self-performed. Good Faith Efforts are otherwise required.

<u>DOW BIDDER WILL SELF-PERFORM (GFE not required)</u>	
EXCAVATION	AGGREGATE BASE(S) & DRAIN ROCK
GRADING	Rock Gallery Detention
EROSION CONTROL	TRAFFIC CONTROL
PIPE	FLAGGING

PRIME CONTRACTOR SHALL DISCLOSE AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Emerging Small Businesses ("M/W/ESB") that you intend to use on the project. Delivery via bid locker <https://bidlocker.us/a/clackamascounty/BidLocker> within 2 hours of the BID/Quote Closing Date/Time.

<u>LIST ALL SUBCONTRACTORS BELOW</u> Use correct legal name of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Eagle -Elsner, Inc. Address PO Box 23294 City/St/Zip Tigard, OR 97281 Phone# 503.628.1137 OCCB# 27112	ASPHALT PAVING	\$458370.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Mountain View Tree Service Address PO Box 7530 City/St/Zip Salem, OR 97303 Phone# 503.363.0991 OCCB# 179875	CLEARING & GRUBBING (TREE REMOVAL)	\$85000.00	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name Crawford, Drummond & Associates, Inc. Address PO Box 2385 City/St/Zip Lebanon, OR 97355 Phone# 541.258.8833 OCCB# N/A Surveyors	SURVEY	\$28000.00	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name Brothers Concrete Cutting Address 1721 Fescue Street SE City/St/Zip Albany, OR 97322 Phone# 541.928.2502 OCCB# 48661	SAWCUT	\$7650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GFE SUBCONTRACTOR AND SELF-PERFORMED WORK LIST (FORM 1) cont'd

Prime Contractor Name:

Total Contract Amount:

Project Name: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

<p align="center">LIST ALL SUBCONTRACTORS BELOW Use correct legal name of Subcontractor (No Assumed Business Names)</p>	<p align="center">Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors</p>	<p align="center">DOLLAR AMOUNT OF SUBCONTRACT</p>	<p align="center">If Certified or self-reporting MBE/WBE/ESB Subcontractor</p>		
			<p align="center">Check box <input checked="" type="checkbox"/></p>		
			MBE	WBE	ESB
<p>Name Fox Erosion Control & Landscape Inc. Address 11901 Hwy 212 City/St/Zip Clackamas, OR 97015 Phone# 503.654.8816 OCCB# N/A Landscape 7393</p>	Landscape/Seeding	\$49,682.50	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Name Specialized Pavement Markers Address 11095 SW Industrial Way City/St/Zip Tualatin, OR 97062 Phone# 503.885-0420 OCCB# 238621</p>	Pavement Markers	\$40537.75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Name Egami Construction, Inc. Address PO Box 21541 City/St/Zip Keizer, OR 97307 Phone# 503.569.1416 OCCB# 133991</p>	Signs		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Name Cutter Construction Address 21410 S Levi Road City/St/Zip Beavercreek, OR 97004 Phone# 503.969.5116 OCCB# N/A Trucking Company</p>	Trucking	\$82,500.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Name AIMS Companies Address 427 Wood Street City/St/Zip Hillsboro, OR 97214 Phone# 503.545.9640 OCCB# 204820</p>	CCTV	\$900.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Name ACS Testing Address 7409 SW Tech Center Dr, Suite 145 City/St/Zip Tigard, OR 97223 Phone# 503.443.3799 OCCB# N/A</p>	Testing	\$20,000.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Name Address City/St/Zip Phone# OCCB#</p>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson & Bradley

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
A&R Diamond Paving & Construction	Asphalt Paving	5.9.23	5/15/23	MEADOW	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Unsure. Will send #'s tomorrow if yes.
Alamo Paving Co	Asphalt Paving	5.9.23	5/15/23	CORY	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			She will pass along to Carlie and get back to us.
All Seal	Asphalt Paving	5.9.23	5/15/23	BREE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Declined.	EMAIL RCVD.
Braun Construction	Asphalt Paving	5.9.23	N/A	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		DECLINED.	EMAIL RCVD.
Heffner Paving	Asphalt Paving	5.9.23	5/15/23	VOICEMAIL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		NON-RESONSIVE	
Kodiak Construction Co.	Asphalt Paving	5.9.23	5/15/23	AMANDA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1489405	Price	BOB HANDLING, WILL SEND OVER TOMORROW
Pavement Protectors	Asphalt Paving	5.9.23	5/15/23	ANDREA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		DOES NOT PROVIDE SERVICE	STRIPING, MARKERS ONLY, REMOVE FROM LIST

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Settje Sons Paving	Asphalt Paving	5.9.23	5/15/23	James	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$529,030.00	PRICE	Joe handling, will get to us in a bit. Received.
T1 Construction	Asphalt Paving	5.9.23	5/15/23	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$0.00	Non-Responsive	
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.

Project: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
AMERICAN UNDERGROUND	CLEARING & GRUBBING	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
AZURI CORPORATION	CLEARING & GRUBBING	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
MID-VALLEY EXCAVATON	CLEARING & GRUBBING	5.9.23	5.15.2023	Mike	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Other	Declined
SUULUTAAQ, INC.	CLEARING & GRUBBING	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
SUTHERLAND CONSTRUCTION	CLEARING & GRUBBING	5.9.23	5.15.2023	Glen's Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
JQ CONSTRUCTION	CLEARING & GRUBBING	5.9.23	5.15.2023	Julie	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Bidding Prime Only
JUST BUCKET EXCAVATING	CLEARING & GRUBBING	5.9.23	N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Too busy - email rcvd.

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
MOUNTAIN VIEW TREE SERVICE	CLEARING & GRUBBING	5.9.23	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$78,000 85K w/ Stump rem.		
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
IRON HORSE LLC	CCTV	5.9.23	5.15.2023	Brandon	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Declined. They don't sub out CCTV work. Only do their own.
JNM SERVICES	CCTV	5.9.23	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$\$372 PH + Mob	Price	
BLUE EARTH SERVICES & TECHNOLOGY	CCTV	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-Responsive
Uni-Tech Communications	CCTV	5.9.23	5.15.2023	Derek	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			wrong kind of "CCTV". They do Closed Captioning or regular TV. Remove from list.
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
NO FURTHER COBID FIRMS FOUND . SEE COBID SEARCH RESULTS ATTACHED HEREIN.					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Reminder Email sent 9am 5.15.2023

Flagging Pg 1 of 2

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGAT INTERCHANGE, INC. Project: #
2023-2 Redland Rd Turn Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
A+ Flagging	Flagging	5.9.23	5.15.2023	Meadow	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Unsure. Will send #'s by 10am tomorrow if Yes.
IMN Traffic Specialties	Flagging	5.9.23	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Brothers IC LLC	Flagging	5.9.23	5.15.2023	Sharnelle	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Declined, verbal.
C&C Flagging	Flagging	5.9.23	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
A&D Flagging	Flagging	5.9.23	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$68.00 PH	other	Self perform
Chick of All Trades	Flagging	5.9.23	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%64.50 PH	other	Self perform
D&H Flagging	Flagging	5.9.23	5.15.2023		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Bid Not Received.

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor:
Project: # 2023-24 242nd Ave / Borges Realignment Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Above & Beyond Flagging	Flagging	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Lord & Associates, Inc.	Flagging	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Gage It Flagging & Traffic Control	Flagging	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
NW Traffic Control	Flagging	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: Dirt and Aggregate Interchange, inc.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Anderson's Erosion Control	Landscape	5.10.23	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$54,682.00	PRICE	Items 6,7, 43 & 44
Colors NW	Landscape	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Cascadian Landscapers Inc.	Landscape	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Miller Factors	Landscape	5.10.23	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$22,458.00	SCOPE	Item's 43 and 44
NW Hydro Mulchers	Landscape-	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Valley Growers	Landscape	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Fox Erosion Control	Landscape	5.10.23	5.15.2023	Voicemail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$49,682.50		Items 6, 7, 9, 43 & 44

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor:

Project: # 2023-24 242nd Ave / Borges Realignment Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Green Arts Landscaping	Landscape	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Non-responsive
Azuri Construction Inc.	Landscape	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Non-responsive
Fulcrum Const & Bldg Services d/b/a/ Landsculpture	Landscape	5.10.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Non-responsive
Coria Landscape	Landscape	5.10.23	5.15.2023	Steven	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$36,807.15		items 6, 43 and 44 only
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Reminder Email Sent: 9am 5.15.2023
 Final Remainder Email Sent: 7am 5.17.2023

**CLACKAMAS COUNTY
 GOOD FAITH EFFORT
 M/W/ESB CONTACT / BIDS RECEIVED LOG
 (FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
 Project: # 2023-33 Redland Rd Tum Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

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			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Ready Made Barricade	Pavement Markers	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Champion Parking Lot	Pavement Markers	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
JBL Signs	Pavement Markers	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Oregon Asphalt Maintenance INC.	Pavement Markers	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
DT Striping	Pavement Markers	5.9.23	N/A	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Declined, email rcvd.
Green Sweep Asphalt Service	Pavement Markers	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
All Seal	Pavement Markers	5.9.23	5.15.2023	Bree	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Declined, email rcvd.

Reminder Email Sent: 9am 5.15.2023
 Final Reminder Email Sent: 7am 5.17.2023

**CLACKAMAS COUNTY
 GOOD FAITH EFFORT
 M/W/ESB CONTACT / BIDS RECEIVED LOG
 (FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
 Project: # 2023-24 242nd Ave / Borges Realignment Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Egami	Signs	5.9.23	5.15.2023	Voicemail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$7800.00	Other	Installation only
Cartello Construction	Signs	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Other	Non-responsive
JBL Signs	Signs	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Other	Non-responsive
Ready Made Barricade	Signs	5.9.23	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Other	Non-responsive
Chick of All Trades (C.O.A.T.)	Signs	5.11.23	5.15.2023	Alyssa	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Other	They only have traffic control signage
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Reminder Email Sent: 9am 5.15.2023

Trucking Pg 1 of 3

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor:

Project: # 2023-31 Johnson Creek Tributary (Hideaway Court)

Culvert Replacement Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Rock & Road Construction	Trucking	5.9.2023	5.15.2023	Alvin	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Just got home from vacation, will check with daughter and send over #'s if they have trucks available.
Bailey's Construction	Trucking	5.9.2023	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$155.00	Price	6 Axle Solo
Blake Babcock Trucking	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Can Excavating & Trucking, LLC	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Clark Moore Trucking	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Crowe Trucking LLC	Trucking	5.9.2023	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Declined - Only has 4 Axle Solo's
Cutter Construction	Trucking	5.9.2023	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$150.00		6 Axle Solo

Reminder Email Sent: 9am 5.15.2023

Trucking Pg 2 of 3

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: Dirt and Aggregate Interchange, Inc.
Project: # 2023-31 Johnson Creek Tributary (Hideaway Court) Culvert
Replacement Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

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			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Don Hines Trucking	Trucking	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Eddy Excavation, LLC	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Franks Excavating, LLC	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Hayes Construction Services, Inc.	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
JTWA Trucking, LLC	Trucking	5.9.2023	N/A	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$165.00	Price	6 axle solo
Lively Trucking	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive
Northwest Infrastructure	Trucking	5.9.2023	5.15.2023		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Other	Non-responsive

Reminder Emailed 9am 5.15.2023

Flagging Pg 1 of 2

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson & Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
A+ Flagging	Traffic Control	5.9.2023	5.15.2023	Meadow	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Unsure. Will send #'s by 10am tomorrow morning if Yes.
IMN Traffic Specialties	Traffic Control	5.9.2023	5.15.2023	Owners daughter	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			"My Mom is out of town until Thurs, if haven't gotten them probably not.
Brothers IC LLC	Traffic Control	5.9.2023	5.15.2023	Sharnelle	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Declined, verbal.
C&C Flagging	Traffic Control	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
A&D Flagging	Traffic Control	5.9.2023	N/A	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Flagging Only. Flagging Bid Rcvd.
Chick of All Trades	Traffic Control	5.9.2023	5.15.2023	Alyssa	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	\$137.50 ph Flagger & TCS + Truck	other	Self perform
D&H Flagging	Traffic Control	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson & Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Above & Beyond Flagging	Traffic Control	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Lord & Associates, Inc.	Traffic Control	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Gage It Flagging & Traffic Control	Traffic Control	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
NW Traffic Control	Traffic Control	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
BROTHERS CONCRETE CUTTING	SAWCUT	5.11.23	5.15.2023	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	.35INFT Asph .55 INFT Conc		
CUTTING EDGE CONCRETE	SAWCUT	5.11.23	5.15.2023	VOICEMAIL	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
ELITE CONCRETE CUTTING	SAWCUT	5.11.23	5.15.2023	VOICEMAIL	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
BEDROCK COMMERCIAL CONCRETE CUTTING	SAWCUT	5.11.23	5.15.2023	VOICEMAIL	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Called back. Maybe, will send #'s by 11am if Yes.
FRITZ CUTTING & CORING	SAWCUT	5.11.23	5.15.2023	N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	.65 INFTAsph .75 INFT Conc	Price	
CORPAC CONSTRUCTION CO.	SAWCUT	5.11.23	5.15.2023	VOICEMAIL	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor:
Project: # 2023-24 242nd Ave / Borges Realignment Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
FEI Testing	Compaction & Density Testing	5.11.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Non-responsive
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
	NO FURTHER COBID FIRMS FOR THIS SCOPE FOUND. SEARCH RESULTS ATTACHED.				<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Reminder Email Sent 9am 5.15.2023

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/W/ESB CONTACT / BIDS RECEIVED LOG
(FORM 2)**

Prime Contractor: DIRT AND AGGREGATE INTERCHANGE, INC.
Project: # 2023-3

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
S&F Land Services	Construction Survey	5.9.2023	5.15.2023	voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
TCC & Associates	Construction Survey	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Terra Dolce Consultants	Construction Survey	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Crawford, Drummond & Assoc.	Construction Survey	5.9.2023	5.15.2023	Adam	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$28,000.00		
Kurahashi & Associates	Construction Survey	5.9.2023	5.15.2023	Greg	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Just got back from vacation, re-send will look and try to send over by 11am
PTS Surveying, Inc.	Construction Survey	5.9.2023	5.15.2023	Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive
Reality Quantified	Construction Survey	5.9.2023	5.15.2023	Nathan's Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			Non-responsive



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID BOND

Project Name: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

We, Dirt and Aggregate Interchange, Inc., as "Principal,"
(Name of Principal)

and Travelers Casualty and Surety Company of America, an Connecticut 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% Of Total Bid)

*** Ten Percent of Total Amount 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. _____) 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 11th day of May, 2023.

Principal: Dirt and Aggregate Interchange, Inc.

Surety: Travelers Casualty and Surety Company of America

By: [Signature]
Corey Pelfrey Signature

By: Attorney-In-Fact

President
Official Capacity

[Signature]
Name

Attest: [Signature]
Corporation Secretary

Robert W. Lagler (Attorney-In-Fact) OR Lic #: 5868
1499 SE Tech Center Place Suite 280
Address

Lynn K Woods., Corporate Secretary

Vancouver WA 98683
City State Zip

360-892-5840 360-892-5871
Phone Fax





**Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company**

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Robert W. Lagler** of **VANCOUVER**, **Washington**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, 2021.



State of Connecticut

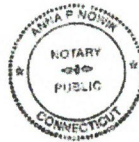
City of Hartford ss.

By: 
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, 2021, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2026




Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **11th** day of **May**, 2023




Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.**



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID FORM

PROJECT: # 2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project
BID CLOSING: May 17, 2023, 2:00 PM, Pacific Time
BID OPENING: May 17, 2023, 2:05 PM, Pacific Time

FROM: DIRT AND AGGREGATE INTERCHANGE, INC.
Bidder's Name (must be full legal name, not ABN/DBA)

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

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

- a. An individual; or
b. A partnership registered under the laws of the State of ; or
X c. A corporation organized under the laws of the State of OREGON ; or
d. A limited liability corporation organized under the laws of the State of ;

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

Two Million One Hundred Forty Two Thousand and
Nine Hundred and Five Dollars and No /100 Dollars (\$ 2,142,905.00)

and the Undersigned agrees to be bound by the following documents:

- Notice of Public Improvement Contract Opportunity
• Instructions to Bidders
• Bid Bond
• Public Improvement Contract Form
• Prevailing Wage Rates
• Plans, Specifications and Drawings
• Supplemental Instructions to Bidders
• Bid Form
• Performance Bond and Payment Bond
• Payroll and Certified Statement Form

• ADDENDA numbered 1 through 2A, inclusive (fill in blanks)

2. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items of work relating to the following Alternate(s) as designated in the Specifications: N/A

3. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items or work relating to the following Unit Price(s) as designated in the Specifications, for which any adjustments in the Contract amount will be made in accordance with the project specifications: Provide the attached Bid Schedules with Bid.

4. The work shall be completed within the time stipulated and specified in 00180.50(h) of the Special Provisions for Redland Rd Turn Lanes at Ferguson and Bradley Project.

5. Accompanying herewith is Bid Security which is equal to ten percent (10%) of the total amount of the Basic Bid, plus the total sum of Alternatives (if any).

6. The Undersigned agrees, if awarded the Contract, to execute and deliver to Clackamas County, within twenty (20) calendar days after receiving the Contract forms, a Contract Form, 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 Owner. The surety requested to issue the Performance Bond and Payment Bond will be:

TRAVELERS CASUALTY & SURETY CO. OF AMERICA
(name of surety company - not insurance agency)

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

7. 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 Owner 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 twenty (20) calendar days after receiving the Contract forms, then the Bid Security shall become the property of the Owner at the Owner'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.

8. 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.

9. The undersigned **HAS**, **HAS NOT** (*check one*) paid unemployment or income taxes in Oregon within the past 12 months and **DOES**, **DOES NOT** (*check one*) 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 Contract Form.

10. 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.

11. Contractor's CCB registration number is 26599. 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.

12. 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.

13. The successful Bidder hereby certifies that, in compliance with the Worker's Compensation Law of the State of Oregon, its Worker's Compensation Insurance provider is SAIF.

Policy No. 36196, and that Contractor shall submit Certificates of Insurance as required.

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

Project Executive:	<u>COREY PELFREY</u> ,	Cell Phone:	<u>503.793.0373</u> ,
Project Manager:	<u>COREY PELFREY</u> ,	Cell Phone:	<u>503.793.0373</u> ,
Job Superintendent:	<u>DAVE SHEPHERD</u> ,	Cell Phone:	<u>503.793.0370</u> ,
Project Engineer:	<u>N/A</u> ,	Cell Phone:	<u>N/A</u> .

15. The Undersigned certifies that it has not discriminated against minority, women, or emerging small businesses in obtaining any subcontracts for this project.

16. The Undersigned certifies that it has a drug testing program in accordance with ORS 279C.505.

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

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

NAME OF FIRM	<u>DIRT AND AGGREGATE INTERCHANGE, INC.</u>
ADDRESS	<u>20905 NE SANDY BLVD.</u>
	<u>FAIRVIEW, OR 97024</u>
TELEPHONE NO	<u>503.661.5093</u>
EMAIL	<u>CONTRACTOR@DIRTAGG.COM</u>
SIGNATURE 1)	<u>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</u> Sole Individual
or 2)	<u>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</u> Partner
or 3)	 <u>Authorized Officer or Employee of Corporation</u> COREY PELFREY, PRESIDENT

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

REDLAND RD TURN LANES AT FERGUSON AND BRADLEY ROADWAY & WATERLINE IMPROVEMENTS

ROADWAY SCHEDULE 'A' BID SCHEDULE

3/23/2023

Bid Item #	Item #	Item Description	Unit	Quantity	Unit Price	Total Price
WHPP 1	00180.95	WORKPLACE HARASSMENT PREVENTION PLAN	LS	ALL	\$475.00	\$475.00
	00196	EXTRA WORK AS AUTHORIZED	FA	ALL	\$ 50,000.00	\$50,000.00
TEMPORARY FEATURES AND APPURTENANCES						
2	0210-010000A	MOBILIZATION	LS	ALL	\$141,000.00	\$141,000.00
3	0221-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$179,104.75	\$179,104.75
4	0270-0106000F	TEMPORARY TYPE 2 FENCE	FOOT	244	\$6.00	\$1,464.00
5	0280-010000A	EROSION CONTROL	LS	ALL	\$11,000.00	\$11,000.00
6	0280-0105100J	COMPOST EROSION BLANKET	SQYD	3880	\$5.00	\$19,400.00
7	0280-0115080F	SEDIMENT BARRIER, TYPE 8	FOOT	2450	\$7.20	\$17,640.00
8	0280-0110010E	CONSTRUCTION ENTRANCE, TYPE 1	EACH	2	\$2,500.00	\$5000.00
9	0280-0114040E	INLET PROTECTION, TYPE 4	EACH	4	\$55.00	\$220.00
10	0290-010000A	POLLUTION CONTROL PLAN	LS	ALL	\$880.00	\$880.00
ROADWORK						
11	0305-010000A	CONSTRUCTION SURVEY WORK	LS	ALL	\$32,750.00	\$32,750.00
12	0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (3%)	LS	ALL	\$33,600.00	\$33,600.00
13	0320-0100000A	CLEARING AND GRUBBING	LS	ALL	\$106,600.00	\$106,600.00
14	0330-0105000K	GENERAL EXCAVATION	CUYD	2700	\$46.00	\$124,200.00
15	0350-0107000J	SUBGRADE REINFORCEMENT GEOGRID	SQYD	2890	\$3.00	\$8670.00
16	0390-0139000E	RIPRAP BASINS	EACH	1	\$5250.00	\$5250.00
DRAINAGE AND SEWERS						
17	0415-010000F	MAINLINE VIDEO INSPECTION	FOOT	360	\$4.50	\$1620.00
18	0445-035024AF	24 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	65	\$143.00	\$9295.00
19	0445-060012AF	12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	103	\$159.00	\$16377.00
20	0445-060018AF	18 INCH DUCTILE IRON PIPE, 5 FT DEPTH	FOOT	192	\$214.00	\$41088.00
21	0470-0105000E	CONCRETE MANHOLES, SHALLOW FLAT TOP FLOW CONTROL	EACH	2	\$5300.00	\$10600.00
22	0470-0311000E	CONCRETE INLETS, TYPE D	EACH	4	\$1540.00	\$6160.00
23	0490-0100000E	ADJUSTING BOXES	EACH	4	\$500.00	\$2000.00
24	0620-0107000J	COLD PLANE PAVEMENT REMOVAL, 0 - 4 INCHES DEEP	SQYD	2520	\$19.25	\$48510.00
BASES						
25	0640-0100000M	AGGREGATE BASE	TON	2720	\$46.00	\$125,120.0
26	0640-0101000M	AGGREGATE SHOULDERS	TON	1090	\$46.00	\$50140.00
WEARING SURFACES						
27	0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	2600	\$140.35	\$364910.00
28	0744-0331000M	LEVEL 3, 1/2 INCH ACP MIXTURE IN LEVELING	TON	1110	\$137.00	\$152070.00
29	0749-0100000E	EXTRA FOR ASPHALT APPROACHES	EACH	16	\$1775.00	\$28400.00
PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES						
30	0840-0102000E	DELINEATORS, TYPE 2	EACH	14	\$60.00	\$840.00
31	0855-0106100E	MONO-DIRECTIONAL WHITE TYPE IAR MARKERS, RECESSED	EACH	22	\$28.50	\$627.00
32	0855-0107100E	BI-DIRECTIONAL YELLOW TYPE IAR MARKERS, RECESSED	EACH	181	\$28.50	\$5158.50
33	0855-0109100E	BI-DIRECTIONAL BLUE TYPE IAR MARKERS, RECESSED	EACH	2	\$28.50	\$57.00
34	0857-0101500L	GAP PATTERN RUMBLE STRIPS	MILE	0.22	\$40900.00	\$8998.00
35	0865-0116610F	THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED	FOOT	18915	\$1.45	\$27426.75
36	0867-0103100E	PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	4	\$415.00	\$1660.00
37	0867-0131000E	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	EACH	4	\$415.00	\$1660.00
38	0867-0145100J	PAVEMENT BAR, TYPE B-HS	SQFT	88	\$20.00	\$1760.00
PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS						
39	0905-0101000A	REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$3325.00	\$3325.00
40	0920-0100000A	SIGN SUPPORT FOOTINGS	LS	ALL	\$3325.00	\$3325.00
41	0930-0117000A	PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$1900.00	\$1900.00
RIGHT-OF-WAY DEVELOPMENT AND CONTROL						

42	1011	ROCK GALLERY DETENTION	LS	ALL	\$181850.00	\$181850.00
43	1012-0100000A	WATER QUALITY SWALE	LS	ALL	\$19885.00	\$19885.00
44	1030-0109000R	PERMANENT SEEDING, MIX NO. 1	ACRE	0.26	\$8200.00	\$2132.00
45	1070-0100000E	SINGLE MAILBOX SUPPORTS	EACH	9	\$360.00	\$3240.00
46	1070-0101000E	MULTIPLE MAILBOX SUPPORTS	EACH	1	\$1100.00	\$1100.00

PROPOSED COST BID SCHEDULE "A" \$1,858,488.00 (INCLUDE EXTRA WORK)
(Numerically)

One Million Eight Hundred Eighty Eight Thousand and Four Hundred and Eighty Eight Dollars and No/100
PROPOSED COST BID SCHEDULE "A" _____ (INCLUDE EXTRA WORK)
(Written in Words)

REDLAND RD WATERLINE IMPROVEMENTS

WATERLINE SCHEDULE 'B' BID SCHEDULE

3/23/2023

Bid Item #	Item #	Item Description	Unit	Quantity	Unit Price	Total Price
TEMPORARY FEATURES AND APPURTENANCES						
1	0210-0100000A	MOBILIZATION	LS	ALL	\$28,400.00	\$28,400.00
2	0221-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$2,900.00	\$2,900.00
WATERLINE WORK						
3	0305-0100000A	CONSTRUCTION SURVEY WORK	LS	ALL	\$3,560.00	\$3,560.00
POTABLE WATER PIPE, HYDRANTS AND APPURTENANCES						
4	1140	ABANDON EXISTING WATERLINE	LS	ALL	\$1,995.00	\$1,995.00
5	1140-0195000E	BLOWOFF ASSEMBLY, 2 INCH	EACH	1	\$690.00	\$690.00
6	1140-0300000E	12 INCH CONNECTION TO 12 INCH EXISTING MAIN	EACH	1	\$1,380.00	\$1,380.00
7	1140-0300000E	8 INCH CONNECTION TO 8 INCH EXISTING MAIN	EACH	1	\$690.00	\$690.00
8	1140-0500000F	12 INCH DUCTILE IRON PIPE with RESTRAINED JOINTS AND CLASS B BACKFILL	FOOT	1840	\$109.80	\$202,032.00
9	1140	TRACER WIRE TERMINAL STATION	EACH	2	\$50.00	\$100.00
10	1160-0100000E	HYDRANT ASSEMBLIES, TYPE 3	EACH	2	\$1,920.00	\$3,840.00
POTABLE WATER SERVICE CONNECTIONS, 2 INCH AND SMALLER						
11	1170	RECONNECT EXISTING WATER SERVICES, 1 INCH , LONG SIDE	EACH	9	\$2,740.00	\$24,660.00
12	1170	RECONNECT EXISTING WATER SERVICES, 1 INCH , SHORT SIDE	EACH	7	\$1,240.00	\$8,680.00
13	1170-0111000E	RELOCATE EXISTING WATER SERVICE, 1 INCH, SHORT SIDE	EACH	3	\$1,830.00	\$5,490.00

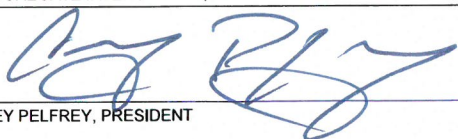
PROPOSED COST BID SCHEDULE "B" 284,417.00
(Numerically)

PROPOSED COST BID SCHEDULE "B" Two Hundred Eighty Four Thousand Four Hundred Seventeen Dollars and No/100
(Written in Words)

PROPOSED COST BID SCHEDULES "A" AND "B" \$2,142,905.00 (INCLUDE EXTRA WORK)
(Numerically)

PROPOSED COST BID SCHEDULES "A" AND "B" Two Million One Hundred Forty Two Thousand and Nine Hundred and Five Dollars No/100 (INCLUDE EXTRA WORK)
(Written in Words)

COMPANY NAME DIRT AND AGGREGATE INTERCHANGE, INC.

AUTHORIZED SIGNATURE 
COREY PELFREY, PRESIDENT

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: #2023-33

BID OPENING: May 17, 2023, 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.

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

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.

Table with 3 columns: SUBCONTRACTOR NAME, DOLLAR VALUE, CATEGORY OF WORK. Row 1: Eagle-Elsner, Inc., \$458,370.00, Paving.

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: DIRT AND AGGREGATE INTERCHANGE, INC.

Bidder Signature: [Signature] Phone # 503.661.5093
Corey Pelfrey, President



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: 107796828

Solicitation: #2023-33

Project Name: Redland Rd Turn Lanes at Ferguson and Bradley Project

Travelers Casualty and
Surety Company of America (Surety #1)
N/A (Surety #2)*

Bond Amount No. 1: \$ 2,142,905.00

Bond Amount No. 2:* \$ N/A

Total Penal Sum of Bond: \$ 2,142,905.00

* If using multiple sureties

We, Dirt and Aggregate Interchange, Inc. as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto Clackamas County, the sum of (Total Penal Sum of Bond) Two Million One Hundred Forty Two Thousand Nine Hundred Five and 00/100 Dollars (\$2,142,905.00) (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.

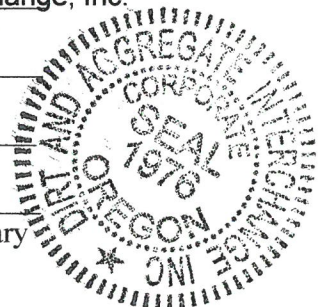
Dated this 9th day of June, 2023.

PRINCIPAL: Dirt and Aggregate Interchange, Inc.

By: [Signature]
Signature

Corey Pelfrey, President
Official Capacity

Attest: [Signature]
Corporation Secretary
Lynn K Woods



SURETY: Travelers Casualty and Surety Company of America
[Add signatures for each if using multiple bonds]

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

Robert W. Lagler (Attorney-In-Fact) OR Lic #: 58687

[Signature]
Name
Signature

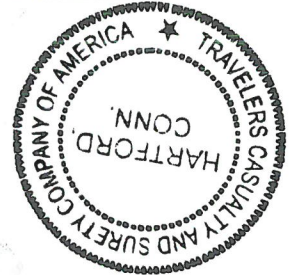
1499 SE Tech Center Place Suite 280
Address

Vancouver WA 98683

City State Zip

360-892-5840 360-892-5871

Phone Fax





**Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company**

POWER OF ATTORNEY

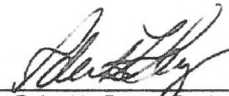
KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Robert W. Lagler** of **VANCOUVER** **Washington**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, 2021.



State of Connecticut

City of Hartford ss.

By: 
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, 2021, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2026




Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority, and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **9th** day of **June**, 2023.




Kevin E. Hughes, Assistant Secretary

*To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.*



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: 107796828
Solicitation: #2023-33
Project Name: Redland Rd Turn Lanes at Ferguson and Bradley Project

Table with 2 columns: Surety information and Bond Amount. Rows include Surety #1 (Travelers Casualty and Surety Company of America), Surety #2 (N/A), and Total Penal Sum of Bond (\$2,142,905.00).

We, Dirt and Aggregate Interchange, Inc., as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto Clackamas County, the sum of (Total Penal Sum of Bond) \$2,142,905.00 (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 9th day of June, 2023.

PRINCIPAL: Dirt and Aggregate Interchange, Inc.

By: [Signature]
 Signature
Corey Pelfrey, President
 Official Capacity

Attest: [Signature]
 Lynn K Woods Corporation Secretary



SURETY: Travelers Casualty and Surety Company of America
[Add signatures for each if using multiple bonds]

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

Robert W. Lagler (Attorney-In-Fact) OR Lic #: 58687

[Signature]
 Name

Signature

1499 SE Tech Center Place Suite 280
 Address

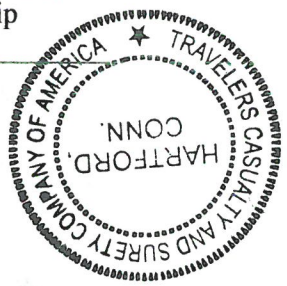
Vancouver WA 98683
 City State Zip

360-892-5840 360-892-5871
 Phone Fax

360-892-5840 360-892-5871
 Phone Fax

360-892-5840 360-892-5871
 Phone Fax

360-892-5840 360-892-5871
 Phone Fax





**Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company**

POWER OF ATTORNEY

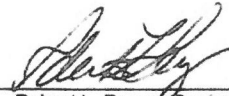
KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Robert W. Lagler** of **VANCOUVER** **Washington**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, 2021.



State of Connecticut

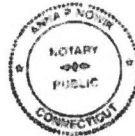
City of Hartford ss.

By: 
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, 2021, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2026




Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary, and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority, and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **9th** day of **June**, 2023.




Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.**



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

PROJECT: #2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project

Project Background:

The County is utilizing Rural STP and Community Road (CRF) Funds to construct improvements along Redland Road - a two-lane rural major arterial, lacking left-turn lanes at both Ferguson and Bradley Roads. The improvements include constructing designated turn lanes at its intersection with Ferguson and Bradley Roads, both two-way stop controlled minor arterials. A recent Road Safety Audit indicated that adding dedicated left-turn lanes will help remove conflicts between left turning vehicles and high speed through traffic. This in turn improves safety, relieves congestion, and increases capacity of Redland Road by reducing the speed differential between the through and left turn vehicles while providing room for the turning vehicle to dwell. An additional part of this Improvement Project will include constructing the Clackamas River Water's (CRW) waterline improvements so only one contractor is responsible for constructing all improvements. The waterline work entails replacing a new waterline main, water services, fire hydrants and associated appurtenances.

Improvements will also include earthwork and drainage, aggregate bases, asphalt concrete paving and oiling, pavement markings, signing, electrical, landscaping, miscellaneous highway appurtenances, temporary traffic control and waterline.

Combined Engineers Estimate: \$2,022,103; (\$1,743,145 Roadway Construction; \$278,958 Waterline Construction)

Key Dates:

All Basic Bid Work may begin as soon as the Notice to Proceed ("NTP") is issued

Substantial Completion: October 27, 2023

Final Completion: May 17, 2024

Time is of the essence for this Project. Note the Liquidated Damages requirements as described in the project Specifications.

The Scope further includes the following Plans, Specifications and Drawings:

SPECIAL PROVISIONS REDLAND RD TURN LANES AT FERGUSON AND BRADLEY INTERSECTION IMPROVEMENTS dated APRIL 2023 (69 PAGES)

REDLAND RD TURN LANES AT FERGUSON AND BRADLEY, Drawing Set, Sheets No. 1. G-01-G-04, TS-01-TS-03, EC-01-EC-02, PP-01-PP-13, SW-01-SW-02, TC-01-TC-05, SS-01-SS-03, LL-01-LL-03 (35 PAGES)

CLACKAMAS RIVER WATER (CRW) REDLAND ROAD WATERLINE Drawing Set, Sheets No. 1; C-01-C-03, WP-01-WP11 (13 pages)

SPECIAL PROVISIONS

FOR

**REDLAND RD TURN LANES AT FERGUSON AND BRADLEY
INTERSECTION IMPROVEMENTS**

**CLACKAMAS COUNTY DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT**

CLACKAMAS COUNTY, OREGON

**EARTHWORK AND DRAINAGE, AGGREGATE BASES, ASPHALT
CONCRETE PAVING AND OILING, PAVEMENT MARKINGS, SIGNING,
ELECTRICAL, LANDSCAPING, MISCELLANEOUS HIGHWAY
APPURTENANCES, TEMPORARY TRAFFIC CONTROL, WATERLINE**

APRIL 2023


CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

REDLAND RD TURN LANES AT FERGUSON AND BRADLEY

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal</p>  <p>EXPIRES: 12/31/2024</p>	<p>w/signature</p> <p>I certify the Special Provision Section(s) listed below are applicable to the design for the Redland Rd Turn Lanes at Ferguson and Bradley Project. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00220, 00222, 00225, 00270, 00280, 00290, 00310, 00330, 00350, 00405, 00430, 00470, 00620, 00730, 00744, 00855, 00867, 00920, 00930, 01011, 01012, 01030, 01140, 01150, 01160, 01170, 02001, 02030, 02415, 02470, 02475, 02480, 02485, 02490, 02510, 02560, 02610, 02690, 02910</p>
--	--

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

SPECIAL PROVISIONS

WORK TO BE DONE

The Redland Rd Turn Lanes at Ferguson and Bradley is a safety improvement project on a 0.5 mile stretch of Redland Road approximately 3.5 miles southeast of Interstate 205 and 1.5 west of the Town of Redland.

The overall project will add a left turn lane at the Ferguson and Bradley intersections with primarily widening on the south side of Redland Road. The north side will include shoulder improvements. The roadway will be repaved with new signing and striping and lighting improvements at both intersections. Stormwater swales and ditches will be constructed on the south side.

This contract will include, but not limited to: construction of approximately 2,620 linear feet of shoulder work and roadway widening with a ditch and swale on the south side; driveway approaches and reconnections; paving approximately 3,710 tons of asphalt; constructing 800 linear feet of a stormwater detention rock gallery; constructing 460 linear feet of stormwater swales; installation of storm structures and piping; installing permanent signing and striping; installation of lighting at the intersections; installing, maintaining, and removing temporary work zone traffic control; and performing additional incidental work as called for in the plans and specifications.

This contract also includes the replacement of waterlines and services for Clackamas River Water. Work includes, but not limited to installation of approximately 1,850 linear feet of 12" ductile iron pipe, 16 services, 2 fire hydrant assemblies, several valves, and performing additional incidental work as called for in the plans and specifications.

APPLICABLE SPECIFICATIONS

The Specifications applicable to the Work on this Project is the 2021 edition of the "Oregon Standard Specifications for Construction", produced by the Oregon Department of Transportation and the Oregon Chapter of the American Public Works Association, and as modified by these Special Provisions.

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

CLASS OF PROJECT

This is a Clackamas County Department of Transportation and Development Community Road Fund Project.

CLASS OF WORK

The Classes of Work for this Project is:

- Earthwork and Drainage
- Bridges and Structures
- Aggregate Bases
- Asphalt Concrete Paving and Oiling
- Pavement Markings
- Signing
- Electrical
- Landscaping
- Miscellaneous Highway Appurtenances
- Temporary Traffic Control
- Other (Waterline)

Redland Rd Turn Lanes at Ferguson and Bradley

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Redland Road Turn Lanes at Ferguson & Bradley

SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

Comply with Section 00110 of the Standard Specifications supplemented and/or modified as follows:

00110.05(d) References to Laws, Acts, Regulations, Rules, Ordinances, Statutes, Orders, and Permits

Add the following to the first bullet (Statutes and Rules):

- Clackamas County's Local Contract Review Board (LCRB) Rules are accessible online on the County's website (<http://www.clackamas.us/code/documents/appendixc.pdf>).

00110.10 Abbreviations

Add the following:

CCDA - Clackamas County Development Agency
CRW - Clackamas River Water
DTD - Clackamas County Department of Transportation and Development
LCRB - Local Contract Review Board
ODFW - Oregon Department of Fish and Wildlife
UNS - Utility Notification System
WES - Water Environment Services of Clackamas County

00110.20 Definitions

Add or modify definitions as follows:

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 C-049-160, prior to approval of such work.

Approved Equal - Materials or services proposed by the contractor and approved by the County as equal substitutes for those materials or services specified.

Award – Same as "Notice to Intent to Award".

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 these bid documents.

Redland Road Turn Lanes at Ferguson & Bradley

Bid Closing - 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:

- Invitation to Bid, Instructions to Bidders, Bid Form, Bid Proposal, Schedule of Prices, Bid
- Bond, Performance Bond
- Certificate of Insurance, Prevailing Wage Rates
- The "Oregon Standard Specifications for Construction" by ODOT and APWA, 2021 edition.
- Plans and drawings
- Other bid documents included or referenced in the bid documents
- Addenda, if any
- The Agreement Form and Special Provisions

Bonds - The bond or surety bond is a written document given by the surety and principal to the obligee to guarantee a specific obligation.

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.

Contract - The written contract agreement, 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 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, 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.

County - The term "County" shall mean Clackamas County, including the Board of County Commissioners, employees and agents of the County authorized to administer the conditions of these contract documents.

Redland Road Turn Lanes at Ferguson & Bradley

Department – A subdivision of the Agency.

Engineer - The County's Project Manager either acting directly or through an authorized representative(s). When referring to approval of extra work or other Contract modifications, "Engineer" also refers to the County's legal authority according to the LCRB rules.

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 ORS 279C.540.

Lump Sum - A method of payment providing for one all-inclusive cost for the work or for a particular portion of the work.

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.

ODOT Procurement Office – Clackamas County Purchasing Department.

Owner – Synonymous with Agency.

CRW Provided Materials- Those materials provided by Clackamas River Water as listed on the Project Water Plans.

Plan Holder's List – A list of contractor's names, contact names, phone, and fax numbers that the County's Purchasing Department creates during bidding of the Project.

Project Inspector – The Owner's representative providing field quality control at the direction of the Project Manager. The inspector for waterline work shall be provided by and performed at the direction of Clackamas River Water.

Project Manager – The Owner's representative who directly supervises the engineering and administration of the contract.

Shop Drawings – Synonymous with Working Drawings.

Solicitation Document – Synonymous with Bid Documents.

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 - "Oregon Standard Specifications for Construction", current edition, published by the Oregon Department of Transportation and as amended by **the Agency**.

Redland Road Turn Lanes at Ferguson & Bradley

State - Where the term “State” or “State of Oregon” or “ODOT” appears in the contract documents it shall mean “Clackamas County”, “State of Oregon”, or “ODOT” as applicable because of context.

Work Day - Any and every calendar day from January 1 to December 31 of every year, excluding Saturdays, Sundays and Legal Holidays.

SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES

Comply with Section 00120 of the Standard Specifications supplemented and/or modified as follows:

00120.00 Prequalification of Bidders - Delete and replace with the following:

See Instructions to Bidders.

00120.01 General Bidding Requirements – Delete and replace with the following:

See Instructions to Bidders.

00120.05 Request for Plans, Special Provisions, and Bid Booklets: – Delete and replace with the following:

See Notice of Public Improvement Contract and Instructions to Bidders.

Copies of the 2021 Oregon Standard Specifications for Construction and Supplements may be found on the Oregon Department of Transportation website at:

http://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx

00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered – Delete the third paragraph.

00120.17 Use of Agency-Owned Land for Staging or Storage Areas – Add the following:

There is no County-owned adjacent property available for the Contractor.

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids - Delete and replace with the following:

See Instructions to Bidders.

00120.40 Preparation of Bids – Delete and replace this section with the following:

See Instructions to Bidders.

00120.45 Submittal of Bids - Delete and replace with:

See Instructions to Bidders.

Redland Road Turn Lanes at Ferguson & Bradley

00120.50 Submitting Bids for More than One Contract – Delete this subsection.

00120.60 Revision or Withdrawal of Bids - Delete and replace with the following:

See Instructions to Bidders.

00120.70 Rejection of Nonresponsive Bids – Delete and replace with the following:

See Instructions to Bidders.

00120.95 Opportunity for Cooperative Arrangement – Delete this section.

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the Standard Specifications supplemented and/or modified as follows:

00130.00 Consideration of Bids - Delete third paragraph.

00130.10 Award of Contract - Delete and replace with the following:

See Instructions to Bidders.

00130.15 Right to Protest Award – Delete and replace with the following:

See Instructions to Bidders.

00130.30 Contract Booklet – Add the following:

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, as published by the Oregon Department of Transportation (ODOT).
- "Oregon Standard Drawings" latest edition, as published by ODOT.
- Clackamas County Service District No. 1 "Surface Water Standard Specifications", latest edition.

00130.40 Contract Submittals - Delete and replace with the following:

See Instructions to Bidders.

00130.70 Release of Bid Guaranties – Delete and replace with the following:

See Instructions to Bidders.

Redland Road Turn Lanes at Ferguson & Bradley

SECTION 00140 - SCOPE OF WORK

Comply with Section 00140 of the Standard Specifications supplemented and/or modified as follows:

00140.30 Agency-Required Changes in the Work – Replace the last paragraph with the following:

Upon receipt of an Engineer's written order modifying the Work, the Contractor shall perform the Work as modified via 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 - Add the following section:

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 for full partial payment of the work completed. At project completion and as a condition of final payment, the Contractor shall deliver to the 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.
- 5) Record details not in the original plans.
- 6) Provide fully completed shop drawings reflecting all revisions.

SECTION 00150 - CONTROL OF WORK

Redland Road Turn Lanes at Ferguson & Bradley

Comply with Section 00150 of the Standard Specifications modified as follows:

00150.00 Authority of the Engineer – Delete and replace the first sentence with the following:

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.

00150.05 Cooperative Arrangements – Delete this section.

00150.10 Coordination of Contract Documents

(a) Order of Precedence – Delete this section and replace with the following:

The Engineer will resolve any discrepancies between these documents in the following order of precedence:

- Approved Amendments
- Approved Change Orders
- Bid Schedule with Schedule of Prices
- Permits from governmental agencies
- Special Provisions
- Agency-prepared drawings specifically applicable to the Project and bearing the Project title
- Reviewed and accepted, stamped Working Drawings
- Agreement Form
- Standard Drawings
- Approved Unstamped Working Drawings
- Standard Specifications
- All other Contract Documents not listed above.

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.

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 ODOT 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:

Redland Road Turn Lanes at Ferguson & Bradley

The Contractor shall perform the Contactor responsibilities described in the ODOT Construction Surveying Manual for Contractors, Chapter 1.6 (see Section 00305) and the following:

- Perform earthwork slope staking including intersections and matchlines and set stakes defining limits for clearing which approximate right-of-way and easements.
- Inform the Engineer of any property corners monuments and/or survey markers that are not shown on the plans and are found during construction activities prior to disturbing the monuments. Allow the Agency 2 Work days for referencing all found markers before they are removed. Monuments that are noted on the plans to be protected and are disturbed by the Contractor's activities shall be replaced by the Contractor's surveyor at the Contractor's expense.

00150.50 Cooperation with Utilities: Add the following to the end of Paragraph (a):

There may be other utility servers who are not specifically listed in these Special Provisions or on the Plans that may be adjusting or inspecting their facilities within the project limits.

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

- Hold a utility scheduling meeting and monthly utility coordination meetings (see also 00180.42);
- Maintain and re-establish utility location marks according to OAR 952-001-0090(2)(a). Coordinate re-establishment of the location marks with the associated Utility;
- 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; and
- 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.

The existing underground utilities shown on the Plans have been determined by as-built records and field surveys but are not guaranteed to be complete or accurate. The Contractor shall be responsible for contacting the individual utility companies to mark locations, and arranging with them for any relocation work that should be required.

The Contractor shall make excavations and borings ahead of the work where necessary to determine the exact location of underground pipes or other features, which might interfere with construction. The Contractor shall support and protect pipes or other services where they cross the trench and shall be responsible for all damages incidental in interruptions of service that may be caused by Contractor operations. Where a new utility line crosses an

Redland Road Turn Lanes at Ferguson & Bradley

existing pipeline or other conduit, the trench backfill shall be well compacted in a manner that provides for the required backfill and compaction standards while protecting the utility in question.

00150.50 Cooperation with Utilities - Add the following subsection:

Notify, in writing, Williams- Northwest Pipeline LLC ("NORTHWEST") at least 14 Calendar Days (2 weeks) before beginning Work on the Project; reference milepost 24.53-24.55 on the 2479 line.

Notify at least 3 Calendar Days (72 hours) by calling the Williams Pipeline Eugene District Office (541) 342-4434 before beginning road construction and excavation and storm and waterline construction within 10 feet of both the 16-inch 20-inch diameter (900 psi high pressure) gas pipelines; reference milepost 24.53-24.55 on the 2479 line. Allow Williams Pipeline 30 Calendar Days (4 weeks) to complete relocation (adjustment) work of bollards and signs.

- Williams Pipeline operates both 16-inch 20-inch diameter (900 psi high pressure) gas pipelines within the Project limits. The pipelines run parallel at a skew to Redland Road between approximate engineering stations 70+40 and 71+40 and may require an On-Site safety watcher, at no cost to the Contractor.

In the immediate area of the high-pressure gas lines, when moving any equipment, excavating, driving piles, pounding guardrail posts, boring, or other road construction activities, increase the Reasonable Accuracy Zone from 24 inches, as defined in OAR 952-001-010, to 10 feet. Exceptions require written approval from the Williams Pipeline and may require an On-Site safety watcher, at no cost to the Contractor. Provide the Engineer a copy of the written approval of the exception before beginning work.

In the event of an emergency, call Williams Pipeline 1.801.584.6948 in addition to calls required by the Utilities notification system.

Williams Gas Pipeline has two gas lines that may be within 15 feet of the Redland Road roadway excavation and waterline construction. There are no anticipated conflicts with this facility. However, due to the close proximity of the roadway excavation, storm and waterline installation, Williams Pipeline will monitor, inspect, and protect.

The Contractor shall perform all necessary potholing prior to working within the Williams pipeline right of way easement. An authorized Williams- Northwest Pipeline LLC ("NORTHWEST") representative must be on site prior to and during any surface-disturbing work or equipment crossings performed within the pipeline right of way easement. NORTHWEST representative will assist in determining the location of the pipeline, the right-of-way width and existing depth of the pipeline. The Estimated depths are 7.5' (20" west) and 9' (16" east). NORTHWEST's representative will supervise all work within Northwest's right-of-way and shall have stop work authority at all times.

Williams requires that cathodic protection (CP) sleeve-style casing encase / slip over the pipe to protect it from our ductile iron water and storm lines. The one water service to the north, crossing Redland, also requires a sleeve.

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Williams requires that our water and storm pipe joints occur a minimum 5 feet away from either side where the County's pipe crosses overtop Williams gas pipelines.

Williams requires a minimum 2 ft. vertical clearance between their gas pipes and the County's water and storm pipes.

Williams requests the County call them (Fred) prior to the County's contractor potholing (positively locating) overtop their gas pipes, so their staff are present.

Williams requests their staff be present during any and all construction overtop and within their easement less the ACP paving work; includes any grading and dirt work and pipe installation efforts.

Add the following subsection:

00150.50(g) Utility Information (Anticipated Relocations):

The organizations listed in Table 00150-2 may be adjusting Utilities within the limits of the Project during the period of the Contract with relocation work estimated to be completed by the following dates and times:

Table 00150-2

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
00150.50(g)(1)	Williams Pipeline	Jean Brady, 801.201.9495 jean.brady@williams.com Fred Corona, 541.342.4434, 540.913.1804 fred.corona@williams.com 89861 N Game Farm Rd., Eugene, OR 97408	June 2023
00150.50(g)(2)	Portland General Electric (PGE)	Timothy Anderson – Pole relocations, 503.736.5504 timothy.anderson2@pgn.com Rico Torres Solis – Illumination, 503.304.9084 Rodrigo.Solis@pgn.com	During Construction
00150.50(g)(3)	Clear Creek TV, Ph, PC	Brian Bellikka, 503.631.2101 bbellikka@clearcreek.coop 18238 South Fischers Mill Rd, Oregon City, OR 97045	During Construction
00150.50(g)(4)	Clackamas River Water (CRW)	Joe Eskew – Engineering Manager, 503.723.2565, 503.747.4394 jeskew@crwater.com	During Construction

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		Adam Bjornstedt – Chief Engineer, 503.722.9246, 503.729.1600 abjornstedt@crwater.com 16770 SE 82 nd Dr, Clackamas, OR 97015	
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(1) (Williams Pipeline) - "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 the Williams Pipeline easement crossing Redland Road.

The Contractor shall notify the Gas Utility in writing, with a copy to the Engineer, 30 Calendar Days before the Contractor is scheduled to begin performing roadway excavation, storm, and waterline construction. After the Gas Utility receives the notification, the Contractor shall then allow the Gas Utility 21 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing the work identified above.

The Gas Utility operates two parallel gas pipelines within the Project limits and may require an on-site safety watcher, at no cost to the Contractor. The gas pipelines are located on and crossing Redland Road at a skew near engineering station 70+90

In the immediate area of the high pressure gas lines, when moving any Equipment, excavating, driving piles, pounding guardrail posts, boring, or other road construction activities, the Contractor shall increase the tolerance zone from 24 inches, as defined in OAR 952-001-010, to 10 feet. Exceptions require written approval from the Gas Utility. The Contractor shall provide the Engineer a copy of the written approval of the exception before beginning Work.

In the event of an emergency, and in addition to the calls required by the Utilities notification system, the Contractor shall call:

- Williams Pipeline 1-801-584-6948.

(2) (PGE) - "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, 30 Calendar Days before the Contractor is scheduled to begin performing road construction. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 21 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing road construction.

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Energized power lines may overhang portions of the Work with an unknown vertical clearance. 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.

The Contractor shall maintain at least 10 feet of safety clearance from energized power lines. Exceptions require written approval from the Power Supplier and will require an on-site safety watcher at no cost to the Contractor. The Contractor shall provide the Engineer with a copy of the written approval of exception before beginning work.

(3) (Clear Creek TV, Ph, PC) - "Telecommunication Utility":

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 30 Calendar Days before the Contractor is scheduled to begin performing road construction. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 14 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing road construction.

The Contractor shall coordinate Fiber Optic relocation work with the Telecommunication Utility due to potential restricted work dates.

(4) (Clackamas River Water) - "Water Utility":

The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Water Utility facilities.

00150.70 Detrimental Operations – Add the following:

Portions of this project might be constructed in close proximity to existing private improvements. All private improvements disturbed by the Contractor's operations shall be repaired or replaced to equal or better condition at the Contractor's expense. The Engineer may withhold from future payments to the Contractor, an amount equal to the costs reasonably estimated by the Engineer to repair or replace, as the case may be, those private improvements disturbed by the Contractor's operations. Engineer shall release the retained amount once Engineer has determined that the Contractor has completed the repair consistent with the requirements of this provision. In addition, prior to construction, the Contractor shall provide to the Engineer videotape showing private property, if any, which may be disturbed during construction.

SECTION 00160 – SOURCE OF MATERIALS

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Comply with Section 00160 of the Standard Specifications supplemented and/or modified as follows:

00160.20(a) Buy America – Delete this section and replace with the following: Federal highway funds are NOT involved on this Project.

00160.30 Agency-Furnished Material – Add the following: “Clackamas River Water will furnish the listed items as shown on the waterline plans at their storage facility located at 9100 SE Mangan Drive, Clackamas, Oregon 97015 .”

SECTION 00165 – QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications modified as follows:

00165.04 Costs of Testing – Replace this section with the following sentence: All testing required to be performed by the Contractor will be at the Contractor’s expense.

00165.10(a) Field-Tested Materials – Add the following sentence: The County follows the MFTP on its projects:

00165.10(b) Non field-Tested Materials - Add the following sentence:

The County follows the NTMAG on its projects.

SECTION 00170 – LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications supplemented and/or modified as follows:

00170.00 General - Replace the first sentence of the first paragraph in this section with the following:

The Contractor shall comply with all laws, ordinances, codes, regulations, executive orders, and administrative rules (collectively referred to as "Laws" in this Section) that relate to the Work or to those engaged in the Work.

00170.02 Permits, Licenses, and Taxes – Add the following:

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

00170.61(a) Workers' Compensation - In the paragraph, replace "00170.70(d)" with "the Agreement".

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Add the following subsection:

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(a) Insurance Coverages - Add the following to the end of this subsection:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	\$2,000,000	\$4,000,000
Commercial Automobile Liability	\$2,000,000	(aggregate limit not required)

00170.70(d) Additional Insured - Add the following paragraph at the beginning of the section and add the bullets to the end of this subsection:

The liability insurance coverages of 00170.70(a) shall include the Agency, the Agency's governing body, board, or Commission and its members, and their respective officers, agents, and employees as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract.

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- Clackamas River Water

00170.70(h) Agency Acceptance – Delete the paragraph in this section and replace with the following:

All insurance and insurance providers are subject to Agency acceptance. In addition, all of the following are subject to Agency acceptance and, if requested by Agency, the Contractor shall provide complete copies of the following to Agency's representatives responsible for verification of the insurance coverages required by the Contract: insurance policies, endorsements, self-insurance documents and related insurance documents.

00170.70(k) Builder's Risk Installation Floater – Delete the paragraph in this section and replace with the following:

If specified by Special Provision, the Contractor shall obtain, at its expense, and keep in effect during the term of the Contract, Builder's Risk Installation Floater Insurance covering the Contractor's Materials and Equipment to be used for completion of the Work performed under the Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contractor's Equipment, Materials, or fixtures to be installed, in-transit, or stored off-site during the performance of the Contract. This insurance shall include as loss payees the Agency, State of Oregon, the building or structure owner, the Contractor and Subcontractors as their interests may appear.

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00170.72 Indemnity/Hold Harmless – Delete and replace with the following:

Clackamas County Public Improvement Contract.

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

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- Clackamas River Water
- PBS Engineering and Environmental

00170.85(b-1) Contractor Warranty for Specific Items – This subsection does not apply:

SECTION 00180 – PROSECUTION AND PROGRESS

Comply with Section 00180 of the Standard Specifications supplemented and/or modified as follows:

00180.06 Assignment of Funds Due Under the Contract - Delete first bulleted item.

00180.21 Subcontracting - Add the following to subsection (a):

All contracts with subcontractors or suppliers shall have provisions making the contract assignable to the County, at the option of the County, if the Contractor terminates, goes out of business, declares bankruptcy, or otherwise is unable to perform provided that the County gives the subcontractor notice of assignment within fourteen (14) days of learning of the inability of the Contractor to perform.

The Engineer may revoke consent to subcontract. If the Engineer revokes consent to subcontract, the subcontractor shall be immediately removed from the Project Site.

00180.40 Limitation of Operations - Add the following to subsection (a):

The Contractor must provide, at a minimum, a 48-hour notice to the Clackamas County Project Manager in order to perform any work on Saturdays.

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
Contract Completion Time	00180.50(h)
Right-of-Way and Access Delays	00180.65
Traffic Lane Restrictions	00220.40(e)
Special Events	00220.40(e)
Noise Control	00290.32

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Maintenance Under Traffic	00620.43
Opening Sections to Traffic.....	00744.51
Opening Sections to Traffic	00745.51

Be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this Subsection.

00180.41 Project Work Schedules – Add the following:

A Type “B” schedule as detailed in the Supplemental Specifications is required on this Contract. In addition, a three-week look ahead schedule shall be prepared by the Contractor on a weekly basis and submitted to the Engineer. It shall include all construction activities planned for the following three-week period. The three-week look ahead schedule can be hand-written and shall be in a format agreed upon by the Contractor and the Engineer.

00180.42 Preconstruction Conference - Add the following:

Before beginning On-Site Work and before meeting with the Engineer for the preconstruction conference, hold a group utilities scheduling meeting with representatives from the utility companies involved with this project. Incorporate the utilities time needs into the Contractor's schedule submitted prior to the preconstruction conference.

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.
- Video recording of private properties affected by construction per 00150.70.

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

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.

00180.43 Commencement and Performance of Work - Add the following bullet item:

- Conduct the work at all times in a manner and sequence that will insure 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

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progress or to finish a construction operation before work is started on an additional portion or unit of the project.

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, and seed establishment, not later than October 27, 2023.
- (2) The Contractor shall complete all Work to be done under the Contract not later than May 17, 2024.

00180.65 Right-of-Way and Access Delays - Add the following paragraph and table to the end of this subsection:

The Contractor shall incorporate the special conditions for each property right of way obligation provided by the County's Project Manager for the project to progress the Work to be done under the Contract.

In addition to any specific time frames noted for each property and in addition to requirements of Section 270.40, the contractor's representative shall make personal contact and notification in writing, with each property owner a minimum 7 days prior to entering property for construction purposes, removal of materials, installation of temporary fencing or limiting of access.

00180.70 Suspension of Work - Add the following to the first bullet item:

If the Inspector has reason to believe that any safety provisions are not being adhered to, the Inspector will immediately notify the Contractor's site foreman and/or the appropriate person and the County Project Manager. The purpose of this discussion is to determine the validity of the alleged violation. This will also allow the Contractor a reasonable amount of time to correct or improve any of the provisions for the safety on this project. If the County Project Manager finds the problem still unresolved or uncorrected, they will notify the Contractor's Project Manager and the County's Risk Management Safety Analyst. If the County's Risk Management Safety Analyst finds that the job site contains any unresolved safety issues they will take appropriate action up to and including suspension of the Contractor's operations on all or part of the Work.

00180.85(b) Liquidated Damages - Add the following paragraph:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$800 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 and Road Closures - Lane closures and road closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

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(1) Lane Closures - It is impractical to determine the actual damages the Agency will sustain in the event traffic lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e). 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).

00180.88 Workplace Harassment Prevention Plan – Submit a workplace harassment prevention plan for review 10 days before the preconstruction conference. The plan shall ensure all workers are guaranteed a safe and respectful work environment regardless of their identity or status. The plan applies to, but is not limited to, a worker's race, gender, creed, or any protected characteristic under state or federal law. At a minimum, the plan shall include:

- A Statement that the Contractor shall provide a safe and respectful workplace on the jobsite for all workers, subcontractors, suppliers, and other persons performing work.
- A description of how the plan will be implemented and monitored during the project duration.
- A list of the in-person trainings that will be conducted for workers of all ranks working on the project to support, promote, and grow a positive jobsite culture.
- A list of meaningful policies including procedures for aggrieved workers in need of recourse.
- How incidents involving bullying or harassment will be investigated and resolved in a prompt, thorough, and impartial manner.

Contractor shall post on the jobsite and make available copies of policies about hate, intimidation, or harassment including how to report incidents and how to receive support. Materials will be provided in all languages necessary to be inclusive of the workforce.

00180.89 Measurement – No measurement of quantities will be made for workplace harassment prevention plan.

00180.95 Payment – Payment for workplace harassment prevention plan will be for developing and implementing the plan during construction of the project, in-person training, developing meaningful policies, and investigating incidents. Payment will be paid for on the Lump Sum basis.

SECTION 00190 – MEASUREMENT OF PAY QUANTITIES

Comply with Section 00190 of the Standard Specifications supplemented and/or modified as follows:

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00190.20(a) Contractor to Provide Vehicle Weigh Scales: Delete and replace the last paragraph in this section with the following:

Unless otherwise provided in the Contract, Pay Items to be measured by weight shall include all Contractor costs for providing, maintaining, inspecting, and testing scales; for furnishing appropriate weigh tickets; for self-printing scales; for electronic weigh memo system(s); and for transporting Materials to the scales or to check weighing.

00190.20(f)(1) Scale with Automatic Printer: Delete and replace the first sentence in this section with the following:

If the scales have an automatic weigh memo printer or an approved electronic weigh memo system that does not require manual entry of gross weight information, the Agency may periodically have a representative at the scales to observe the weighing procedures.

00190.20(f)(1) Scale with Automatic Printer: Delete and replace the last bullet in this section with the following:

- Furnish a legible, serially numbered weigh memo for each load of Materials to the Agency's Materials receiver at the point of delivery, or as directed by the Engineer. The memo shall identify the Project, the Materials, the date, net weight (gross and tare as appropriate), and identification of the vehicle and weigh technician. If approved by the Engineer an electronic weigh memo system may be used. Requests to use an electronic weigh memo system shall be submitted to the Engineer according to 00150.37, providing sufficient detail for the Engineer to perform an evaluation. If approved, the Contractor shall provide training, technical support, reports, and weigh memo information to the Engineer at no additional cost to the Agency. The electronic weigh memo system shall be:
 - Capable of recording and securely retaining the same required "weigh memo" information identified above. For retention see 00170.07(c).
 - Fully integrated with the provided weigh scale system.
 - Designed in such a way that the data electronically read from scales cannot be altered by the Contractor, Subcontractor, Supplier, Engineer, or other system users.
 - Designed to allow the Engineer remote access to all the weigh memo data in real-time and allow the Engineer to add comments to the individual weigh memo regarding waste, temperature, stations, yield or other information. The system shall identify the system user or individual that adds comments to the electronic weigh memo or otherwise access the system. The Contractor shall provide the Engineer a means to access the data if the Engineer cannot use an Agency provided hand held device for access.
 - Capable of providing all the weigh memo information, including any added comments, in an electronic data file the Engineer can easily access without proprietary software.

00190.20(g) Agency-Provided Weigh Technician: Delete and replace subsection (g) with the following:

The Contractor must provide a weigh technician. The Agency will not provide one for the Contractor.

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00190.30 Plant Scales: Add the following sentence after the bulleted list:

If approved by the Engineer an electronic weigh memo system may be used in place of a printer system. See 00190.20(f)(3).

SECTION 00195 – PAYMENT

Comply with Section 00195 of the Standard Specifications supplemented and/or modified as follows:

00195.10 Payment For Changes in Materials Costs - Replace this subsection with the following subsection:

00195.10 Asphalt Cement Material Price Escalation/De-escalation - An asphalt cement escalation/de-escalation clause will be in effect during the life of the Contract.

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 escalation/de-escalation provision shall not limit those rights.

(a) Monthly Asphalt Cement Material Price (MACMP) - The Monthly Asphalt Cement Material Price (MACMP) is established by the Agency each month. For the actual MACMP, go to the Agency website at:

<https://www.oregon.gov/ODOT/Business/Pages/Asphalt-Fuel-Price.aspx>

The MACMP is based on selling prices of asphalt cement published by Poten & Partners, Inc. for primarily PG 64-22 paving grades in the Portland, Oregon area and typical non-modified paving grades in the Boise, Idaho area. The MACMP for a given month is the average of the weekly published prices for each area reported each Friday in that month. If any portion of the Project Site is located within the boundaries of ODOT Maintenance District 13 or 14, the MACMP will be based on the prices for the Boise, Idaho area. If no portion of the Project Site is within the boundaries of ODOT Maintenance District 13 or 14, the Contractor may elect to have the MACMP based on the prices of either the Portland, Oregon area or the Boise, Idaho area. If electing to use Boise, Idaho area prices for determination of the MACMP, the Contractor shall notify the Engineer in writing of the Contractor's election before or within 7 Calendar Days after the date of the preconstruction conference. This election, once acknowledged by the Engineer, will be binding for the entire duration of the Contract. If no such written notification is made, the Portland, Oregon area prices will be used as the basis of the MACMP. The area selected as the basis of the MACMP, once chosen, will become the sole area to be used as the basis for all asphalt cement used on the Project.

If the weekly prices cease to be available from Poten & Partners, Inc. for any reason, the Agency, in its discretion will select and begin using a substitute price source or index to establish the MACMP each month. The Agency does not guarantee that asphalt cement will be available at the MACMP.

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(b) Base Asphalt Cement Material Price (Base) - The base asphalt cement material price for this Project is the MACMP published on the Agency website for the month immediately preceding the Bid Opening date.

(c) Monthly Asphalt Cement Adjustment Factor - The monthly asphalt cement adjustment factor will be determined each month as follows:

- If the MACMP is within $\pm 5\%$ of the Base, there will be no adjustment.
- If the MACMP is more than 105% of the Base, then:

$$\text{Adjustment Factor} = (\text{MACMP}) - (1.05 \times \text{Base})$$

- If the MACMP is less than 95% of the Base, then:

$$\text{Adjustment Factor} = (\text{MACMP}) - (0.95 \times \text{Base})$$

(d) Asphalt Cement Price Adjustment - A price adjustment will be made for the items containing asphalt cement listed below. The price adjustment as calculated in (c) above will use the MACMP for the month the asphalt is incorporated into the Project. The price adjustment will be determined by multiplying the asphalt incorporated during the month for subject Pay Items by the Adjustment Factor.

The Pay Items for which price adjustments will be made are:

Pay Item(s)

Level 3, 1/2 Inch ACP Mixture
Level 3, 1/2 Inch ACP Mixture in Leveling

00195.20(b) Significant Changed Work – Add the following:

Significant is defined as:

- a) An increase or decrease of more than 25 percent of the total cost of the Work calculated from the original proposal quantities and the unit contract prices; or,
- b) An increase or decrease of more than 25 percent in the quantity of any one major contract item.

For condition b) above, a major item is defined as any item that amounts to 10 percent or more of the original total contract price.

00195.50(a) Progress Payments - Delete and replace the last sentence in the second paragraph as follows:

All estimated quantities are subject to correction in the final estimate. If the Contractor uses these estimates as a basis for making payments to Subcontractors and Suppliers, the Contractor assumes all risk and bears any losses that result.

00195.50(a)(1) Progress Estimates - Delete the first sentence and replace with the following:

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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 will be submitted to the Project Manager for review and approval.

(2) Value of Material on Hand - Delete the section and replace with the following:

(2) Value of Material 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.

(4) Limitations on Value of Work Accomplished - In the first sentence, change "Engineer's estimate" to "Contractor's reviewed estimate".

00195.50 (b) Retainage - Delete the first paragraph and replace with:

The amount to be retained from progress payments will be 5.0% of the value of payments made, and will be retained in one of the forms specified in Subsection (c) below. The County will withhold Retainage from all force account and change order work.

00195.50(c) Forms of Retainage – Delete first paragraph and replace with:

Forms of acceptable retainage are set forth below in Subsections (1) through (3). "Cash, Alternate A" or "Cash, Alternate B" (Retainage Surety Bond) are the Agency-preferred forms of retainage. Unless the Contractor notifies the County otherwise in writing, the County will automatically hold retainage per paragraph (2) "Cash, Alternate B (No Interest Earned)". If the Agency incurs additional costs as a result of the Contractor's election to use "Bonds and Securities", the Agency may recover such costs from the Contractor by a reduction of the final payment.

Delete and replace paragraph (2) with the following:

(2) Cash, Alternate B (No Interest Earned) – Retainage will be deducted from progress payments and held by the Agency until final payment is made in accordance with 00195.90, unless otherwise specified in the Contract.

00195.50(d) Release of Retainage – Delete this section and replace with the following:

(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.

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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.

SECTION 00196 – PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications modified as follows:

00196.91 Extra Work Allowance – Add the following new section:

The Bid schedule of prices contains a bid item for a pre-determined amount of Engineer ordered extra work. All Bidders shall reflect this same amount in their total Bid. No Bidder shall presume in the preparation of the bid or in the course of contract work that there will be a certain payment under that item or a certain order for extra work.

SECTION 00197 – PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

SECTION 00199 – DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the Standard Specifications supplemented and/or modified as follows:

00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies - Delete the entire section and replace with the following:

The Contractor must properly submit a claim as detailed in 00199.30.

(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.

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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.

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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.

00199.50 Mediation - Delete the entire section.

00199.60 Review of Determination Regarding Records - Delete the entire section.

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 bullet(s) to the end of the bullet list:

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- When performing trench excavation or other excavation across or adjacent to a Traffic Lane on a roadway having a pre-construction posted speed greater than 35 mph, backfill the excavation, install surfacing, and open the roadway to traffic by the end of each work shift. Install a "BUMP" (W8-1-48) sign approximately 100 feet before the backfilled area and a "ROUGH ROAD" (W8-8-48) sign approximately 500 feet ahead of the "BUMP" sign. If this requirement is not met, maintain all necessary lane or shoulder closures and provide additional TCM, including flagging, at no additional cost to the Agency. Do not use temporary steel plating to reopen the roadway.
- Before activating a modified traffic signal, revising lane usage, implementing new roadway geometry, or removing a "STOP" sign, protect traffic by installing "NEW TRAFFIC PATTERN AHEAD" (W23-2) signing according to 00222.40. Keep the signs in place for 30 Calendar Days after completing the modifications.
- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.
- Protect traffic by grinding and inlaying existing longitudinal rumble strips before staging traffic across them. Grind and inlay existing rumble strips according to the "Existing Rumble Strip Removal" detail shown on the Standard Drawings. Use Level 2, 1/2-inch ACP, or as directed.

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

A single traffic Lane may be closed on Redland Road, Ferguson Road, and Bradley Road when allowed, shown, or directed during the following periods of time:

- Daily, Monday through Friday, between 9:00 a.m. and 4:00 p.m.

SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

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

00221.03 Traffic Safety and Operations - Replace the bullet that begins "When paving operations create..." with the following bullet:

- When paving operations create an abrupt or sloped edge drop off greater than 1 inch, protect traffic by installing signing according to the "2 Lane, 2 Way Roadway Overlay Area" detail shown on the Standard Drawings. Protect longitudinal and transverse Pavement joints by placing and maintaining an asphalt concrete wedge according to 00221.07(c)(1).

00221.07(c)(1) Paving - Replace this subsection, except subsection number and title, with the following:

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When the longitudinal joint is greater than 1 inch in height, install additional TCD according to 00221.03. Complete the placing of ACP and construction of paving joints according to 00735.48, 00735.49, 00743.45, 00744.44, 00744.45, 00745.47, and 00745.48, as applicable.

00221.88 Measurement, Method "B" – Under this method, no measurement of quantities will be made.

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

Replace the bullet that begins "When the Schedule of Items does not include ..." with the following bullet:

- Preparing and signing the daily "Traffic Control Inspection Report", when a TCS is not included in the Schedule of Items or when a TCS is not onsite for a work shift.

00221.98 Payment, Method "B" – Add the following to this section:

"This method is relevant to items in Sections 00222, 00223, 00224, 00225, 00226, 00227 and 00228."

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

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

00222.15(b) Portable Changeable Message Signs - Add the following paragraph to the end of this subsection:

For PCMS mounted on rollers, use 2-line PCMS from the QPL.

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

- Install a 54-inch "TRUCKS LEAVING HIGHWAY XXXX FT" sign in advance of each entrance point to the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings. Install a 54-inch "TRUCKS ENTERING HIGHWAY XXXX FT" sign in advance of each exit point from the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings.
- Install "ROAD WORK AHEAD" (W20-1-48) signs with a 36 by 24-inch "FINES DOUBLE" (R2-6aP) rider on Redland Road, according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans except do not install the "FINES DOUBLE" rider on concrete barrier mounted signs.
- Install beyond each end of the Project, facing outgoing traffic, an "END ROAD WORK" (CG20-2A-24) sign a distance of $(A \div 2)$ according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans.

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- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign approximately 1000 feet in advance of the Ferguson and Bradley intersections, facing incoming traffic.
- Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after installing the new intersections configuration.
- When the existing centerline striping on Redland Road is obliterated or removed, do the following:
 - Place a "NO CENTER LINE" (W8-12) sign with a 24 by 18-inch "NEXT 1 MILE" (W7-3aP) rider, approximately 2,500 feet in advance of each end of the Project.
- 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.
- Install a "Bicycle ON ROADWAY" (CW11-1) symbol sign and a 24 by 18-inch "NEXT 1 MILE" (W7-3aP) plaque according to "Sign Spacing A", from the "TRAFFIC CONTROL DEVICES SPACING TABLE" shown on the Standard Drawings, after the "ROAD WORK AHEAD" sign. Keep the signs in place until completion of the Shoulder or bikeway final surface.

SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

Comply with Section 00223 of the Standard Specifications.

SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications.

SECTION 00225 - TEMPORARY PAVEMENT MARKINGS

Comply with Section 00227 of the Standard Specifications modified as follows:

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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 00270 - TEMPORARY FENCES

Comply with Section 00270 of the Standard Specifications modified as follows:

00270.00 Scope – Add the following paragraph to the end of this subsection:

Provide temporary fencing at the following locations:

File No.	Fence Type	Fence Length (ft)*	Gate	Notes*
25 (16606 S Redland Rd)	Type 2	73	none	Secure
26 (16566 S Redland Rd)	Type 2	171	none	Secure

*Secure fencing intends to convey requirement to enclose property so that children and pets remain bound to the parcel.

00270.10 Material – Add the following paragraph to the end of this subsection:

Provide Type 2 fence rectangular woven wire fabric and metal t-posts as shown in Oregon Standard Drawing RD810. Modify the standard drawing as follows:

- Do not provide barbed wire as shown in the Standard Drawing.
- Provide 1-inch square opening maximum wire mesh, with an overall minimum height of 48-inches.
- Modify distance P as necessary to adjust the fence alignment for tree protection and to avoid impacting landscaping features.
- Only provide line posts as shown for fencing. End, corner and intermediate end posts are not required.

00270.40 Construction - Add the following to the end of this subsection:

Comply with the Right of Way obligation requirements furnished by the Agency for temporary fencing.

Furnish and distribute initial property notification letters to each affected property owner at least 30 calendar days preceding existing fence removal.

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- 30-day notifications shall be by both certified mail and hand delivered or “door hanger”.
- 30-day Notification shall note to the property owner they may remove the existing fencing within this time frame.

Furnish and distribute a subsequent property notification letter to each affected property owner at least 5 calendar days preceding existing fence removal.

Furnish and distribute a third property notification letter within 90 calendar days of completing construction to notify owners of temporary fence removal.

Obtain Agency approval for all information and content within each property owner notification letter before distribution.

Install and connect the entire temporary fence before removing existing fence.

Field verify fence alignment and line post locations before furnishing material.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications modified as follows:

00280.00 Scope - Replace the paragraph that begins "This Work also consists of providing temporary ..." with the following paragraph:

This Work also consists of providing temporary erosion and sediment control (ESC) measures and furnishing, installing, moving, operating, maintaining, inspecting, and removing ESC throughout the Project area according to the Standard Drawings, the erosion and sediment control plan (ESCP) with an environmental management plan (EMP), when required for the Project, the Specifications, or as directed, until the site is permanently stabilized. Included also is the monitoring of weather, of stormwater and receiving waters, the reporting of monitoring observations, the reporting of corrective actions (when necessary) and the updates and revisions of the ESCP, including ESCP cover sheet, necessary to keep it representative of current site conditions and compliant with the 1200-CA Permit.

Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA Permit is not applicable to the Project. Before beginning Work on the Project, obtain a NPDES 1200-CA Permit from the applicable local jurisdiction or a NPDES 1200-C Permit that is applicable to the Project.

00280.02 Definitions -

Replace the sentence that begins “**Temporary Stabilization**” with the following sentence:

Temporary Stabilization - Measures or methods necessary to prevent erosion until permanent stabilization measures are in place and established.

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00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands - Replace the bullets with the following bullets:

- When using the Agency's ESCP with only modifications required to keep the ESCP current during construction, submit a written notification indicating the Agency's ESCP is used without modifications prior to construction.
 - Prior to beginning construction, edit the ESCP to provide a list of all contractors working on the site.
 - Prior to beginning construction edit the ESCP cover sheet to list all personnel by name and position who are responsible for the installation and maintenance of stormwater control measures including their individual responsibilities and certifications. Keep list current for the duration of the project.
- When using a Contractor modified version of the Agency's ESCP, include the following:
 - Proposed ESCP showing all ESC Work, and quantities of Work.
 - An EMP that addresses pollution prevention and control of potentially contaminated sites or Materials.
 - Implementation schedules for the ESCP
 - Plans for each phase of Contractor's Work
 - Names and positions of all personnel engaged in construction activities.
 - Names and positions of all personnel responsible for the installation and maintenance of stormwater control measures.
 - Information required under 1200-CA permit.
- When using a Contractor developed ESCP, develop and stamp the ESCP by a professional with one of the following credentials. Include their name and credentials in the ESCP. The ESCP preparer shall be one of the following:
 - Oregon Registered Professional Engineer,
 - Oregon Registered Landscape Architect; or
 - Oregon Certified Engineering Geologist
- When using a Contractor developed ESCP where engineered facilities such as sedimentation basins or diversion structures for erosion and sediment control are required, prepare and stamp the ESCP by one of the following:
 - Oregon Registered Professional Engineer; or
 - Oregon Registered Landscape Architect.
- When using a Contractor developed ESCP, provide plans for each phase of Contractor's work implementation schedule and information required under the 1200-CA permit and as directed in ODOT's Erosion Control Manual.

00280.06 Erosion and Sediment Control Manager - Delete this subsection.

00280.15(f)(1) Filter Sock Material - Add the following sentence to the end of this subsection:

Furnish filter sock Material with a diameter of 12 inches.

Add the following subsection:

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00280.41(e) Buffers - This Section is added after Section 00280.41(d) Disturbance Restrictions.

Retain and preserve buffer zones of natural, undisturbed vegetation, 50 feet in width between Work and Waters of the State. Where 50-foot buffers are not attainable, provide erosion, runoff, and sediment control BMPs with effectiveness equivalent to a 50-foot buffer. Identify and mark buffer zones with flagging, construction fencing or other readily identifiable means.

00280.46(a) Construction Entrances - Add the following to the end of this subsection:

Construct the construction entrances as shown or directed.

00280.46(h) Temporary Sediment Trap - Add the following paragraph to the end of this subsection:

Where location of Temporary Sediment Trap is used post-construction for water quality treatment, storage or infiltration, remove sediment and soil to a depth of 18" and replace to finish grade with material approved by engineer.

00280.48 Emergency Materials - Add the following paragraphs after the paragraph that begins "Provide, stockpile, and protect...":

Provide and stockpile emergency Materials on the Project site for the potential of a large storm event at the stormwater outfall pipe just east of the Redland/Ferguson Road intersection. 60 LF of Type 8 Sediment Barrier is recommended.

00280.62(a) Inspection and Monitoring - Replace this subsection, except for the subsection number and title, with the following:

Perform site inspection, complete all applicable parts of the ODOT Erosion Control Monitoring Form, and submit the form to the Agency as follows:

- On initial day of construction activity
- Every 14 days
- 24 hours after any rainfall event or snow melt event that results in runoff, including weekends and holidays
- When directed by the Engineer.

If a significant noncompliance or serious water quality issue occurs that could endanger health or the environment, verbally report it to the Engineer within 24 hours.

00280.90 Payment - In the paragraph that begins "Item (a) includes..." delete the bullet that specifies "providing the Erosion and Sediment Control Manager".

SECTION 00290 - ENVIRONMENTAL PROTECTION

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Comply with Section 00290 of the Standard Specifications modified as follows:

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.
- Do not use explosives under water.
- 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.
- Do not end-dump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.
- Cease Project operations under high flow conditions that may result in inundation of the Project area, except for efforts to avoid or minimize resource damage.
- 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.

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

Review Clackamas County Code Chapter 6.05 which describes noise control regulations. Comply with the applicable noise control requirements of the permit for Project Work.

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

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.

(1) Bird Management - Bird management activities to comply with the Migratory Bird Treaty Act will be performed by Clackamas County and its permitted agents, as documented in the MBTA permit (USFW Special Purpose-Miscellaneous MB25437B-0).

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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 each calendar 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 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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

00310.00 Scope – Add the following to the end of this subsection:

For CRW, this Work consists of abandoning, removing, and disposing of man-made materials for services lines, fire hydrants, meter boxes and associated water system components for construction of water system improvements and cleaning up the areas they occupy including plugging the existing 8-inch water main and the abandonment of the existing 8-Inch water main in accordance with subsection 00490.43 Abandoning Pipe in Place.

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

No separate or additional payment will be made for asphalt pavement sawcutting and 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.

SECTION 00330 - EARTHWORK

Comply with Section 00330 of the Standard Specifications modified as follows:

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00330.03 Basis of Performance - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section on the excavation basis. The total embankment quantity is estimated at 250 cubic yards.

Excavation for the Rock Gallery Detention is performed under 01011.00.

00330.91(d) General Excavation - Delete the bullet that begins "Includes Unsuitable Material...".

00330.92 Kinds of Incidental Earthwork - Add the following bullets to the end of the bullet list:

- Earthwork required for driveways, road approaches and driveway removal. Earthwork for driveways, road approaches, and driveway removal will be that which is outside the Neat Line limits shown on the typical sections.

SECTION 00340 - WATERING

Comply with Section 00340 of the Standard Specifications.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications modified as follows:

00350.01 Definitions - Replace the sentence that begins "**Embankment Geotextile** - For installation..." with the following sentence:

Replace the sentence that begins "**Riprap Geotextile** - For installation..." with the following sentence:

Riprap Geotextile - Riprap geotextile is used as a filter and separator behind or beneath riprap, Buttresses, inlays, shear keys and erosion control applications.

Replace the sentence that begins "**Subgrade Geotextile** - For installation..." with the following sentence:

Subgrade Geotextile - Subgrade geotextile is used as a separator and reinforcement on Subgrades and in other material separation applications.

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00350.41(f)(5) Geotextile Placement - Replace the paragraph that begins “Slit wrinkles or folds ...” with the following paragraph:

Slit wrinkles or folds exceeding 1 inch and lay flat. Shingle-lap not more than 6 inches in the direction of the paving. Broom or squeegee to smooth the geotextile and pneumatic roll to maximize geotextile contact with the Pavement surface. Additional hand-placed sealant material may be required at laps as determined.

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications.

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications modified as follows:

00405.41(a) Within Paved Areas to be Preserved - Add the following to the end of this subsection:

Do not use the open excavation method for installing pipes transversely.

00405.90 Payment - Add the following paragraph to the end of this subsection:

When the Contract Schedule of Items does not indicate payment for Work performed under this Section, no separate or additional payment will be made. Payment will be included in payment made for the appropriate items under which this Work is required.

SECTION 00430 - SUBSURFACE DRAINS

Comply with Section 00430 of the Standard Specifications modified as follows:

00430.10 Materials – 10-inch drain pipe in the rock gallery shall be Perforated Corrugated Polyethylene Pipe following the requirements of 02415.10.

00430.90 Payment –

Payment for materials and installation will be included in payment made for Rock Gallery Detention 01011.90.

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SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 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.

00470.90 Payment -

No separate or additional payment will be made for the baffle wall and orifice for item (c).

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

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Comply with Section 00490 of the Standard Specifications.

SECTION 00495 - TRENCH RESURFACING

Comply with Section 00495 of the Standard Specifications.

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL

Comply with Section 00620 of the Standard Specifications modified as follows:

00620.40(e) Warning Signs - Replace this subsection, except for the subsection number and title, with the following:

Provide warning signs as required where abrupt or sloped drop-offs occur at the edge of the existing or new surface according to Sections 00221 and 00222.

00620.43 Maintenance Under Traffic - Replace this subsection, except for the subsection number and title, with the following:

Traffic will be allowed on the cold planed surface up to 3 Calendar Days after removing the existing surface. Sweep and clean the cold planed surface before opening to traffic.

Before beginning paving operations, make repairs to the existing cold planed surface as directed. Payment for the repairs will be made according to 00195.20.

SECTION 00640 - AGGREGATE BASE AND SHOULDERS

Comply with Section 00640 of the Standard Specifications.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications modified as follows:

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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 3.4 Tons of Emulsified Asphalt in tack coat will be required on this Project.

SECTION 00738 - SAFETY EDGE

Comply with Section 00738 of the Standard Specifications.

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 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

Comply with Section 00749 of the Standard Specifications.

SECTION 00840 – DELINEATORS AND MILEPOST MARKER POSTS

Comply with Section 00840 of the Standard Specifications.

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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 modified as follows:

00855.90 Payment - Replace the Pay Items (i) and (j) with the following Pay Items:

- (i) Bi-Directional Blue Type IAR Markers..... Each
- (j) Bi-Directional Blue Type IAR Markers, Recessed Each

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SECTION 00857 - RUMBLE STRIPS

Comply with Section 00857 of the Standard Specifications.

SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 0865 of the Standard Specifications.

SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications modified as follows.

00867.90 Payment - Add the following paragraph after the paragraph that begins "Item (p) includes one...":

Item (r) includes Transverse Median Bar (Pavement Bar, Type B-HS).

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:

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The estimated quantities of concrete for minor sign supports are:

Support Type	Quantity
Perforated Steel Square Tube Anchor Sign Supports	3 cu. yd.

SECTION 00930 - METAL SIGN SUPPORTS

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

Add the following subsection:

00930.48 Coating - Prepare and powder coat supports according to the applicable portions of Section 00593 or prepare and coat supports according to the applicable portions of Section 00594. Provide coating materials for field application, repairing damaged coatings, and coating hardware after installation, according to Section 00593 or 00594. Do not coat:

- Slip plate or arm connection surfaces.
- Slip base bolting hardware.
- Anchor rods, anchor rod washers, and anchor rod nuts.

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 Anchor Sign Supports	116

00930.90 Payment - Add the following paragraph to the end of this subsection:

No separate or additional payment will be made for coating steel sign supports.

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SECTION 00940 – SIGNS

Comply with Section 00940 of the Standard Specifications.

SECTION 01011 – STORMWATER CONTROL, ROCK GALLERY DETENTION

Section 01011, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01011.00 Scope – This Work consists of furnishing and constructing a rock gallery detention facility as shown in the plans. The stormwater rock detention gallery is separate from the water quality biofiltration swale under Section 01012.

Materials

01011.10 Materials – Furnish Material meeting the following requirements:

Drainage Textile, Type 2	2320.10
Aggregate	02610.10
Drainage pipe	02415.10

01011.12 Aggregate – Furnish $\frac{3}{4}$ " – 2-1/2" round washed drain rock meeting the requirements of Section 02610.

Measurement

01011.80 Measurement – No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Rock Gallery Detention Quantities:

Item	Quantity
Excavation	1,254 Cu. Yd.
Drainage Geotextile, Type 2	2,120 Sq. Yd.
Aggregate	1,010 Ton
Drainage Pipe	1,009 LF
Cleanouts	22 EA

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Payment

01011.90 Payment – The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item “Rock Gallery Detention”.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 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 with no underdrain as shown. The stormwater rock detention gallery is separate from the swale.

Materials

01012.10 Materials - Furnish Material meeting the following requirements:

Water Quality Mixture	03020
Seeding	01030.13

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.

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- Has a pH between 5.5 and 8.0.
- Does not have clumps greater than 3 inches in any direction.

Construction

01012.40 General - Construct water quality biofiltration swale facility after construction of the stormwater detention rock gallery as shown. Perform 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) Placement of Water Quality Mixture** - Place the water quality mixture in maximum 12-inch Lifts. Compact each Lift with a water filled landscape roller.
- (b) Seeding** - Seed according to 01030.13.

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 Quantities:

Item	Quantity
Water Quality Seeding	550 Sq. Yd.
Water Quality Mixture	180 Cu. Yd.

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".

Payment for soil media testing is included in this item.

Payment for temporary watering is included in this item.

Excavation will be paid under 01012.90 and according to 00330.90 (d).

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Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01030 - SEEDING

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

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

Provide the following seed mix formulas:

- **Stormwater Facility Grass Mix Seeding: SUNMARK Native Water Quality Mix or approved equal**

Botanical Name (Common Name)	PLS (lb/acre)	÷ (% Purity (minimum)	x % Germination) (minimum)	= Amount (%)
<u>Elymus glaucus</u> (Blue Wildrye)	_____	_____	_____	<u>8</u>
<u>Deschampsia caespitosa</u> (Tufted Hairgrass)	_____	_____	_____	<u>50</u>
<u>Festuca rubra rubra</u> (Native Red Fescue)	_____	_____	_____	<u>34</u>
<u>Beckmania syzigachne</u> (American Sloughgrass)	_____	_____	_____	<u>3</u>
<u>Glyceria occidentalis</u> (Western Mannagrass)	_____	_____	_____	<u>5</u>

43.38 lbs/acre

* Oregon Certified Seed

- **Erosion Control Mix Seeding:**

Name	PLS (lb/acre)	÷ (% Purity (minimum)	x % Germination) (minimum)	= Amount (lb/acre)
PT 855 ODOT Erosion Control Mix, by Pro Time Lawn Seed or approved equal				40lbs/acre

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.

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

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

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- 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.
- 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.

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.

SECTION 01050 - FENCES

Comply with Section 01050 of the Standard Specifications.

SECTION 01070 - MAILBOX SUPPORTS

Comply with Section 01070 of the Standard Specifications.

SECTION 01140 – POTABLE WATER PIPE AND FITTINGS

Comply with Section 01140 of the Standard Specifications modified as follows:

01140.00 Scope – Add the following to the end of the subsection:

CRW has pre-ordered and acquired piping, valves, fittings, and appurtenances for the construction of the waterline improvements. The CRW furnished materials are limited to those listed on the project plans. This Work includes transportation of materials from CRW facility located at 9100 SE Mangan Drive, Clackamas, Oregon 97015 to job site and the scheduling of materials transportation with CRW. Contractor shall furnish all miscellaneous materials not listed and provided by CRW as required for a complete project assembly.

01140.41 Laying Pipe, (a) General – Add the following to the end of the subsection:

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Pipelines intended to be straight shall not deviate from the straight line at any joint in excess of 1-inch.

01140.41 Laying Pipe – Add the following:

(g) Utility Separation – Waterlines near utilities (other than sewer) require the following minimum separation, Horizontal: 3 feet; Vertical (at crossing): 18 inches. Separation distances may be modified on a case-by-case basis after review and approval.

01140.44 Thrust Restraint, (a) Concrete Thrust Blocks - Add the following to the end of the subsection:

Place the blocking so that the pipe, fittings and joints will be accessible for disassembly and repairs, unless otherwise indicated. Wrap all pipe and fittings that will contact concrete with 4-mil plastic sheeting. Allow concrete to cure a minimum of 5 days prior to filling or testing the waterline.

Concrete for thrust/collar blocks shall have a 28-day compressive strength of 3,000 psi minimum.

01140.44 Thrust Restraint, (b) Restrained Joints - Add the following to the end of the subsection:

Mechanical joint restraint shall not be used on plain end fittings.

Thrust Blocks in lieu of pipe joint restraint shall be used only as directed.

01140.45 Marking Tape and Wire, (a) Installation – Replace this subsection, except for the subsection number and title, with the following:

(a) Installation - Tracer Wire for locating purposes shall be 12 AWG solid copper wire with blue colored high molecular weight polyethylene (HMWPE), PVC insulation or approved equal, suitable for direct bury installations. Intersections and splices shall provide electric continuity and be protected from moisture and soil. Connectors shall be watertight, silicon filled connectors.

01140.51 Hydrostatic Testing, (a) General – Add the following at the end of the subsection:

Notify agency at least 4 days in advance of scheduled testing. Agency's representative shall be present prior to beginning of test.

01140.52 Disinfecting, (a) General - Replace this section, except for the subsection number and title, with the following:

(a) General - Before placing new water mains in service, chlorinate and test new mains and repaired portions of, or extensions to, existing mains according to AWWA C651-14 and obtain a satisfactory bacteriological report.

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The initial chlorine content of the water shall be 40 to 50 ppm but not less than 25 ppm. A chlorine residual of not less than 10 ppm shall remain in the water after standing 24 hours in the pipe.

When approved by CRW, a solution strength of 300 ppm shall be used for swabbing pipe and fittings on short pipe sections, waterline repairs, tie-ins and hydrant installations. The solution will be thoroughly swabbed on each pipe component and fitting. Per AWWA C651-4.7.4, this solution shall sit for a minimum of 15 minutes prior to flushing to allow for adequate contact time.

(c) Point of Application – Add the following at the end of the subsection:

Use an approved solution-feed chlorinating device which provides adequate backflow prevention.

Water from the existing system or other CRW approved source shall be controlled so as to flow slowly into the newly laid pipeline during the application of chlorine. The rate of chlorine mixture flow shall be in such proportion to the rate of water entering the pipe that the combined mixture shall contain 40 to 50 ppm of free available chlorine.

During disinfection and under CRW direction, operate all valves, hydrants, and other appurtenances to assure that the disinfection solution is dispersed into all parts of the line, including dead ends, new services, and similar areas that otherwise may not receive the chlorinated water.

Valves shall be manipulated so that the strong chlorine solution in the line being chlorinated will not flow back into the line supplying the water. Use check valves if necessary.

(h) Flushing and Testing – Add the following:

(4) Disposal of Chlorinated Water - Dispose of chlorinated water in an approved manner. Do not allow chlorinated water to flow into a waterway without using a satisfactory method of reducing chlorine concentrations to a safe level as determined by the U.S. Environmental Protection Agency and Oregon State Department of Environmental Quality.

(5) Acceptance - After chlorination and flushing, the water shall remain in the pipe for an additional 24 hours before bacterial sampling. Samples will be collected by a representative of CRW and tested at the CRW water treatment lab. After bacterial tests have been performed and accepted by CRW, replace the test corp with a solid bronze plug that has C.C. type threads. Galvanized plugs will not be accepted.

01140.90 Payment – The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) 12 Inch Ductile Iron Pipe with Restrained Joints and Class B Backfill.....	Foot
(b)Tracer Wire Terminal Station.....	Each
(c)Blowoff Assembly, 2 Inch.....	Each
(d) 12 Inch Connection to 12 Inch Existing Main.....	Each

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(e) 8 Inch Connection to 8 Inch Existing Main.....Each
(f) Abandon Existing Waterline.....Lump Sum

Item (a) includes the installation of 12-inch gate valves, tees, and bends

Item (e) includes the installation of 6-Inch gate valves

Payment will be payment in full for transporting and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01150 – POTABLE WATER VALVES

Comply with Section 01150 of the Standard Specifications modified as follows.

01150.00 Scope – Delete the words “furnishing and”. Add the following to the end of the subsection:

CRW has pre-ordered and acquired water valves for the construction of the waterline improvements. The CRW furnished materials are limited to those listed on the project plans. This Work includes transportation of materials from CRW facility located at 9100 SE Mangan Drive, Clackamas, Oregon 97015 to job site and the scheduling of materials transportation with CRW. Contractor shall furnish all miscellaneous materials not provided by CRW required for a complete project assembly.

Replace 01150.90 Payment with the following:

01150.90 Payment – The accepted quantities of Work performed under this Section for Gate Valves will be paid accordingly:

6-Inch Gate Valves installation is paid for according to 01160.90
8-Inch Gate Valve installation is paid for according to 01140.90(e)
12-Inch Gate Valves installation is paid for according to 01140.90(a)

Payment will be payment in full for transporting and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01160 – HYDRANT AND APPURTENANCES

Comply with Section 01160 of the Standard Specifications modified as follows:

01160.00 Scope – Delete the words “furnishing and”. Add the following to the end of the subsection:

CRW has pre-ordered and acquired hydrant and appurtenances for the construction of the waterline improvements. This Work includes transportation of materials from CRW facility located at 9100 SE Mangan Drive, Clackamas, Oregon 97015 to job site and the scheduling

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of materials transportation with CRW. Contractor shall furnish all miscellaneous materials not provided by CRW required for a complete project assembly.

01160.40 Setting Hydrant – Replace this subsection, except for the subsection number and title, with the following:

Inspect all hydrants upon delivery in the field to ensure proper working order. Provide a minimum 5-foot radius unobstructed working area around all hydrants. Set the traffic flange 3 to 9 inches above finish grade. Allow the hydrant barrel drain to waste into a pit of porous gravel material situated at the base of the hydrant.

01160.90 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
Hydrant Assemblies, TYPE 3.....	Each

Payment for the installation of 6 – Inch Gate Valves are included in the pay item Hydrant Assemblies, TYPE 3 above.

Payment will be payment in full for transporting and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01170 – POTABLE WATER SERVICE CONNECTIONS, 2-INCH AND SMALLER

Comply with Section 01170 of the Standard Specifications modified as follows:

01170.00 Scope – Add the following to the end of the subsection:

CRW has pre-ordered and acquired some materials for potable water services connections 2-Inch and smaller for the construction of the waterline improvements. Contractor shall review the material list provided on the project plans to determine any additional materials necessary. This Work includes transportation of materials from CRW facility located at 9100 SE Mangan Drive, Clackamas, Oregon 97015 to job site and the scheduling of materials transportation with CRW. Contractor shall furnish all miscellaneous materials not provided by CRW required for a complete project assembly.

01170.40 General – Add the following:

(b) Installation – Add the following to the end of the subsection:

Care shall be taken to prevent copper tube from kinking or buckling on short radius bends.

Do not place the service connection within 18 inches of a pipe joint or other tap, or as otherwise directed by the Agency.

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An A-24 Ford meter reducer or equal is to be installed to connect $\frac{3}{4}$ -inch meters.

01170.90 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
Reconnect Existing Water Services, 1 Inch, Long Side	Each
Reconnect Existing Water Services, 1 Inch, Short Side	Each
Relocate Existing Water Service, 1 Inch, Short Side.....	Each

Payment will be payment in full for transporting and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications modified as follows:

02001.02 Abbreviations and Definitions:

Add the following definition:

Lightweight Concrete - Structural concrete having a specified density using lightweight Aggregates.

Replace the sentence that begins “**Pozzolans** - Fly ash, silica fume...” with the following sentence:

Pozzolans - Fly ash, natural Pozzolans, silica fume, and high-reactivity Pozzolans.

Replace the sentence that begins “**Supplementary Cementitious Materials** - Fly ash, silica fume...” with the following sentence:

Supplementary Cementitious Materials - Pozzolans and ground granulated blast furnace slag.

02001.15(a) Current Mix Designs - Replace this subsection, except for the subsection number and title, with the following:

Mix designs that meet the requirements for the specified class of concrete and are currently being used or have been used within the past 24 months on any project, public or private, may be submitted for review. Provide individual test results that comprise the average if more than one data point exists. For paving designs the flexural strength testing must be from within the last two years. For HPC designs the length change and permeability tests must be from within the last two years.

02001.15(b)(1) Trial Batch Plastic Properties - Replace this subsection, except for the subsection number and title, with the following:

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For each trial batch, test according to the following test methods:

Test	Test Method
Sampling Fresh Concrete	WAQTC TM 2
Concrete Temperature	AASHTO T 309
Slump	AASHTO T 119 ¹
Air Content	AASHTO T 152 or T 196 ²
Density	AASHTO T 121
Yield	AASHTO T 121
Molding Concrete Specimens	AASHTO T 23 or R 39 ³
Water Cement Ratio	⁴

- ¹ For drilled shaft concrete test the slump retention by subsequent tests at half-hour intervals for the duration of the estimated drilled shaft placement, including temporary casing extraction. Report in table or graphical format.
- ² Use AASHTO T 196 for lightweight concrete.
- ³ Cast cylinders in single use plastic molds.
- ⁴ Use ODOT's Field Operating Procedure for AASHTO T 121 in the MFTP.

SECTION 02030 – SUPPLEMENTARY CEMENTITIOUS MATERIALS

Comply with Section 02030, of the Standard Specifications modified as follows:

02030.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

This Section includes the requirements for fly ash, natural pozzolans, silica fume, ground granulated blast furnace slag and high reactivity pozzolans used in portland cement concrete.

02030.10 Fly Ash - Replace this subsection, except for the subsection number and title, with the following:

Furnish Class C and Class F fly ash from the QPL and conforming to AASHTO M 295 (ASTM C618).

Add the following subsection:

02030.15 Natural Pozzolans - Furnish Class N natural pozzolans from the QPL and conforming to AASHTO M 295 (ASTM C618).

02030.50 Metakaolin - Replace this subsection with the following:

02030.50 High Reactivity Pozzolans - Furnish high-reactivity pozzolans from the QPL and conforming to AASHTO M 321.

SECTION 02415 - PLASTIC PIPE

Comply with Section 02415 of the Standard Specifications modified as follows:

02415.40 Polypropylene Pipe - Replace the sentence that begins "Dual wall polypropylene pipe ..." with the following sentence:

Dual wall polypropylene pipe and fittings ASTM F2764

SECTION 02470 – POTABLE WATER PIPE MATERIALS

Comply with Section 02470 of the Standard Specifications and as modified as follows:

02470.10 General – Add the following at the end of the subsection:

Where only one type of pipe is called out, no substitutions shall be allowed. Piping material of like kind shall be produced by one manufacturer.

02470.20 Ductile Iron Pipe, (a) General – Replace this subsection, except for the subsection number and title, with the following:

Use centrifugally cast ductile iron pipe meeting the requirements of AWWA C151. Ductile iron pipe shall have a cement-mortar lining and seal coating meeting the requirements of AWWA C104. Ductile iron pipe to be joined using bolted flanged joints shall be Standard Thickness Class 53. All other ductile iron pipe shall be Standard Thickness Class 52 or the thickness class specified or indicated.

02470.30 Steel Pipe 6 Inches and Larger – Add the following at the end of the subsection:

Surface repair coatings for tar-coated pipe shall be 3M Spray-on Rubberized Undercoating, or equal. Provide appropriate cloth wrapping between multiple repair coatings per manufacturer’s specifications and as directed.

SECTION 02475 – POTABLE WATER FITTING MATERIALS

Comply with Section 02475 of the Standard Specifications modified as follows:

02475.10 General – add the following at the end of the subsection:

Mechanical joint gaskets, bolts, nuts and washers shall comply with the requirements of AWWA C111. Flange gaskets, bolts, nuts and washers shall be in conformance with the requirements of AWWA C110.

Where taps are shown on fittings, tapping bosses shall be used.

02475.20 Ductile Iron Pipe Fittings – add the following at the end of the subsection:

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All cast fittings shall be of domestic origin.

02475.30 Fittings for Steel Pipe 6 Inches and Larger – add the following at the end of the subsection:

Fusion bonded epoxy-coated fittings shall be U.S. Pipe Permafuse or equal. Any fitting with marred interior or exterior coating will be rejected and repaired by a factory representative or replaced. Mortar lining for fittings shall be the same thickness as specified for pipe.

02475.50 Restrained Joints – add the following at the end of the subsection:

Boltless restrained joint pipe shall be TR Flex by U.S. Pipe; Lok-Ring by American Pipe; Super-Loc by Clow or approved equal.

Mechanical Joint restraints shall be Grip Ring or Romagrip by Romac Industries Inc.; Megalug by EBAA Iron Inc.; LocTyte by Pacific States Cast Iron Pipe Co. or approved equal.

Mechanical external bell restraints shall be Model 611 by Romac Industries Inc.; Series 1500TD by EBAA Iron Inc. or approved equal.

02475.60 Bolted Sleeve-Type Couplings for Plain-End Pipe - add the following at the end of the subsection:

Flexible couplings shall be Romac 501 by Romac Industries Inc.; Model 411 by Smith-Blair or approved equal, with the stop removed from the middle ring.

Flexible reducing couplings shall be Romac RC501 by Romac Industries Inc. or approved equal.

Flange adapters shall be Romac FCG or RFCA by Romac Industries Inc.; Smith-Blair Series 900, or approved equal.

Transition couplings shall be Romac 501 by Romac Industries Inc. with an insulating boot at the smaller diameter end of the coupling. If the pipes are the same diameter put the insulating boot on the OD Steel pipe.

Mechanical couplings, not a part of the pipe itself, shall be ductile iron couplings with rubber rings and high strength low alloy bolts and nuts conforming to AWWA C111. Couplings shall be Smith-Blair No. 441 or approved equal.

Section 02475.65, which is not in the Standard Specifications, is included by special provision.

02475.65 Tapping Sleeves – Tapping sleeves shall be provided for the pressure taps according to the requirements of the connecting pipe.

(a) Ductile Iron - Tapping sleeves shall be full circle, stainless steel JCM 432 or 452, Mueller H-304-SS, or approved equal.

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(b) Steel Pipe - Tapping sleeves for OD steel pipe size-on-size shall be weld-on, JCM 416 Type 4, or equal, with Insulation Kit per section 01140.47(f). Sleeve shall be fabricated from minimum 3/16-inch steel.

Unless otherwise specified, flanges used on the tapping neck shall be steel, flat or raised face, class 125 drilling, and Class D (150 psi rated) according to AWWA C207.

Both the sleeve and the exposed metal around the tap shall be tar coated. Taps smaller than the main require a JCM 422 stainless steel sleeve, or equal.

(c) Cast Iron - Tapping sleeves shall be full circle, stainless steel JCM 432 or 452, Mueller H-304-SS, or approved equal.

(d) Concrete Cylinder Pipe - Tapping sleeves will be weld-on JCM 416 Type 4 concrete pipe type sleeves, or approved equal.

Weld-o-lets may be used upon approval of the District.

SECTION 02480 – POTABLE WATER VALVE MATERIALS

Comply with Section 02480 of the Standard Specifications modified as follows:

02480.10 General – Add the following at the end of the subsection:

Operating torque to operate any valve shall not exceed 40 ft-lb. Unless otherwise indicated, the direction of rotation of the wheel, operating nut or lever to open the valve shall be counterclockwise. Each valve body or operator shall have cast thereon the word “OPEN” and an arrow indicating the direction to open.

Actual length of valves shall be within 1/16 inch (plus or minus) of the specified or catalog length except where installed adjacent to flexible or mechanical pipe couplings, where different lengths of a replacement can be accommodated.

Flanges shall meet the requirements of ANSI B16.1.

Valve boxes and extended stems shall be provided for all buried valves, as specified below.

Valve-to-pipe joint materials, including gaskets, bolts and nuts, shall be ductile iron pipe mechanical joints and shall meet the requirements of AWWA C111.

Unless otherwise specified, valves shall be rated for **250 psi working pressure** minimum.

02480.20 Gate Valves – Replace this subsection, except for the subsection number and title, with the following:

(a) Gate Valves - Gate valves shall be 250 psi-rated, Class 125 drilling, cast ductile iron body, bronze-mounted, resilient seated, non-rising stem (NRS) valves with O-ring seals, and meeting the requirements of AWWA C515. Unless otherwise shown, valves shall have 2-inch square operating nut. The valves shall be full-port and fusion epoxy-coated (internal and external surfaces) meeting the requirements of AWWA C550.

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Gate valves shall be M&H/Kennedy 7000 series; Clow 2638; American Flow Control (AFC) 2500 or approved equal.

(b) Tapping Valves - Tapping gate valves shall be flange by mechanical joint, shall conform to the above specifications unless stated otherwise, and as recommended by the manufacturer for use with the tapping sleeve supplied. Valves shall be cast ductile iron body, resilient seated, non-rising stem (NRS) tapping valves with 2-inch square operating nut, fusion epoxy coated inside and outside, meeting the requirements of AWWA C509.

(1) Connecting Valve for Steel Pipe - Valves for O.D. Steel weld-on taps will be installed with insulation kits for flanged (or other) connections between dissimilar metals. Install tracer wire to either side of transition, and bring up both ends of tracer wire in a valve box for continuity purposes. (Follow basic valve box installation.)

02480.22 Butterfly Valves – Replace this subsection, except for the subsection number and title, with the following:

Butterfly valves shall be used on 14-inch diameter pipe and greater, unless otherwise specified on the drawings.

Butterfly valves shall be rubber seated with O-ring seals, Class 150B short body type or Class 250B meeting AWWA C504 with factory-installed operators and 2-inch square operating nut. High-pressure butterfly valves must be able to withstand 1½ times the main pressure.

The valve components shall withstand environmental conditions for buried service including epoxy coatings and casting that comply with the referenced standards, to provide continuous trouble-free service.

Butterfly valves shall be Clow, Mueller, M&H 4500 or approved equal.

02480.25 Valve Boxes – Replace this subsection, except for the subsection number and title, with the following:

(a) Valve Box Top - Valve box tops shall be cast iron, "Vancouver Style 910", minimum 6-inch diameter and 3/16 inch wall thickness, standard 18 inches long, and bituminous varnish coated. Valve box top shall be VBT91018D as manufactured by East Jordan Iron Works, or approved equal.

(b) Valve Box Lid - Valve box lids shall be cast iron, Vancouver Style 910 with "W" or "WATER" designation cast thereon. All parts shall be bituminous varnish coated. Valve box lids shall be VBL910WD as manufactured by East Jordan Iron Works, or approved equal.

(c) Valve Box Bottom - Valve can or bottom material and valve box extensions shall be 6-inch diameter, white plastic ASTM D3034 PVC pipe or approved equal. PVC extensions shall be 6-inch diameter by 24 inches long cut to fit within 4 inches of the top.

A minimum of 4 inches of vertical separation shall be maintained between finished grade of the valve box top and the top edge of the valve box bottom, to prevent damage from the valve box lid bearing on the PVC valve box bottom.

Redland Road Turn Lanes at Ferguson & Bradley

A bell reducer shall be installed at the valve operation bonnet on all gate valves 8 inches and larger. Reducers shall be 8-inch x 6-inch, rubber gasketed SDR-35 bell-by-bell Concentric Reducer. The gasket shall be left in place on the 6-inch side for securing and sealing the valve can.

SECTION 02485 – HYDRANT AND APPURTENANCE MATERIALS

Comply with Section 02485 of the Standard Specifications modified as follows:

02485.10 Fire Hydrants – Replace this subsection, except for the subsection number and title, with the following:

Fire hydrants shall be dry-barrel, conforming to AWWA C502, of standard manufacture and of a pattern approved by the Agency. Hydrants shall be designed for a minimum working pressure of 250 psi.

All materials in contact with potable water shall conform to ANSI/NSF Standard 61, Drinking Water System Components - Health Effects, or equivalent.

Hydrant shall be Mueller Super Centurion A-423; Clow Medallion; M&H 129; U. S. Pipe Style 94 Metropolitan 250; Waterous Pacer, WB-67-250 or approved equal.

02485.60 Tie Rods – Replace this subsection, except for the subsection number with the following:

02485.60 Thrust Restraint – Thrust restraint shall be provided for all fire hydrant and fire service piping installations.

(a) Thrust Lugs – Thrust lugs shall be provided for all new construction. Thrust restraint shall be “Mega-lug” as manufactured by EBAA Iron Sales, Inc., Eastland, Texas, Romac Grip Ring or RomaGrip, Romac Industries Inc. or approved equal.

(b) Tie Rods - Thrust Rods or Split “Mega-Lug” may be used for existing hydrants, as directed by Agency. Thrust rods, nuts and washers shall be nickel or stainless steel coated.

(c) Restrained Joint Systems - Restrained joint shall be Flanged spools, Locking Gaskets (bell joints only), Romac Grip Rings, Mega Lugs or approved equal, as directed by Agency.

SECTION 02490 – POTABLE WATER SERVICE CONNECTION MATERIALS, 2-INCH AND SMALLER

Comply with Section 02490 of the Standard Specifications modified as follows:

02490.10 General – Add the following at the end of the subsection:

Redland Road Turn Lanes at Ferguson & Bradley

As required by U.S. Senate Bill S.3874, all service connection materials, including brass or bronze valves and fittings, shall be certified “lead-free” or “no-lead (NL)” containing no more than 0.2 percent lead for solder and flux and, not more than a weighted average of 0.25 percent lead for the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

For the purposes of these specifications, allowed exemptions to the “lead-free” requirement include; Pipes, plumbing fixtures, or fittings (including backflow preventers) used exclusively for non-potable services and service saddles or water distribution main gate valves that are two inches diameter or larger.

Where only one type of pipe is called out, no substitutions shall be allowed. Pipe materials of like kind shall be the product of one manufacturer.

02490.20 Saddles – Add the following to the end of the subsection:

Service saddles for $\frac{3}{4}$ " or 1" service connections to OD steel, PVC or transite watermain, use double-strap “lead-free” brass or stainless steel service saddles, with CC-threaded outlet. Saddles shall be Ford F202B-NL, Romac 202S, or approved equal.

Service saddles shall be utilized on all 1 $\frac{1}{2}$ - inch and 2-inch connections to existing water mains. For 1 $\frac{1}{2}$ - inch and/or 2 - inch service connections to existing ductile iron or cast iron water main, use double-strap “lead-free” brass or stainless steel service saddles with 2-inch CC-threaded outlet. Saddles shall be Ford F202B-NL, Romac 202S, or approved equal.

For connections to new water mains, an approved tee will be required unless otherwise directed by the Agency.

02490.30 Corporation Stops, (a) Less than or Equal to 1 Inch – Add the following to the end of the subsection:

CRW has pre-ordered and acquired some materials for the construction of the waterline improvements. The CRW furnished materials are limited to those listed on the project plans. This Work includes transportation of materials from CRW facility located at 9100 SE Mangan Drive, Clackamas, Oregon 97015 to job site and the scheduling of materials transportation with CRW. Contractor shall furnish all miscellaneous materials not provided by CRW required for a complete project assembly.

Service connections to ductile iron or cast iron water mains shall be $\frac{3}{4}$ -inch or 1-inch, “lead-free” corporation stops that are direct-tapped at a 45° angle upward. Corporation stops for $\frac{3}{4}$ -inch and 1-inch services shall have a CC-threaded inlet and a compressive or grip connection for a copper pipe outlet.

For high pressure applications (100-300 psi) use Ford FB1000-4-G-NL Corp stop or approved equal.

02490.40 Service Pipe and Fittings – Replace this subsection, except for the subsection number and title, with the following:

(a) Copper Tubing Service Pipe- Copper tubing service pipe shall be annealed, seamless tubing conforming to the requirements of ASTM B 88, Type K. Polyethylene tubing will not be allowed.

Redland Road Turn Lanes at Ferguson & Bradley

(b) Service Fittings - Make fittings used for service connections of bronze alloy. Fittings used for copper tubing shall be either compression or flare type, insulated or non-insulated. All components of a service connection shall be the same size as the nominal designation of the service connection pipe

(1) Service material for ¾ Inch and 1” Inch Services:

Copper-to-copper couplings shall be Ford C44-XX-G-NL or equal.

Reducers and adapters shall be Ford, Mueller or equal.

Flared fittings, when required, shall conform to ANSI B16.26.

Angle meter stops shall have a copper inlet and inside IP outlet with swivel nut and padlock wing. Angle stops shall be Ford KV43-444W-G-NL (grip joint) style or equal. **No Q (quick joint) style Corp stops shall be used.** For high pressure applications (100-300 psi) use Ford BA43-444W-G-NL angle stops.

(2) Service Material for 1 ½ Inch and 2” Inch Services - 1-½ and 2-inch service connections to ductile iron or cast iron water mains shall be a 2-inch CC-threaded, double-strap service saddle that is tapped perpendicular and horizontal to the main. For locations where conditions merit and as directed by the District (existing utility conflicts, etc.), the service connection may be tapped at a 45° angle and the gate valve installed at a specified distance from the main line connection.

Gate valves for 1-1/2 and 2-inch service connections shall be resilient seat, 2-inch size, with approved connections to both the service saddle (or tee) and the copper service line.

Copper-to-copper couplings shall be Ford C44-XX-G-NL or equal.

Reducers and adapters shall be Ford, Mueller or equal.

02490.50 Meter Setters – Replace this subsection, except for the subsection number and title, with the following:

Meter setters shall be manufactured and tested according to all applicable parts of AWWA C800. Meter setters shall be 12 inches in height and shall have an angle meter stop with drilled padlock wing, an angle check valve, and inlet and outlet threads compatible with fittings connecting to service pipes. Meter setters for 5/8 inch by 3/4 inch, 3/4 inch, and 1 inch services shall have meter saddle nuts for installation and removal of the meter. Meter setters for 1 1/2 inch and 2 inch services shall be equipped with a locking bypass.

(a) Meters - The Agency will furnish and install approved meters.

(1) ¾ and 1 Inch Meters - Meters shall be Badger Recordall Disc series, lead-free alloy, Model 55, or equal.

(2) 1 ½ and 2” Meters - 2-inch meters shall be as specified and provided by the Agency. 2-inch meter shall be radio-read capable, equipped with antenna and register.

Redland Road Turn Lanes at Ferguson & Bradley

Meter setter assemblies shall be Ford 70 Series Coppersetter, Model VBH77-95035-003-NL, or equal, and shall include: Flanged angle ball valve and flanged angle single check valve with $\frac{3}{4}$ " test port, for flanged meter connection; 1-inch dedicated bypass line with inline bypass ball valve and single check valve; CC-threaded (FIP) inlet and outlet brass elbows.

02490.70 Meter Boxes – Replace this subsection, except for the subsection number and title, with the following:

(a) **Meter Boxes for Standard $\frac{3}{4}$ or 1 Inch Services** - Armorcast, Model A6001946PCX12, 13" x 24" x 12", heavy wall polyethylene or equal. Meter box lids shall be EBAA Iron MC 1324-4R or approved equal.

(b) **Meter Boxes for 1½ or 2 Inch Services** - Oldcastle H-Series 2436-30 concrete polymer meter box. Additional criteria, including dimensions and traffic loading rating, will be specified by the agency as required for each application. Meter box lids shall be DFW Plastics, Inc. Model DFWB40C-1-LID or approved equal.

SECTION 02510 - REINFORCEMENT

Comply with Section 02510 of the Standard Specifications modified as follows:

02510.11(c) Coated Reinforcement Ties and Supports - Replace this subsection, except for the subsection number and title, with the following:

Ties and supports for coated reinforcement, including ties for coated to uncoated reinforcement connections, shall be nonmetallic coated.

SECTION 02560 - FASTENERS

Comply with Section 02560 of the Standard Specifications modified as follows:

02560.30(b) High Strength Tie Rods, Anchor Bolts and Anchor Rods - Add the following paragraph to the end of this subsection:

End stamp all ASTM F1554, Grade 105 according to ASTM F1554 Supplementary Requirements S2 and S3. If the end of the bolt is to be embedded in concrete, the projecting end from the concrete shall be the marked end.

SECTION 02610 – SPECIAL FILTER MATERIAL

Redland Road Turn Lanes at Ferguson & Bradley

Comply with Section 02610 of the Standard Specifications modified as follows:

Materials

Replace 02610.10 with the following:

02610.10 Special Filter Materials – Furnish $\frac{3}{4}$ " – 2-1/2" round washed drain rock that meets the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
3"	100
1-1/2"	90 - 100
$\frac{3}{4}$ "	60 - 80
No. 10	0 - 10
No. 100	0 - 5

SECTION 02690 - PCC AGGREGATES

Comply with Section 02690 of the Standard Specifications modified as follows:

02690.20(e) Grading and Separation by Sizes for Prestressed Concrete - Replace this subsection with the following subsection:

02690.20(e) Grading and Separation by Sizes - Sampling shall be according to AASHTO R 90. Sieve analysis shall be according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Table 02690-1 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-1
Gradation of Coarse Aggregates
Percent passing (by Weight)

Redland Road Turn Lanes at Ferguson & Bradley

Size Number	Nominal Size Square Openings	Sieve Size											
		(2½ in.)	(2 in.)	(1½ in.)	(1 in.)	(¾ in.)	(½ in.)	(⅜ in.)	(No. 4)	(No. 8)	(No. 16)	(No. 50)	(No. 200)
3	(2 to 1 in.)	100	90 to 100	35 to 70	0 to 15	—	0 to 5	—	—	—	—	—	**
357*	(2 in. to No. 4)	100	95 to 100	—	35 to 70	—	10 to 30	—	0 to 5	—	—	—	**
4	(1½ to ¾ in.)	—	100	90 to 100	20 to 55	0 to 15	—	0 to 5	—	—	—	—	**
467*	(1½ to No. 4)	—	100	95 to 100	—	35 to 70	—	10 to 30	0 to 5	—	—	—	**
5	(1 to ½ in.)	—	—	100	90 to 100	20 to 55	0 to 10	0 to 5	—	—	—	—	**
56	(1 to ⅜ in.)	—	—	100	90 to 100	40 to 85	10 to 40	0 to 15	0 to 5	—	—	—	**
57	(1 to No. 4)	—	—	100	95 to 100	—	25 to 60	—	0 to 10	0 to 5	—	—	**
6	(¾ to ⅝ in.)	—	—	—	100	90 to 100	20 to 55	0 to 15	0 to 5	—	—	—	**
67	(¾ to No. 4)	—	—	—	100	90 to 100	—	20 to 55	0 to 10	0 to 5	—	—	**
68	(¾ to No. 8)	—	—	—	100	90 to 100	—	30 to 65	5 to 25	0 to 10	0 to 5	—	**
7	(½ to No. 4)	—	—	—	—	100	90 to 100	40 to 70	0 to 15	0 to 5	—	—	**
78	(½ to No. 8)	—	—	—	—	100	90 to 100	40 to 75	5 to 25	0 to 10	0 to 5	—	**
8	(⅝ to No. 8)	—	—	—	—	—	100	85 to 100	10 to 30	0 to 10	0 to 5	—	**
89	(⅝ to No. 16)	—	—	—	—	—	100	90 to 100	20 to 55	5 to 30	0 to 10	0 to 5	**

* Use two or more separated sizes which when combined meet these gradation limits.

** See 02690.20(a). Do Not evaluate material passing the No. 200 sieve according to 00165.40.

02690.20(f) Grading and Separation by Sizes for Other Concrete - Delete this subsection.

02690.30(g) Grading - In the paragraph that begins “Sampling shall be according to...”, replace the words “AASHTO T 2” with the words “AASHTO R 90”.

SECTION 02910 - SIGN MATERIALS

Comply with Section 02910 of the Standard Specifications modified as follows:

02910.33(a) General - Replace this subsection, except for the subsection number and title, with the following:

Permanent legends consist of white retroreflective screened, red retroreflective screened, black screened or cut-out white retroreflective sheeting. The letters and numerals of all permanent legends shall conform to the design of the FHWA Standard Rounded Capital Letter Alphabets.

Add following subsection:

02910.50 Digitally Printed Signs, Temporary - Temporary traffic control signs may use digitally printed signs from an integrated engineered match component system on the QPL and applied to furnished substrate according to 00222.10(b).

CLACKAMAS COUNTY

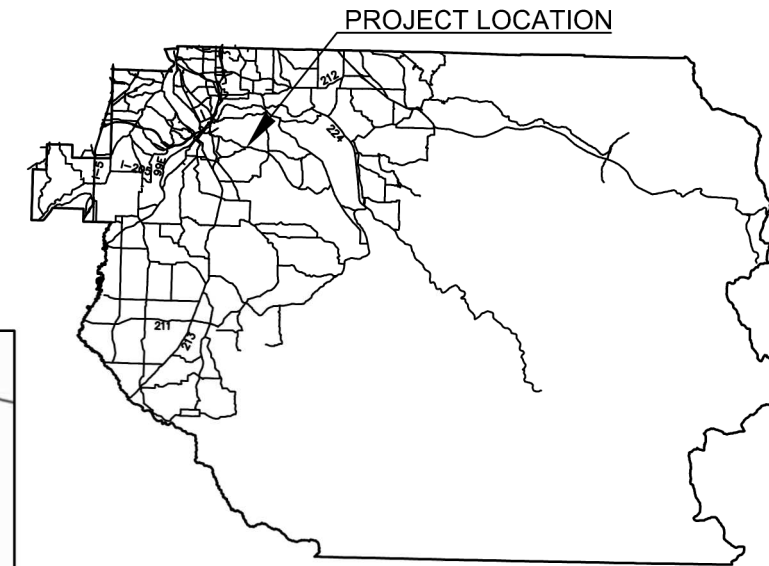
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

ROADWORK, PAVING, DRAINAGE, WATER, AND SIGNING & STRIPING

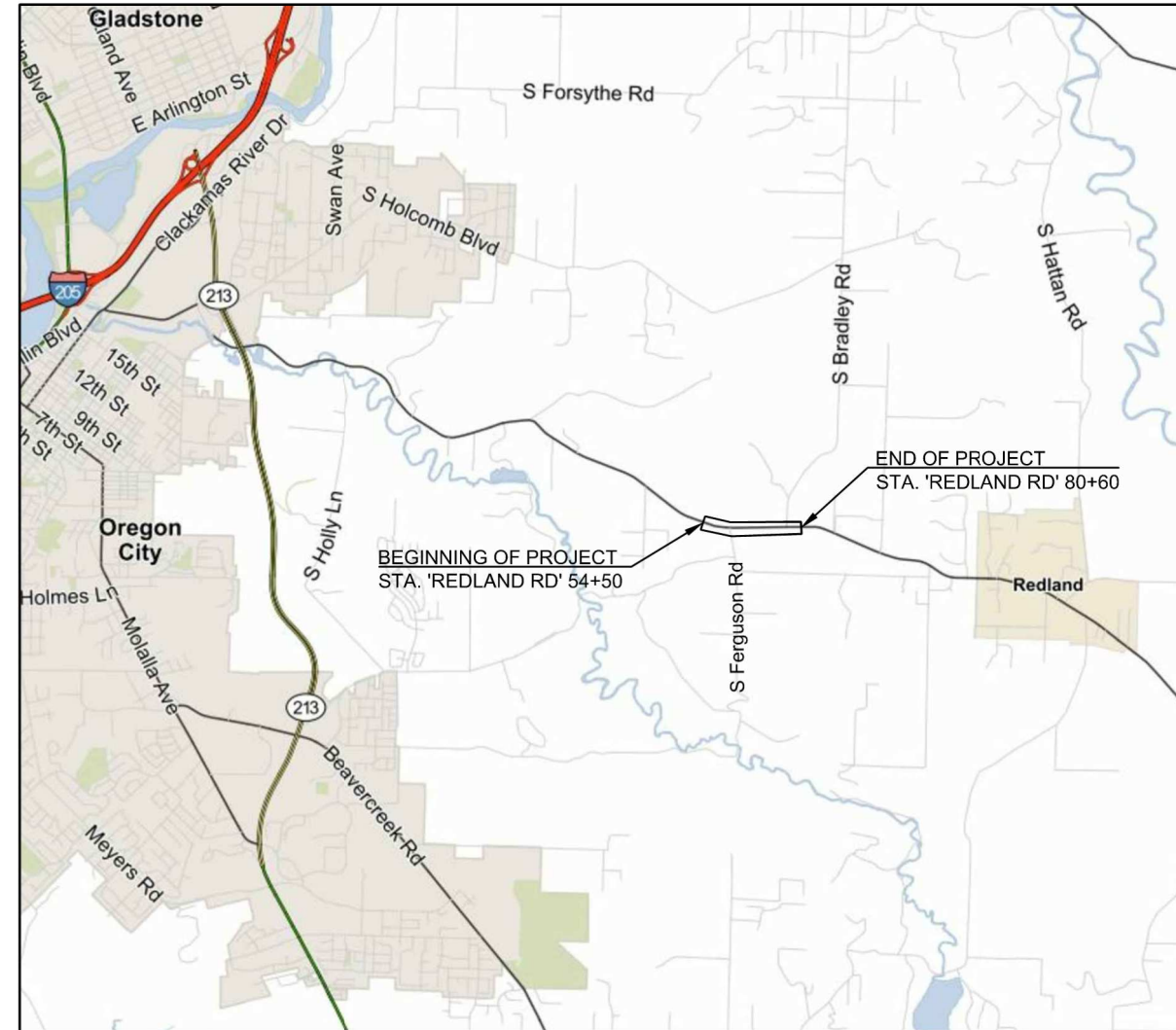
REDLAND RD TURN LANES AT FERGUSON AND BRADLEY

CLACKAMAS COUNTY, OREGON

APRIL 2023



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
G-01	ROADWAY COVER SHEET
G-02	GENERAL NOTES - COUNTY
G-03	GENERAL NOTES - WILLIAMS GAS PIPELINE
G-04	LEGEND, ABBREVIATIONS & STD. DRAWINGS
TS-01	TYPICAL SECTIONS
TS-02	PAVING PLAN
TS-03	SUPERELEVATION CHART
EC-01	EROSION & SEDIMENT CONTROL NOTES
EC-02	EROSION & SEDIMENT CONTROL PLAN
PP-01 - PP-13	ROADWAY PLAN & PROFILE
SW-01	STORMWATER SECTION DETAILS
SW-02	STORMWATER FLOW CONTROL DETAILS
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SS-01 - SS-02	SIGNING & STRIPING PLAN
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LL-01 - LL-02	ILLUMINATION PLAN
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C-01	WATERLINE COVER SHEET
C-02	WATER GENERAL NOTES - CLACKAMAS RIVER WATER
C-03	WATER GENERAL NOTES - WILLIAMS GAS PIPELINE
WP-01 - WP-08	WATERLINE PLAN & PROFILE
WP-09	WATERLINE CONNECTION DETAILS
WP-10 - WP-11	WATERLINE DETAILS



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.

BASIS OF BEARINGS
OREGON COORDINATE REFERENCE SYSTEM (OCRS) DERIVED BEARING OF N 87°46'04" E.
GEODETTIC DATUM - NORTH AMERICAN DATUM OF 1983 (2011) EPOCH 2010.00
COORDINATE SYSTEM - OCRS (PORTLAND ZONE)

PROJECTION - LAMBERT CONFORMAL CONIC PROJECTION
LATITUDE OF GRID ORIGIN - 122°45'00" W
FALSE NORTHING - 50,000.00 m
FALSE EASTING - 100,000.00 m (328083.99 INTERNATIONAL FEET)
SCALE FACTOR 1.000002 (EXACT)



VICINITY MAP
NOT TO SCALE

CONTACT INFORMATION:

<p>Clackamas County Department of Transportation 150 Beaver Creek Rd Oregon City, OR 97045 503-742-4400 www.clackamas.us Bob Knorr, Project Manager rknorr@clackamas.us</p>	<p>Civil Engineer: PBS Engineering & Environmental 4412 S Corbett Avenue Portland, OR 97239 Ken Rehms, PE Ken.Rehms@pbsusa.com (503) 417-7720 (503) 729-8880, mobile</p>	<p>Surveyor: Clackamas County Department of Transportation 150 Beaver Creek Rd Oregon City, OR 97045 Brian Paull BPaull@clackamas.us (503) 742-4650</p>
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CLACKAMAS COUNTY CONCURRENCE	
CAPITAL PROJECTS SUPERVISOR	DATE

PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com



<p>ROADWAY COVER SHEET</p> <p>REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY</p>	<p>PROJECT NO.: CL-300320344</p> <p>DATE: 03/20/2023</p>									
<p>CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045</p>	<p>DIRECTOR</p> <p>DAN JOHNSON</p>									
<p>DESIGNED BY: MDB</p> <p>DRAFTED BY: PPG</p> <p>CHECKED BY: KSR</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	DESCRIPTION						
NO.	DATE	DESCRIPTION								
<p>Sheet No.</p> <p>G-01</p>										

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GENERAL NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CLACKAMAS COUNTY ROADWAY STANDARDS.
- ALL WORK SHALL CONFORM TO CLACKAMAS COUNTY STANDARDS AND THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2021, AS AMENDED BY THE SPECIAL PROVISIONS.
- THIS PROJECT HAS BEEN DESIGNED BASED ON THE ORIGINAL TOPOGRAPHIC SURVEY PERFORMED BY CLACKAMAS COUNTY. THE CONTRACTOR SHALL NOTIFY THE COUNTY IF SURVEYED CONDITIONS DIFFER FROM ACTUAL FIELD CONDITIONS.
- IN ORDER TO PROTECT UNDERGROUND FACILITIES, EXCAVATORS PERFORMING THE WORK SET FORTH ON THESE PLANS MUST COMPLY WITH THE PROVISIONS OF ORS 757.557 (REQUIRES CONTRACTOR TO NOTIFY THE OREGON UTILITY NOTIFICATION CENTER AT LEAST TWO, BUT NO MORE THAN 10 BUSINESS DAYS, PRIOR TO ANY EXCAVATION).
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS APPROXIMATE AND SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER AND DTD ENGINEERING OF ANY DISCREPANCIES PRIOR TO INITIATING THE CONSTRUCTION OF THE FACILITIES.
- THE COUNTY REQUIRES A PROOF ROLL TEST WITH A FULLY LOADED 10-YARD DUMP TRUCK (LOAD TICKET TO BE PROVIDED) TO CHECK FOR SOFT SPOTS IN THE SUBGRADE PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC AND GRANULAR BASE ROCK AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK FOLLOWED BY REQUIRED DENSITY TESTING PRIOR TO PAVING THE FIRST LIFT OF ASPHALT CONCRETE.
- ACP MIX TO BE CREATED IN ACCORDANCE WITH SPECIAL PROVISIONS.
- SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO THE COUNTY AND IN A MANNER ACCEPTABLE TO THE COUNTY.
- THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND OREGON SUPPLEMENTS. THE CONTRACTOR SHALL, AT ALL TIMES, MAINTAIN LOCAL ACCESS FOR EMERGENCY VEHICLES, BUSINESSES, BUSES, AND HOMEOWNERS ALONG THE PROJECT SITE.
- WHEN TEMPORARY TRAFFIC DELAYS ARE TO BE EXPECTED DURING THE CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE AGENCIES, INCLUDING TRIMET, SCHOOL DISTRICT, EMERGENCY SERVICES, AND LOCAL BUSINESSES.
- THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS AND SPECIAL PROVISIONS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL AND OTHER MATERIAL ENCOUNTERED DURING THE CONSTRUCTION OF THE ROADWAY AND WHERE INDICATED ON THE PLANS. THE CONTRACTOR SHALL PROTECT ALL EXISTING TREES AND LANDSCAPING THAT IS TO REMAIN. MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, REGIONAL AND STATE REGULATIONS AT FACILITIES AUTHORIZED TO ACCEPT SUCH MATERIAL. FILL SITES SHALL BE LEVELED AND GRADED TO DRAIN. THE CONTRACTOR SHALL CORRECT ANY DEFICIENT FILL OR NON PERMITTED DISPOSAL OF MATERIALS.
- CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL EARTHWORK, TRENCH BACKFILL AND ROAD CONSTRUCTION COMPACTION TESTS, AND GEOTECHNICAL REVIEWS WITH THE MATERIALS TESTING LAB AS REQUIRED FOR ACCEPTANCE OF PROJECT WORK BY CLACKAMAS COUNTY. COUNTY SHALL BE PROVIDED WITH ALL TEST RESULTS.
- CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS, AND OTHER REFERENCE POINTS PURSUANT TO ORS 209.140 AND ORS 209.150. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS & OTHER SUCH MONUMENTS.
- AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ACP, CONCRETE OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.

- THE LOCATION OF ABOVE GROUND IMPROVEMENTS (EXISTING AND PROPOSED) SHALL NOT CONFLICT WITH THE REQUIRED SIDEWALK WIDTHS, ROADWAY IMPROVEMENTS, AND REQUIRED SIGHT DISTANCE.
- RIGHT-OF-WAY DOCUMENTS ARE ON FILE WITH THE COUNTY. THESE DOCUMENTS INCLUDE LEGAL DESCRIPTIONS AND EXHIBITS FOR TEMPORARY CONSTRUCTION EASEMENTS, RIGHT-OF-WAY, RIGHT-OF-ENTRIES AND OTHER INFORMATION. THE CONTRACTOR SHALL OBTAIN A COPY OF THIS INFORMATION. THESE DOCUMENTS SHOW PROPERTY AGREEMENTS, LEGAL LIMITS OF CONSTRUCTION EASEMENTS AND RIGHT-OF-WAY AND ARE HEREBY MADE A PART OF THESE DOCUMENTS.

GRADING NOTES

- ALL FILLS WITHIN TEMPORARY CONSTRUCTION EASEMENTS ON PRIVATE PROPERTY MUST BE PLACED CONSISTENT WITH COUNTY CODE TITLE 9.03, EXCAVATION AND GRADING. SITE PREPARATION MUST INCLUDE THE REMOVAL OF VEGETATION, NON-COMPLYING FILL, TOPSOIL, OR OTHER UNSUITABLE MATERIAL PRIOR TO PLACEMENT OF THE FILL. FILL SLOPES SHALL NOT EXCEED A GRADE OF TWO HORIZONTAL TO ONE VERTICAL.
- RECYCLED ASPHALT WILL NOT BE ALLOWED FOR USE AS FILL MATERIAL.
- WITHIN TEMPORARY CONSTRUCTION EASEMENTS ON PRIVATE PROPERTY, APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER FIVE FEET IN HEIGHT ON SLOPES IN EXCESS OF FIVE HORIZONTAL TO ONE VERTICAL. BENCHING MUST BE DONE IN ACCORDANCE WITH THE APPROVED PLANS. CLACKAMAS COUNTY SHALL INSPECT BENCHES PRIOR TO FILL PLACEMENT.
- CUT AND FILL SLOPES AND ALL EXPOSED SOILS SHALL BE PROTECTED FROM EROSION AND BE IN COMPLIANCE WITH WATER ENVIRONMENT SERVICES RULES, REGULATIONS, AND STANDARDS. SUCH CONTROL SHALL CONSIST OF TEMPORARY MEASURES DURING CONSTRUCTION AND PERMANENT MEASURES AT THE COMPLETION OF CONSTRUCTION ACTIVITIES; INCLUDING APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.
- THE CONTRACTOR SHALL NOTIFY THE COUNTY INSPECTOR 48 HOURS PRIOR, FOR ALL REQUIRED EROSION CONTROL AND STRUCTURAL FILL INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION:
 - EROSION CONTROL INSPECTION PRIOR TO INITIATING CONSTRUCTION ACTIVITIES;
 - PROOF ROLL ON SUBGRADE AND
 - AT EVERY ONE FOOT OF STRUCTURAL FILL OR 300 CUBIC YARDS AND
 - AT COMPLETION OF STRUCTURAL FILL BEFORE GEOTEXTILE FABRIC AND BASE AGGREGATE IS PLACED AND
 - AT COMPLETION OF BASE AGGREGATE COURSE FOLLOWED BY DENSITY TESTING ON THE FINAL BASE COURSE PRIOR TO PAVING.
- THE CONTRACTOR SHALL BE REQUIRED TO COORDINATE RELOCATION (AS NECESSARY) OF EXISTING UTILITIES DUE TO ANY CUT/FILL OPERATIONS OR ROADWAY IMPROVEMENTS, COORDINATION SHALL TAKE PLACE PRIOR TO INITIATION OF WORK.

STREET & STORM DRAINAGE NOTES

- STREET AND STORM DRAIN IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CLACKAMAS COUNTY ROADWAY STANDARDS AND WATER ENVIRONMENT SERVICES. ALL STORM WATER PIPES SHALL HAVE RUBBER GASKETS, WHICH SHALL PROVIDE A WATER TIGHT CONNECTION.
- ALL TRENCH EXCAVATION SHALL CONFORM TO THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- PIPE BEDDING AND PIPE ZONE SHALL CONFORM TO THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE COUNTY ROADWAY STANDARDS DETAILS, AND SHALL BE 3/4"-0" CRUSHED ROCK.
- COMPACTION SHALL BE PER OREGON STANDARD SPECIFICATIONS. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND THE METHOD USED TO ACHIEVE REQUIRED COMPACTION PER THE 2021 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED IN ACCORDANCE WITH SPECIAL PROVISIONS. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED IN ACCORDANCE WITH SPECIAL PROVISIONS.

UTILITY NOTES

- TRENCHES WITHIN THE RIGHTS-OF-WAY SHALL BE BACKFILLED WITH LOW STRENGTH CONTROLLED DENSITY FILL (CDF) WHEN:
 - TRENCHES LESS THAN 100' WITHIN THE ROADWAY OF ALL ARTERIALS AND COLLECTOR CLASSIFIED ROADS;

- THE AFFECTED ROADWAY SURFACE IS NEWER THAN FIVE (5) YEARS FROM THE TIME OF THE LAST OVERLAY, WITHOUT REGARD TO THE ROADWAY CLASSIFICATION;
- DEEMED NECESSARY BY THE COUNTY ROAD OFFICIAL.

WHEN TRENCHES ARE EXEMPT FROM USE OF CDF THE ROADWAY TRENCH SHALL BE BACKFILLED WITH AN APPROVED GRANULAR MATERIAL CONFORMING TO OREGON STANDARD SPECIFICATIONS SECTION 00405 CLASS B SPECIFICATIONS AND PER THE COUNTY CODE TITLE 7.03.100 THROUGH 7.03.230 AND SECTION 710 OF THE CLACKAMAS COUNTY ROADWAY STANDARDS.

- TRENCHES OUTSIDE OF RIGHTS-OF-WAY MAY BE BACKFILLED IN ACCORDANCE WITH NATIVE MATERIAL AND COMPACTION SPECIFICATIONS FOR OREGON STANDARD SPECIFICATIONS SECTION 00405 CLASS A BACKFILL.
- COPIES OF THE CDF MATERIAL DELIVERY SLIPS SHALL BE SUBMITTED FOR COUNTY RECORDS.
- EXISTING UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. IF THE CONTRACTOR ENCOUNTERS ABANDONED FACILITIES DURING EXCAVATION, THEY SHALL NOTIFY THE ENGINEER AND UTILITY IMMEDIATELY.
- EXISTING UTILITIES SHOWN ON THE PLANS ARE PER SURFACE LOCATIONS AND AS-BUILT DRAWINGS. THE CONTRACTOR SHALL POTHOLE VERIFY THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXIST. UTILITIES AT POINTS OF CONNECTION, CROSSINGS, OR WHERE NOTED ON PLANS, PRIOR TO CONSTRUCTION TO AVOID POTENTIAL CONFLICTS,
- EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.542 THROUGH 757.562. EXCAVATOR(S) SHALL NOTIFY OREGON UTILITY NOTIFICATION CENTER FOR LINE LOCATIONS AT LEAST TWO, BUT NOT MORE THAN TEN, BUSINESS DAYS PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. OREGON UTILITY NOTIFICATION CENTER: PH. 1-800-332-2344.
- COORDINATE UTILITY RELOCATIONS WITH PGE FOR POWER/LIGHTING, CLACKAMAS RIVER WATER FOR WATER, AND CLEAR CREEK AND LUMEN FOR CABLE, TELEPHONE, AND FIBER OPTIC.
- CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS BEFORE INSTALLING GUARDRAIL, STORM WATER PIPES/FACILITIES, WATERLINES, AND/OR SANITARY LINES. CONTRACTOR TO REPORT ANY CONFLICTS TO ENGINEER PRIOR TO INSTALLATION.
- AT LEAST 24 HOURS PRIOR TO EXCAVATION AND WITHIN 5 FEET OF A FIBER OPTIC COMMUNICATION LINE, THE CONTRACTOR SHALL COORDINATE AND CALL THE AFFECTED UTILITY.
- CONTRACTOR SHALL NOTIFY WILLIAMS GAS COMPANY 48 HOURS MIN. PRIOR TO PERFORMING ANY EXCAVATION AND/OR WATERLINE WORK INSIDE THEIR EASEMENT CROSSING REDLAND ROAD.



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GENERAL NOTES - COUNTY		REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY		PROJECT NO.: CL-300320344
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045		DIRECTOR DAN JOHNSON		DATE: 03/20/2023
DESIGNED BY: MDB	DRAFTED BY: PPG	CHECKED BY: KSR		
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		Sheet No. G-02		

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WILLIAMS GAS PIPELINE GENERAL NOTES

1. WILLIAMS- NORTHWEST PIPELINE LLC ("NORTHWEST") WILL REQUIRE THE EXECUTION OF AN ENCROACHMENT AGREEMENT AND ISSUE A WILLIAMS GAS PIPELINE ENCROACHMENT/FOREIGN LINE CROSSING PERMIT FOR EACH CONTRACTOR AND ACTIVITY WITHIN THE PIPELINE EASEMENT. THE AGREEMENT MUST BE EXECUTED BEFORE WORK BEGINS ON THE RIGHT OF WAY.
2. NORTHWEST WILL REQUIRE SUBMITTAL OF PLAN AND PROFILE DRAWINGS FOR PRIOR REVIEW AND APPROVAL BY NORTHWEST. ALL DRAWINGS MUST SHOW IN DETAIL, ALL OF NORTHWEST'S FACILITIES AND OTHER FEATURES THAT WILL ALLOW NORTHWEST TO DETERMINE THE EFFECTS OF THE PROPOSED CONSTRUCTION OR MAINTENANCE ACTIVITY ON ITS FACILITIES.
3. AN AUTHORIZED NORTHWEST REPRESENTATIVE MUST BE ON SITE PRIOR TO AND DURING ANY SURFACE-DISTURBING WORK OR EQUIPMENT CROSSINGS PERFORMED WITHIN THE PIPELINE RIGHT OF WAY EASEMENT. NORTHWEST REPRESENTATIVE WILL ASSIST IN DETERMINING THE LOCATION OF THE PIPELINE, THE RIGHT-OF-WAY WIDTH AND EXISTING DEPTH OF THE PIPELINE. NORTHWEST'S REPRESENTATIVE WILL SUPERVISE ALL WORK WITHIN NORTHWEST'S RIGHT-OF-WAY AND SHALL HAVE STOP WORK AUTHORITY AT ALL TIMES.
4. NORTHWEST'S REPRESENTATIVE WILL CONDUCT A SAFETY/INFORMATIONAL DISCUSSION WITH CONTRACTORS PRIOR TO CONSTRUCTION.
5. EVERY PERSON WORKING WITHIN THE NORTHWEST GAS PIPELINE RIGHT OF WAY EASEMENT MUST FOLLOW ALL REQUIREMENTS IN THE WILLIAMS DEVELOPERS' HANDBOOK AND ENCROACHMENT/FOREIGN LINE CROSSING PERMIT UNLESS IT IS WAIVED BY A NORTHWEST REPRESENTATIVE AND WRITTEN ON THE PERMIT. IN THE EVENT WORK COMMENCES ABSENT SUCH AN AGREEMENT, NORTHWEST MAY TAKE STEPS TO PREVENT FURTHER ACTIVITY.
6. ANY CROSSINGS MADE WITHOUT A NORTHWEST REPRESENTATIVE ON SITE WILL BE EXCAVATED AT THE EXCAVATOR'S EXPENSE TO PROVIDE NORTHWEST AN OPPORTUNITY TO INSPECT ALL AFFECTED PIPELINE FACILITIES. NORTHWEST WILL BE FULLY AND COMPLETELY COMPENSATED FOR ANY DAMAGES TO ITS FACILITIES RESULTING FROM THE ACTS OF THIRD PARTIES WHO ARE WORKING IN THE VICINITY OF NORTHWEST'S FACILITIES WITH OR WITHOUT NORTHWEST'S CONSENT.
7. TO PROTECT NORTHWEST'S GAS PIPELINE FROM EXTERNAL LOADING, NORTHWEST MUST PERFORM AND ENGINEERING EVALUATION TO DETERMINE THE EFFECTS OF ANY PROPOSED EQUIPMENT USE. MATS, TIMBER BRIDGES, OR OTHER PROTECTIVE MATERIALS DEEMED NECESSARY BY NORTHWEST WILL BE PLACED OVER NORTHWEST'S GAS FACILITIES FOR THE DURATION OF ANY LOADING. PROTECTIVE MATERIALS SHALL BE PURCHASED, PLACED, AND REMOVED AT NO COST TO NORTHWEST. THE GAS LINE EASEMENT OR RIGHT-OF-WAY MUST BE RESTORED TO ITS ORIGINAL CONDITION.
8. NORTHWEST MAY REQUIRE MARKINGS TO IDENTIFY SPECIFIC AREAS WHERE EQUIPMENT USE IS AUTHORIZED. VIBRATORY EQUIPMENT IS NOT PERMITTED ON THE GAS LINE EASEMENT.
9. NORTHWEST REPRESENTATIVES MUST BE PROVIDED SAFE ACCESS TO ALL OPEN EXCAVATIONS. EXCAVATIONS MUST BE PROPERLY SLOPED OR SHORED IN ACCORDANCE WITH OSHA REGULATIONS.
10. NO CUT OR FILL ON THE RIGHT-OF-WAY IS ALLOWED WITHOUT NORTHWEST'S APPROVAL.
11. STOCKPILING FILL, BRUSH, TRASH, OR OTHER DEBRIS ON THE RIGHT OF WAY IS PROHIBITED.
12. NORTHWEST MUST BE NOTIFIED AT THE EUGENE DISTRICT OFFICE (541) 342-4434 AT LEAST 72 HOURS BEFORE ANY WORK COMMENCES ON OR NEAR ITS RIGHT-OF-WAY. REFERENCE MILEPOST 24.53-24.55 ON THE 2479 LINE.

GENERAL NOTES - WILLIAMS GAS PIPELINE
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY
DATE: 03/20/2023 PROJECT NO.: CL-300320344

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

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CLACKAMAS COUNTY STANDARD DRAWINGS

D500 STANDARD DRIVEWAY ENTRY ONTO PAVED
 U275 PAVEMENT CUT STANDARD ARTERIAL/COLLECTOR ROADS

ODOT STANDARD DRAWINGS

RD100 MAILBOX SUPPORT
 RD101 MAILBOX INSTALLATION
 RD317 CULVERT EMBANKMENT PROTECTION AND RIPRAP PADS
 RD336 STANDARD MANHOLE DETAILS
 RD344 STANDARD MANHOLE BASE SECTION
 RD345 PIPE TO MANHOLE CONNECTIONS
 RD356 MANHOLE COVERS AND FRAMES
 RD615 SURFACE EDGE DETAILS
 RD1000 CONSTRUCTION ENTRANCES
 RD1015 INLET PROTECTION TYPE 4
 RD1032 SEDIMENT BARRIER TYPE 8
 TM200 SIGN INSTALLATION DETAILS
 TM500 PAVEMENT MARKING STANDARD DETAIL BLOCKS
 TM501 PAVEMENT MARKING STANDARD DETAIL BLOCKS
 TM502 PAVEMENT MARKING STANDARD DETAIL BLOCKS
 TM503 PAVEMENT MARKING STANDARD DETAIL BLOCK
 TM517 RECESSED PAVEMENT MARKERS
 TM570 TRAFFIC DELINEATORS
 TM800 TABLES, ABRUPT EDGE AND PCMS DETAILS
 TM821 TEMPORARY SIGN SUPPORTS
 TM841 INTERSECTION WORK ZONE DETAILS
 TM850 2-LANE, 2-WAY ROADWAYS

WES STANDARD DRAWINGS

ST-4.0 STORM - CLEANOUT
 CB-3.0 CATCH BASIN - DITCH INLET
 CB-4.0 CATCH BASIN - FRAME AND GRATE

CWS STANDARD DETAILS

711 ORIFICE PLACE AND GUIDE

LINETYPES	
EXISTING	PROPOSED
	EDGE OF UNPAVED SURFACE
	EDGE OF PAVED SURFACE
	FENCE LINE
	GUARDRAIL
	EASEMENT LINE
	CENTERLINE
	ROAD RIGHT OF WAY
	LOT LINE
	COUNTY BOUNDARY
	DLC BOUNDARY WIDTH
	STORM PIPE
	DITCH LINE
	PUBLIC WATER LINE
	SANITARY SEWER LINE
	FIBER OPTIC LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND POWER LINE
	CABLE TELEVISION LINE
	GAS LINE
	HIGH PRESSURE GAS
	SWALE/DITCH CENTERLINE
	CUT GRADING LIMIT
	FILL GRADING LIMIT
	TEMPORARY CONSTRUCTION EASEMENT

ABBREVIATIONS

CB	CATCH BASIN (INLET)	ELEV	ELEVATION	IR	IRON ROD	SW	SOUTHWEST
CL	CENTERLINE	EMB	EMBANKMENT	NE	NORTHEAST	Sq Ft	SQUARE FEET
CTR	CENTER	EQUA	EQUATION	NW	NORTHWEST	STD	STANDARD
CO	CLEANOUT	EXC	EXCAVATION	No.	NUMBER	STA	STATION
COMP	COMPACTED	EXTG	EXISTING	OBL	OBLITERATE	STL	STEEL
CONC	CONCRETE	FH	FIRE HYDRANT	OH/P/T/C	OVERHEAD///UTILITIES	ST	STREET
CONST	CONSTRUCT	FL	FLOW LINE	P	POWER	STRM	STORM
CONT	CONTINUOUS	FND	FOUND	PP	POWER (UTILITY) POLE	STR, STRUCT	STRUCTURE
COR	CORNER	FDTN	FOUNDATION	PPL	POWER POLE W/ LIGHT	SURF	SURFACING
Cu.Yd.	CUBIC YARD	FT	FEET	PER	PERPENDICULAR	T(1-3)	TOWNSHIP
CULV	CULVERT	GA	GAGE	PL	PLATE	T, TEL	TELEPHONE
DIA	DIAMETER	GALV	GALVANIZED	R(1-7)	RANGE	TEMP	TEMPORARY
DIST	DISTANCE	G V	GAS VALVE	REM	REMOVE	THKN	THICKNESS
DLC	DONATION LAND CLAIM	GAR	GARAGE	RT	RIGHT	TYP SECT	TYPICAL SECTION
DWG	DRAWING	GEN	GENERAL	R/W, ROW	RIGHT OF WAY	VAR	VARIABLE
DR	DRIVE	HT	HEIGHT	SAN	SANITARY	VERT	VERTICAL
DWY	DRIVEWAY	HWY	HIGHWAY	SECT	SECTION	W M	WILLAMETTE MERIDIAN
EA	EACH	HORIZ	HORIZONTAL	SEW	SEWER	WAT	WATER
E	EAST	IE	INVERT ELEV	SL	SLOPE	WAT M	WATER METER
EASE	EASEMENT (ALL PURPOSES)	IN PL	IN PLACE	S	SOUTH	WV	WATER VALVE
ELECT	ELECTRICAL	INST	INSTALL	SE	SOUTHEAST	W	WEST

SYMBOLS	
EXISTING	PROPOSED
	STREET LITE 2
	STREET LITE 1
	MAIL BOX
	TELEPHONE RISER
	TELEPHONE MANHOLE
	UTILITY POLE, GUY ANCHOR
	GB 2/GB-1 CATCH BASIN/CURB INLET
	DRAINAGE MANHOLE
	SANITARY MANHOLE
	GAS METER
	GAS VALVE
	FIRE HYDRANT
	WATER METER
	WATER VALVE
	EVERGREEN TREE
	DECIDUOUS TREE
	REMOVE TREE
	PLANT/BUSH
	HEDGE
	PAVEMENT
	PAVEMENT WIDENING
	STORMWATER ROCK GALLERY



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LEGEND, ABBREVIATIONS & STD. DRAWINGS

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DIRECTOR
 DAN JOHNSON

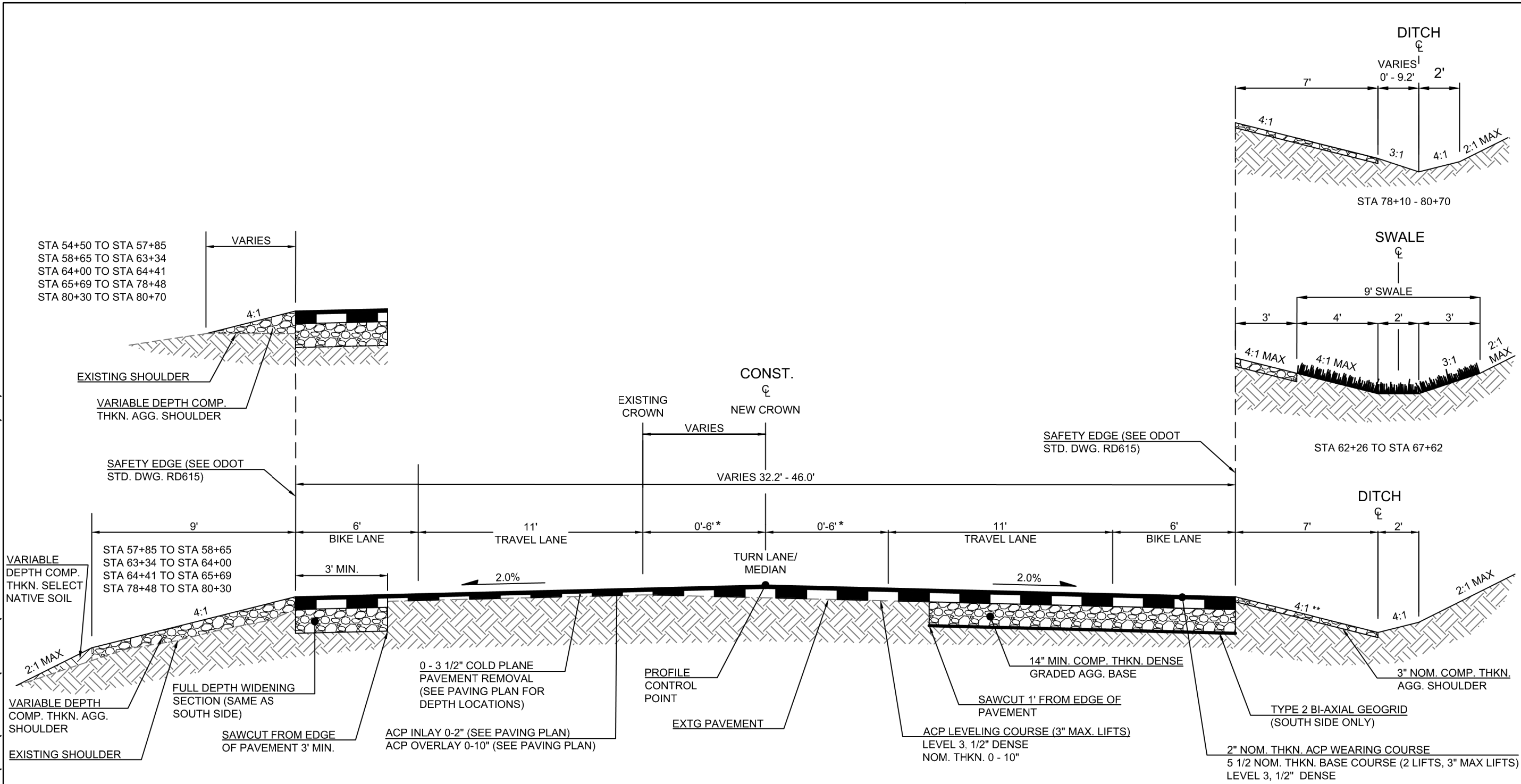
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PROJECT NO.: CL-300320344
DATE: 03/20/2023



REDLAND ROAD

NTS
STA 54+50 TO STA 80+70

NOTE:

1. ALL MEDIANS AND TURN LANES ARE STRIPED PER THE SIGNING & STRIPING PLAN ON SHEETS SS-01 - SS-02.
2. FOR ACP LEVELING DEPTHS, SEE PAVING PLAN SHEET TS-02.
3. EXISTING RIGHT OF WAY AND NEW PERMANENT AND TEMPORARY EASEMENTS ARE SHOWN IN ROADWAY PLAN SHEETS.
4. FOR ADDITIONAL SWALE AND DITCH SECTION WITH STORMWATER ROCK GALLERY, SEE SHT. SW-01.
5. CONTACT WILLIAMS GAS MINIMUM 72 HOURS IN ADVANCE OF ANY WORK INSIDE THE GAS LINE EASEMENT. SEE NOTES ON SHEET G-03.

* STA 56+47 TO STA 62+24 - TAPERS FROM 2' MEDIAN TO 12' WIDTH AT S FERGUSON ST
 STA 64+73 TO STA 67+67 - TAPERS FROM 12' WIDTH TO 2' MEDIAN SECTION
 STA 71+23 TO STA 74+06 - TAPERS FROM 2' MEDIAN TO 12' WIDTH AT S BRADLEY ST
 STA 77+46 TO STA 80+20 - TAPERS FROM 12' WIDTH TO 2' MEDIAN SECTION

** STA 69+27 TO STA 71+22 - SLOPE VARIES - 4:1 MAX



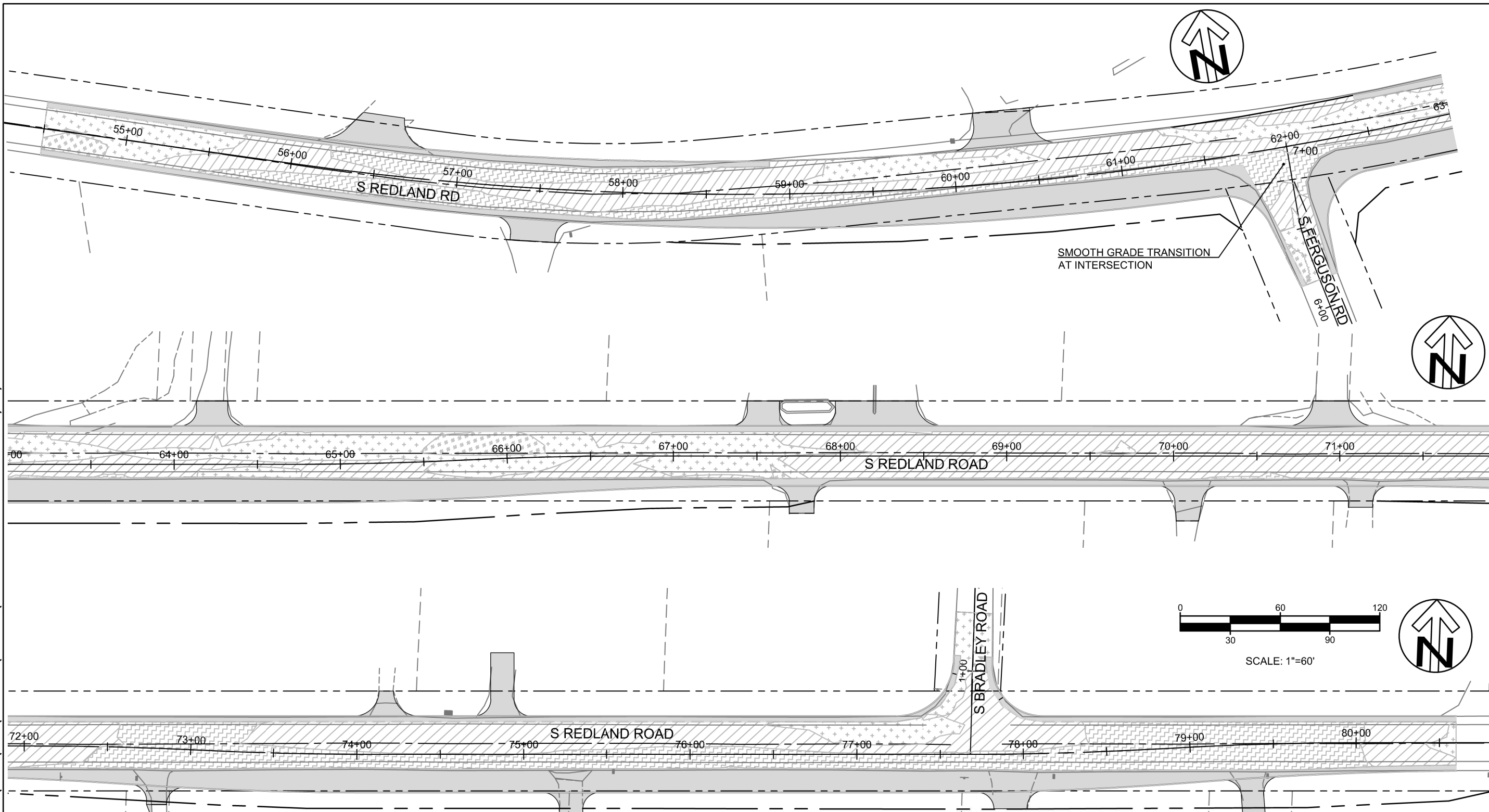
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TYPICAL SECTIONS	
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY	
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DIRECTOR DAN JOHNSON
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PROJECT NO.: CL-300320344 DATE: 03/20/2023	

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HATCHING LEGEND

	7 1/2" ACP ROADWAY WIDENING SECTION (3" ACP DRIVEWAY APPROACHES)		0 - 3 1/2" ACP LEVELING COURSE (3" MAX. LIFTS)
	0 - 2" COLD PLANE PAVEMENT REMOVAL (PAY ITEM UNDER 0 - 4" CPPR)		0 - 10" ACP LEVELING COURSE (3" MAX. LIFTS)
	0 - 3 1/2" COLD PLANE PAVEMENT REMOVAL (PAY ITEM UNDER 0 - 4" CPPR)		

NOTES

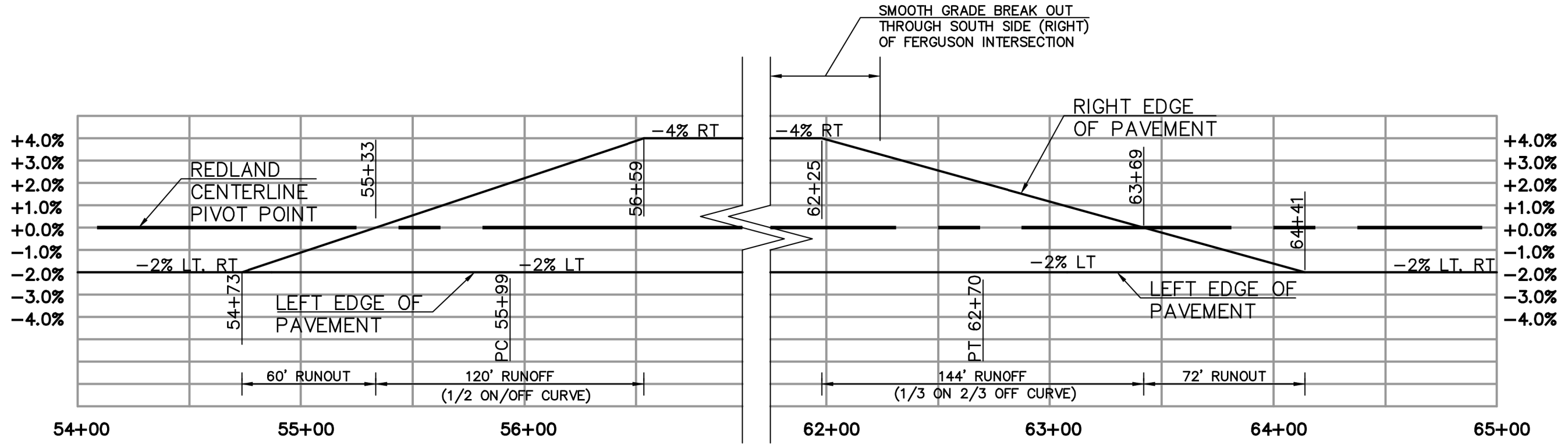
1. THE INTENT OF THE PAVING PLAN IS TO SCHEMATICALLY INDICATE THE DIFFERENT AREAS OF PAVEMENT CONSTRUCTION, COLD PLANE PAVEMENT REMOVAL, AND ACP LEVELING. BID QUANTITIES FOR COLD PLANE PAVEMENT REMOVAL WERE INCREASED TO SQUARE OFF AREA SHOWN, INCLUDING ADDITIONAL ASPHALT PAVEMENT.
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. A FINISH GRADE SURFACE MODEL OF THE PAVING WILL BE PROVIDED.
4. THE LEVELING COURSE DEPTHS SHOWN IN THE LEGEND ARE FROM 2" BELOW THE FINISH GRADE SURFACE TO THE EXISTING PAVEMENT SURFACE.
5. THE FINAL 2" WEARING COURSE COVERS THE ENTIRE ROADWAY SURFACE.



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PAVING PLAN	
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY	
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SUPERELEVATION CHART
NTS

SUPERELEVATION CHART
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

DATE: 03/20/2023 PROJECT NO.: CL-300320344

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EROSION & SEDIMENT CONTROL NOTES

1. THE CONSTRUCTION NOTES AND DETAILS SHOWN ON THIS PLAN REFLECT RECOMMENDED PROCEDURES AS ADDRESSED IN THE "EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL" BY CLACKAMAS COUNTY WATER ENVIRONMENTAL SERVICES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
3. THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE ENGINEER, AND VEGETATION/LANDSCAPING IS ESTABLISHED.
4. IT IS THE INTENT OF THESE PLANS TO SHOW POSSIBLE APPLICATIONS OF RECOMMENDED PROCEDURES IN THE EVENT THAT EROSION CONTROL IS NEEDED. ALL RECOMMENDED PROCEDURES ARE DEPENDENT ON CONSTRUCTION METHODS, STAGING, SITE CONDITIONS, WEATHER, AND SCHEDULING. THE PROCEDURES SHOWN ON THE PLANS ARE NOT INTENDED TO BE EXCLUSIVE OF ALL THE PROTECTION REQUIRED IN AN AREA AT A PARTICULAR INSTANT. THEY SHOULD BE USED AS A GUIDELINE ONLY.
5. EROSION CONTROL MEASURES ARE SHOWN FOR GENERAL PURPOSES. THE CONTRACTOR SHALL ADJUST EROSION CONTROL AS NEEDED.
6. THE BOUNDARIES OF THE CLEARING/GRADING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO CONSTRUCTION. REFER TO THE SPECIFICATIONS FOR FURTHER DETAIL.
7. THE CONTRACTOR IS RESPONSIBLE FOR CONTROL OF SEDIMENT TRANSPORT WITHIN PROJECT LIMITS DURING CONSTRUCTION. IF AN INSTALLED EROSION CONTROL SYSTEM DOES NOT ADEQUATELY CONTAIN SEDIMENT ON SITE, THEN THE EROSION CONTROL MEASURES MUST BE FIELD ADJUSTED BY THE CONTRACTOR AS NECESSARY FOR EXPECTED STORM EVENTS TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
8. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
9. TEMPORARY EROSION CONTROL METHODS MUST REMAIN AND BE MAINTAINED UNTIL PERMANENT EROSION CONTROL METHODS ARE IN PLACE AND OPERATIONAL. THESE METHODS SHALL BE REMOVED ONCE SOIL STABILIZATION HAS BEEN ACHIEVED PER THE ENGINEER.
10. ADDITIONAL INTERIM MEASURES SHALL BE INSTALLED AS NECESSARY TO PREVENT SEDIMENT OR SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE IN ACCORDANCE WITH THE "EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL" BY CLACKAMAS COUNTY WATER ENVIRONMENT SERVICES (WES). THESE MEASURES WILL BE INSTALLED ALONG EXPOSED SOIL TO PREVENT SEDIMENT TRANSPORT.
11. THE ESC FACILITIES SHALL BE INSPECTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
12. THE CONTRACTOR SHALL HYDROSEED ALL CUT AND FILL SLOPES, AND ALL DISTURBED GROUND AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HYDROSEED AREAS UNTIL VEGETATION UPON THEM IS ESTABLISHED. ANY ADDITIONAL HYDROSEEDING NECESSARY TO ESTABLISH VEGETATION SHALL BE DONE BY THE CONTRACTOR.
13. ALL BARE SOIL SHALL BE RE-SEEDED, COVERED WITH AN APPROPRIATE EROSION CONTROL STRAW BLANKET AND FERTILIZED. WHERE RAPID GERMINATION IS REQUIRED, USE THE ANNUAL RYGRASS BLEND AS RECOMMENDED IN THE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
14. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF ALL ADJACENT PROPERTIES AND DOWNSTREAM FACILITIES FROM EROSION AND SILTATION DURING THE COURSE OF THE WORK. ANY DAMAGE RESULTING FROM SUCH EROSION AND SILTATION SHALL BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR.

15. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. IF CONSTRUCTION OCCURS DURING WET WEATHER; HAUL ROADS AND OTHER HIGH USE TRAFFIC AREAS SHALL BE PROTECTED BY AT LEAST 18" OF 3"-0 CRUSHED ROCK UNDERLAIN BY A WOVEN GEOTEXTILE, SUCH AS AMOCO 2006, MIRAFI 600X, OR EQUIVALENT.
16. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, WHERE ON-SITE OR OFF-SITE DAMAGE IS LIKELY TO OCCUR, ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:
 - MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.
 - THE SITE IS SPRINKLED WITH WATER UNTIL SURFACE IS WET. REPEAT AS NEEDED TO PREVENT THE CARRY OUT OF MUD ONTO STREET, REFER TO STABILIZED CONSTRUCTION ENTRANCE DETAILS.
 - SPRAY EXPOSED SOILS WITH A DUST PALLIATIVE. NOTE, USED OIL IS PROHIBITED AS A PALLIATIVE.
17. PRIOR TO ANY SITE EXCAVATION, ALL EXISTING AND NEWLY CONSTRUCTED STORM DRAINAGE INLETS SHALL BE PROTECTED AS SHOWN ON THE DETAIL SHEETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. CLEAN THE FILTER AS NECESSARY TO MAINTAIN DRAINAGE. PROVIDE APPROVED TRAFFIC CONTROL DEVICES AS NECESSARY. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.
18. AT NO TIME SHALL MORE THAN 12" OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
19. STORM DRAIN INLETS, BASINS, AND AREA DRAINS SHALL BE PROTECTED UNTIL PAVEMENT SURFACES ARE COMPLETED AND/OR VEGETATION IS RE-ESTABLISHED.
20. PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.



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EROSION & SEDIMENT CONTROL NOTES

REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

PROJECT NO.: CL-300320344

DATE: 03/20/2023

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
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150 BEAVERCREEK ROAD
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DAN JOHNSON
DIRECTOR

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REVISIONS

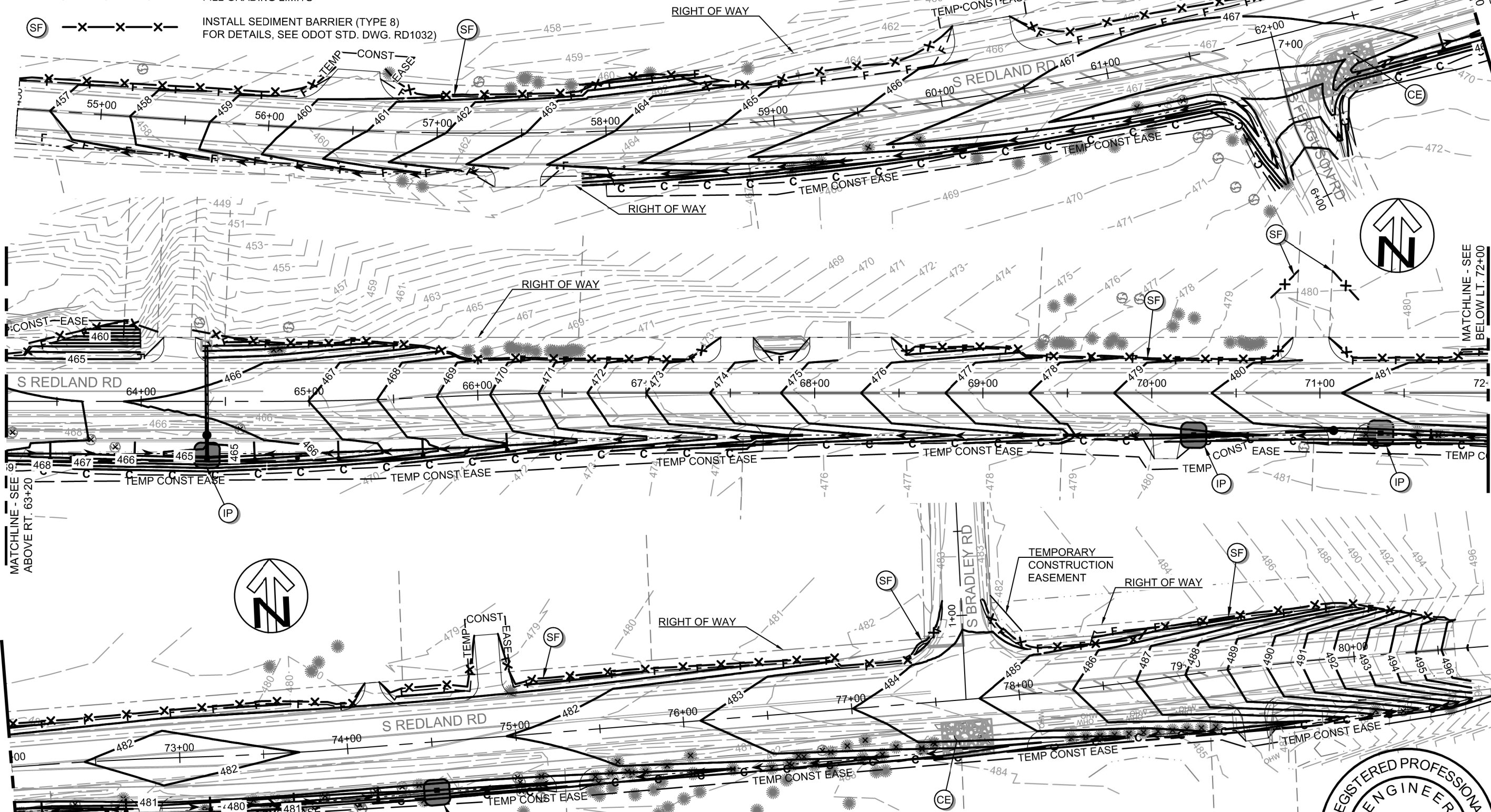
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Sheet No. EC-01

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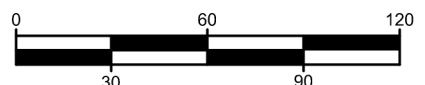
PLAN LEGEND

- 200 --- EXISTING CONTOUR
- C - C - C CUT GRADING LIMITS
- F - F - F FILL GRADING LIMITS
- (SF) - X - X - X INSTALL SEDIMENT BARRIER (TYPE 8)
FOR DETAILS, SEE ODOT STD. DWG. RD1032)



PLAN LEGEND

- (CE) CONSTRUCT GRAVEL CONSTRUCTION ENTRANCE. CONTRACTOR TO PROVIDE FINAL LOCATION BASED ON STAGING (FOR DETAILS, SEE ODOT STD. DWG. RD1000)
- (IP) INSTALL INLET PROTECTION (TYPE 4) (FOR DETAILS, SEE ODOT STD. DWG. RD1015)



SCALE: 1"=60'



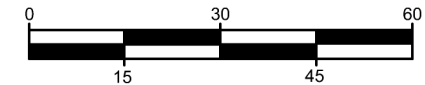
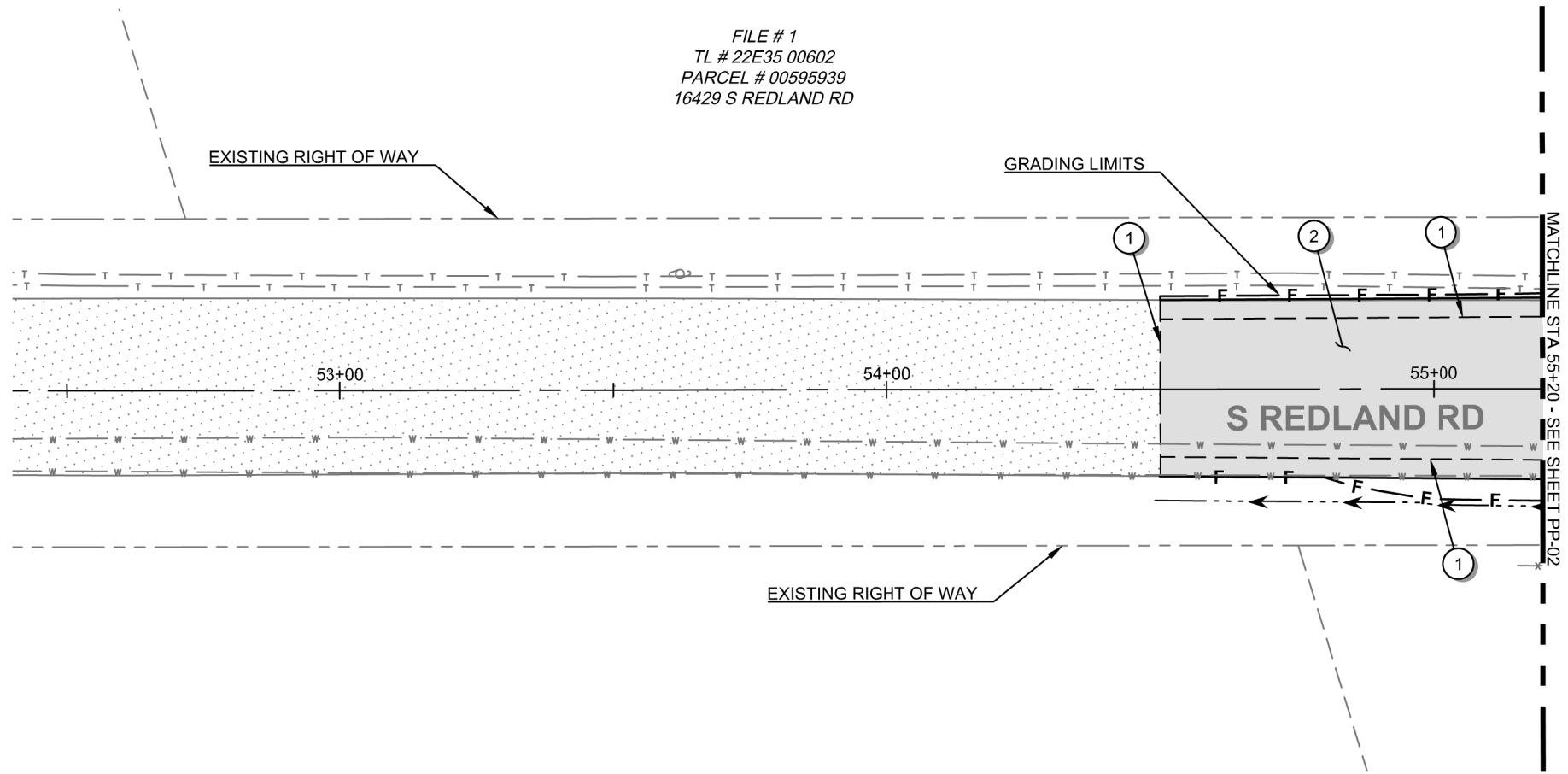
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Portland, OR 97239
503.248.1939
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EXPIRES: 12/31/2024

EROSION & SEDIMENT CONTROL PLAN										
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY										
<p>CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045</p>	<p>DIRECTOR DAN JOHNSON</p>									
<p>DESIGNED BY: PPG DRAFTED BY: PPG CHECKED BY: KSR</p>	<p>PROJECT NO.: CL-300320344 DATE: 03/20/2023</p>									
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<p>Sheet No. EC-02</p>										

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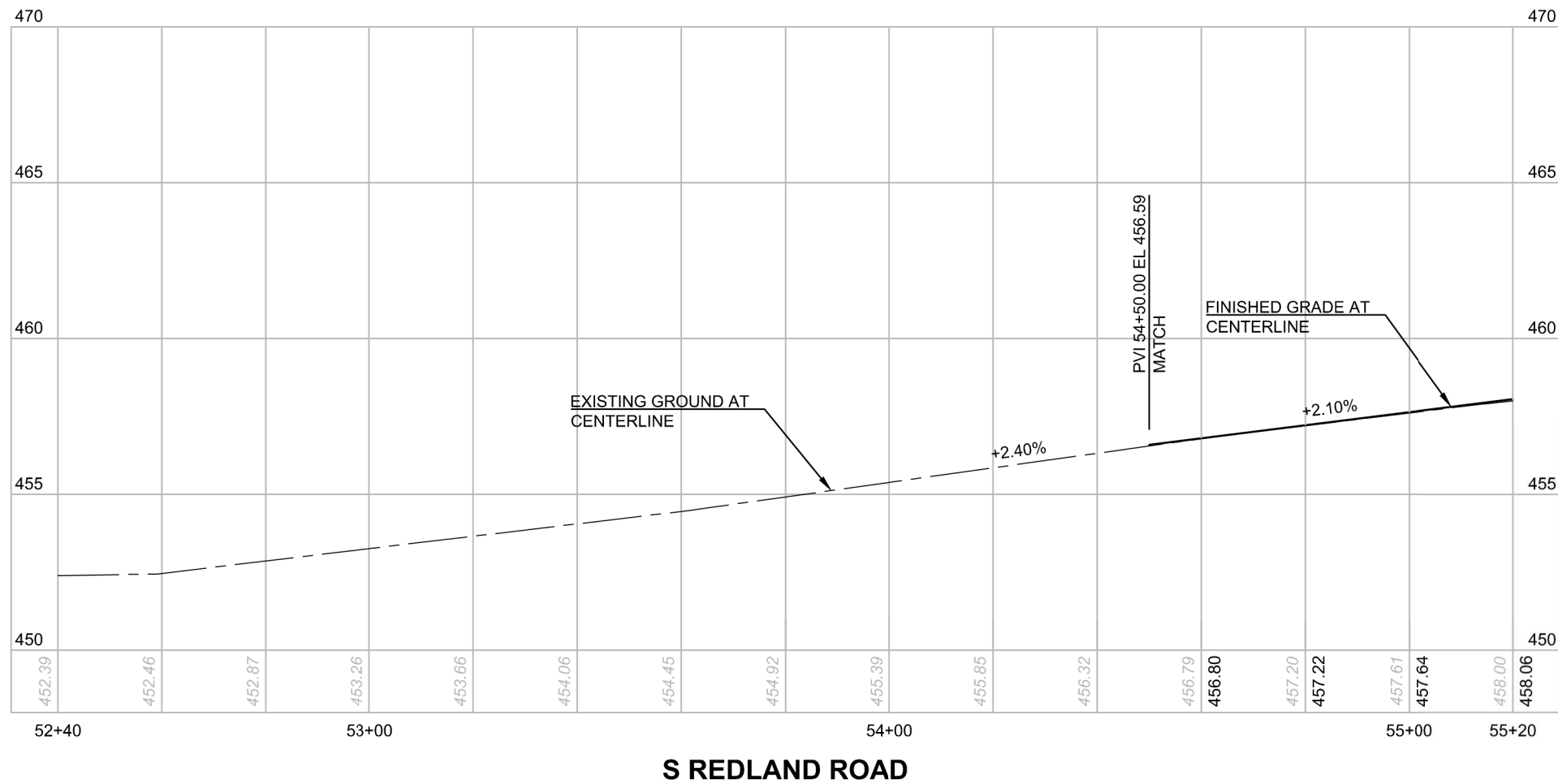
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 16429 S REDLAND RD



SCALE: 1"=30'

CONSTRUCTION NOTES:

- ① SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCDDT STD. DWG. U275)
- ② CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)



ROADWAY PLAN & PROFILE
 REDLAND ROAD TURN LANES AT
 FERGUSON & BRADLEY

PROJECT NO.: CL-300320344
 DATE: 03/20/2023

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

DESIGNED BY: MDB
 DRAFTED BY: PPG
 CHECKED BY: KSR

REVISIONS

NO. DATE:
 Sheet No. PP-01

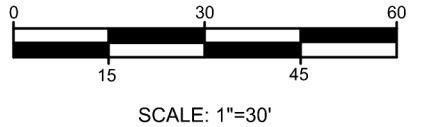
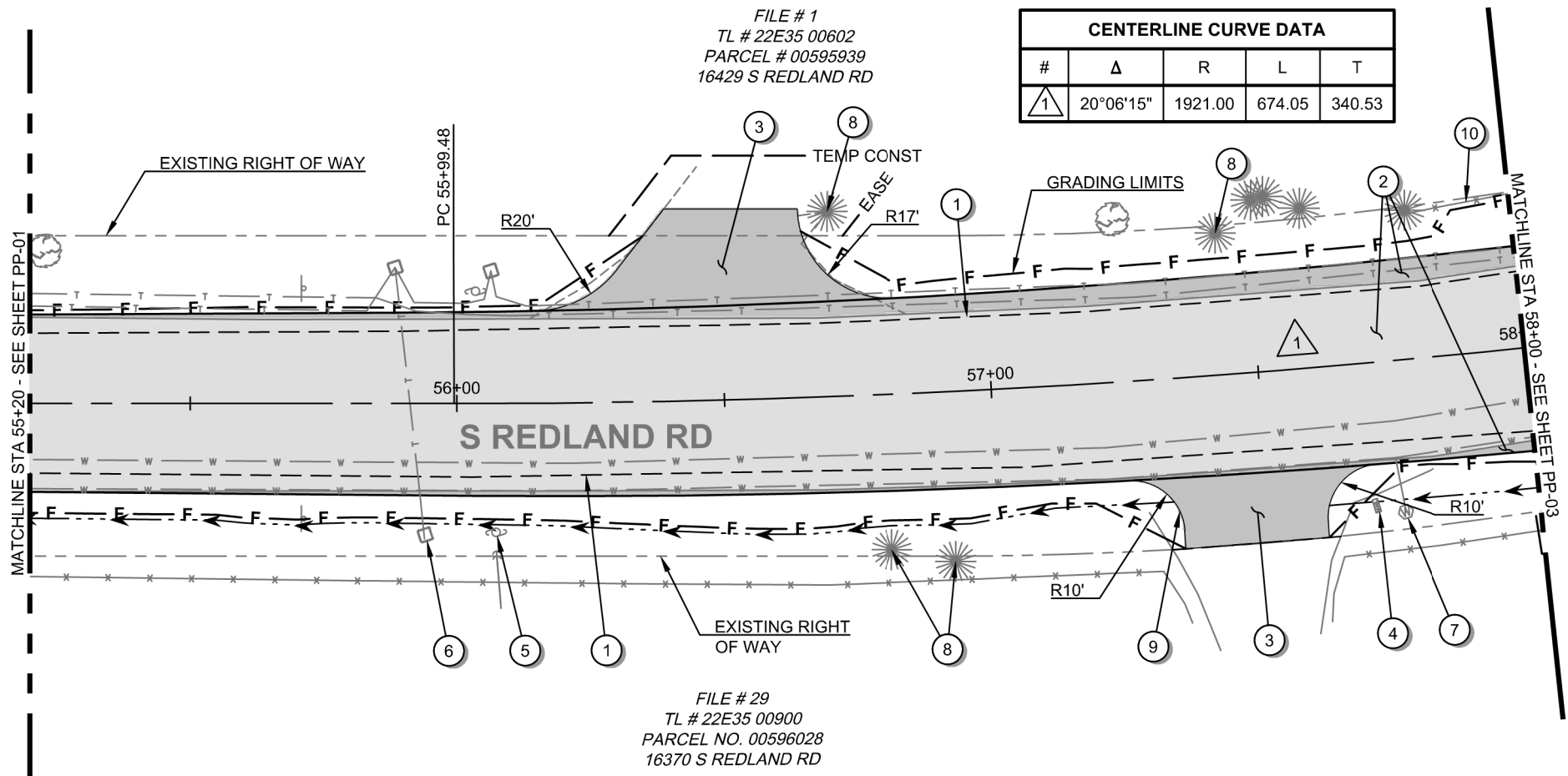


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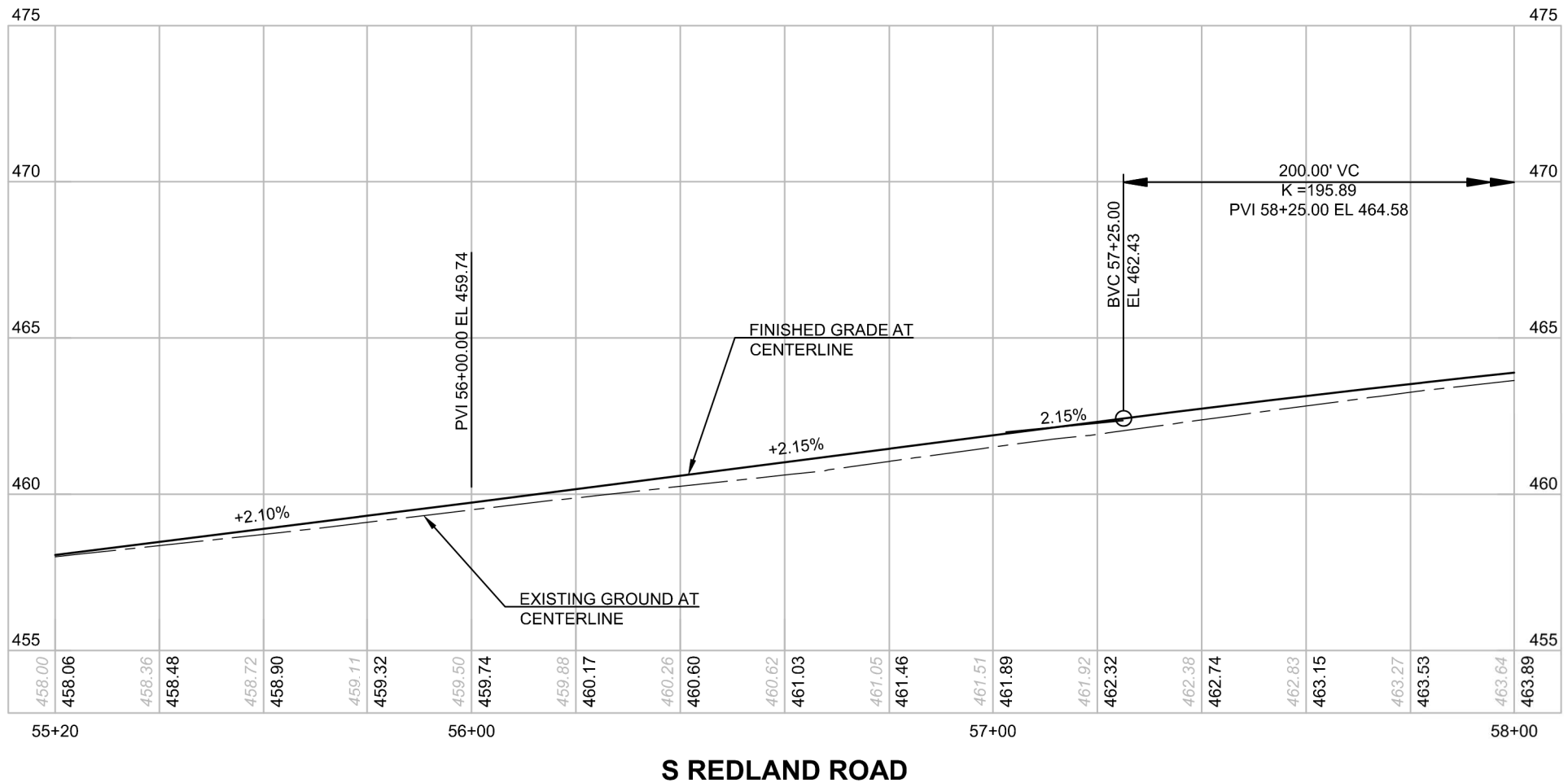
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CONSTRUCTION NOTES:

- ① SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCTD STD. DWG. U275)
- ② CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- ③ CONSTRUCT DRIVEWAY APPROACH - 2 (FOR DETAILS, SEE CCTD STD. DWG. D500)
- ④ REMOVE AND REINSTALL MAILBOX ON NEW SINGLE SUPPORT (FOR DETAILS, SEE ODOT STD. DWG. RD100 & RD101)
- ⑤ PROTECT UTILITY POLE
- ⑥ PROTECT TELEPHONE RISER
- ⑦ PROTECT WATER METER
- ⑧ PRESERVE AND PROTECT TREE
- ⑨ PROTECT ROCK BOULDERS ALONG DRIVEWAY EDGES. PAVE APPROACH UP TO BOULDERS.
- ⑩ PROTECT FENCE



ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

CLACKAMAS COUNTY
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DAN JOHNSON

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CHECKED BY: KSR

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NO. DATE:

Sheet No.
PP-02

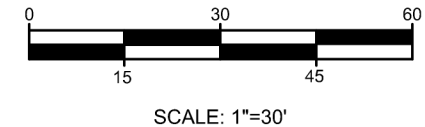
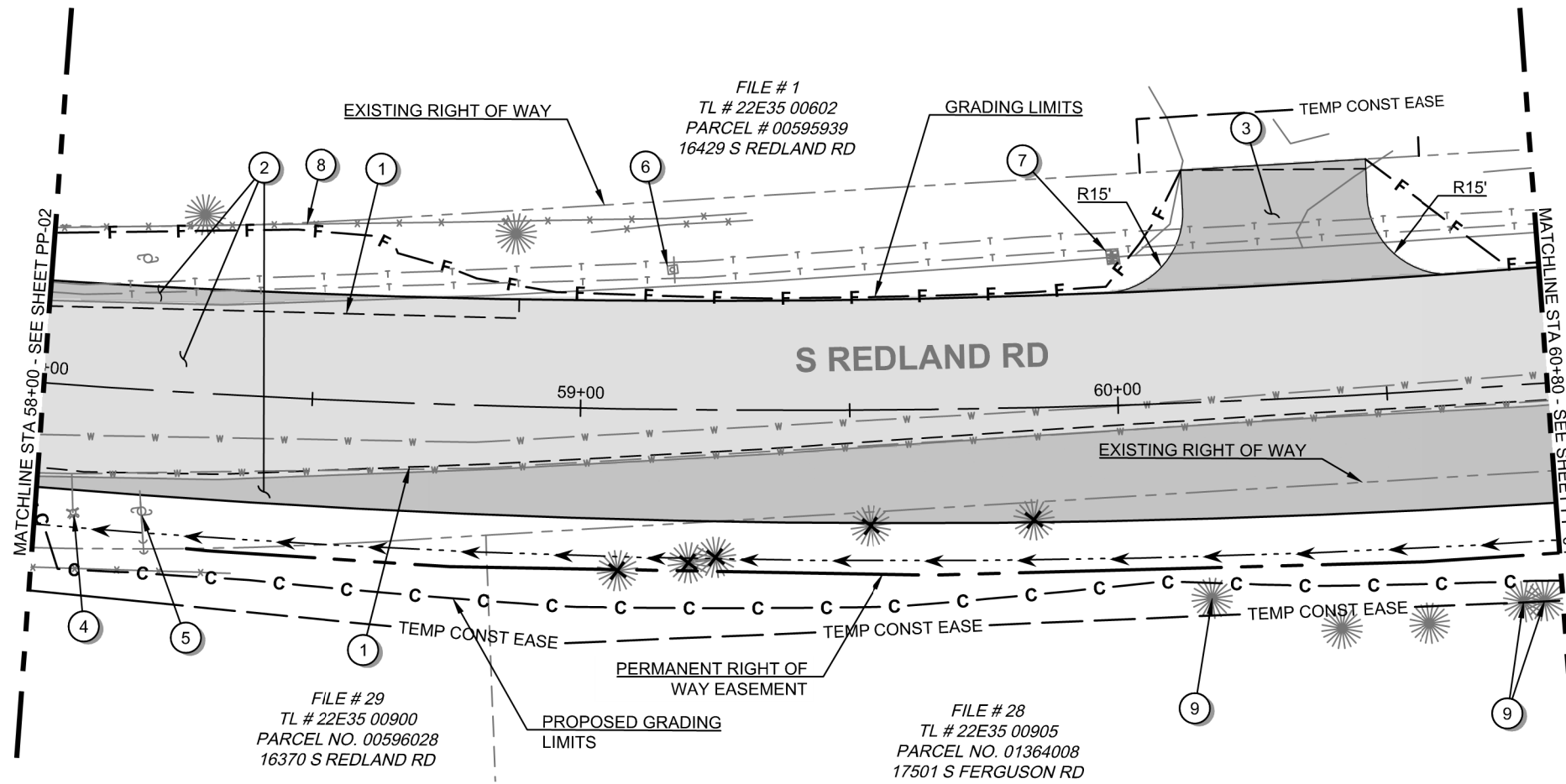
PROJECT NO.: CL-300320344
DATE: 03/20/2023



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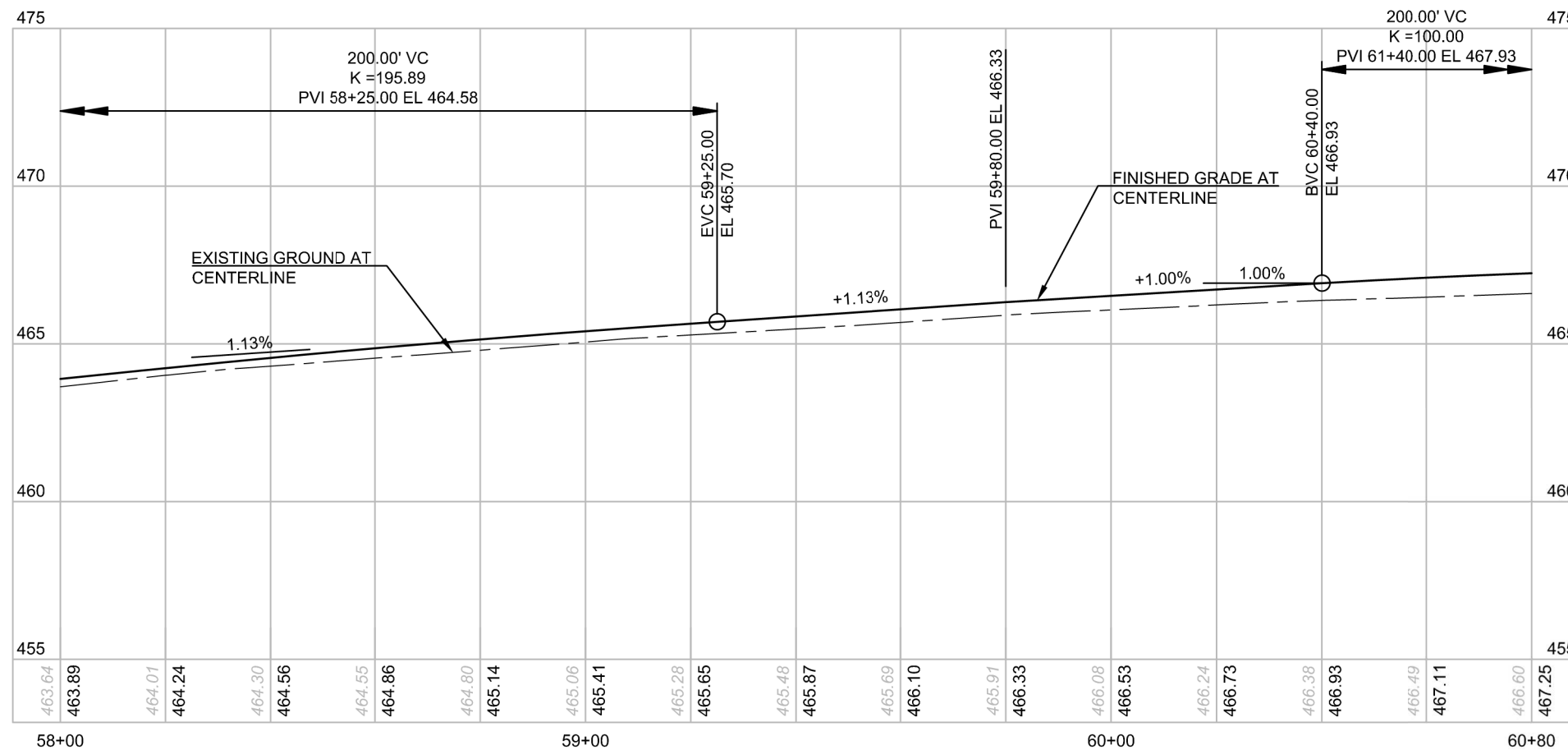
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- ① SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCTD STD. DWG. U275)
- ② CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- ③ CONSTRUCT DRIVEWAY APPROACH (FOR DETAILS, SEE CCTD STD. DWG. D500)
- ④ PROTECT HYDRANT ASSEMBLY
- ⑤ RELOCATE UTILITY POLE (BY OTHERS)
- ⑥ PROTECT SIGN
- ⑦ PROTECT MAILBOX
- ⑧ PROTECT FENCE
- ⑨ PRESERVE AND PROTECT TREE

TREE REMOVAL

LOCATION	TYPE	SIZE (in)
59+07 (30' R)	E	12
59+20 (28' R)	E	12
59+25 (27' R)	E	18
59+54 (22' R)	E	12
59+84 (21' R)	E	12

E = EVERGREEN TOTAL = 5 TREES
D = DECIDUOUS



S REDLAND ROAD

ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

PROJECT NO.: CL-300320344

DATE: 03/20/2023

CLACKAMAS COUNTY

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



DIRECTOR

DAN JOHNSON

DESIGNED BY:
MDB

DRAFTED BY:
PPG

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KSR

REVISIONS

NO DATE:

Sheet No.

PP-03

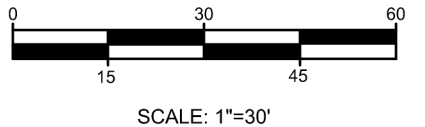
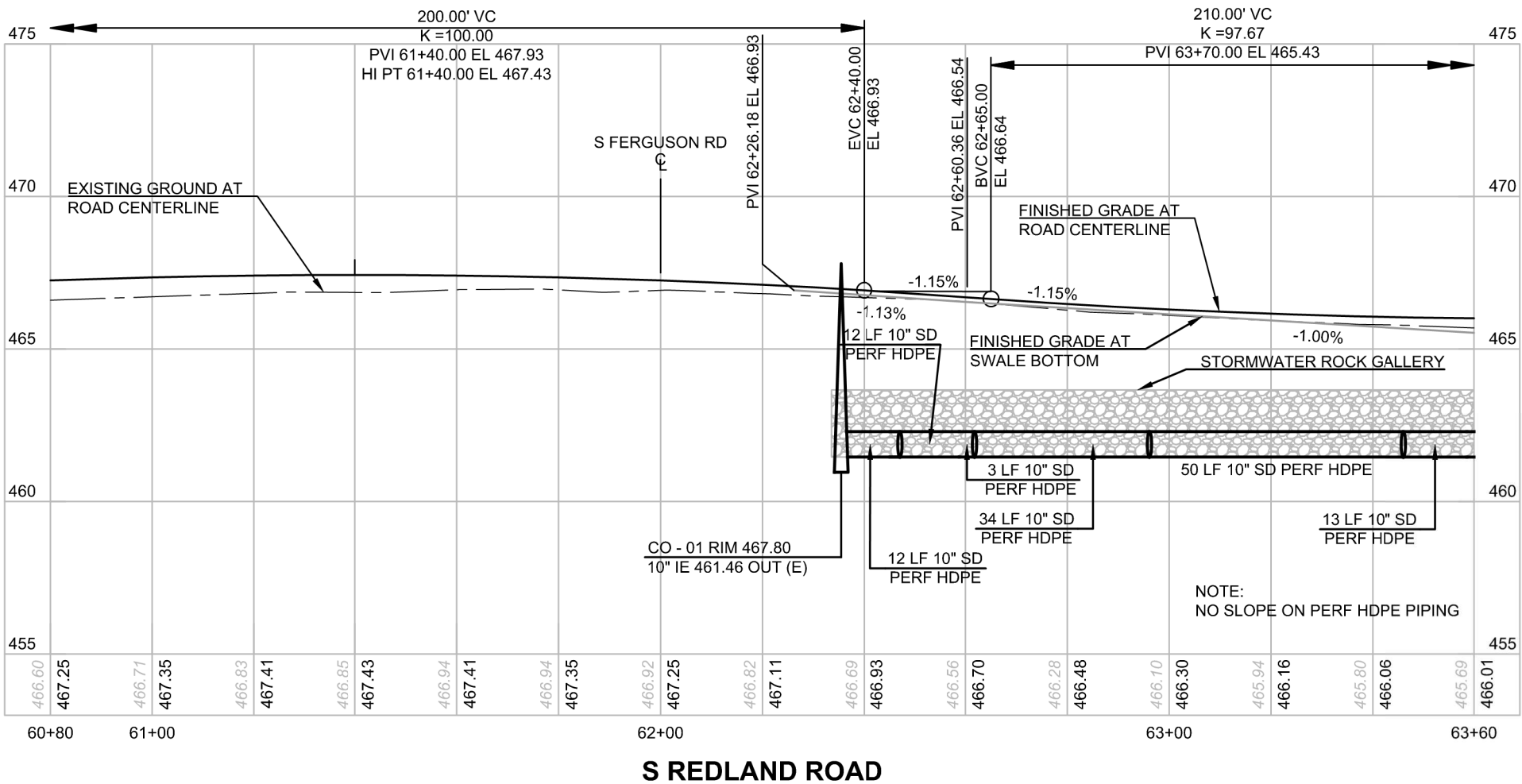
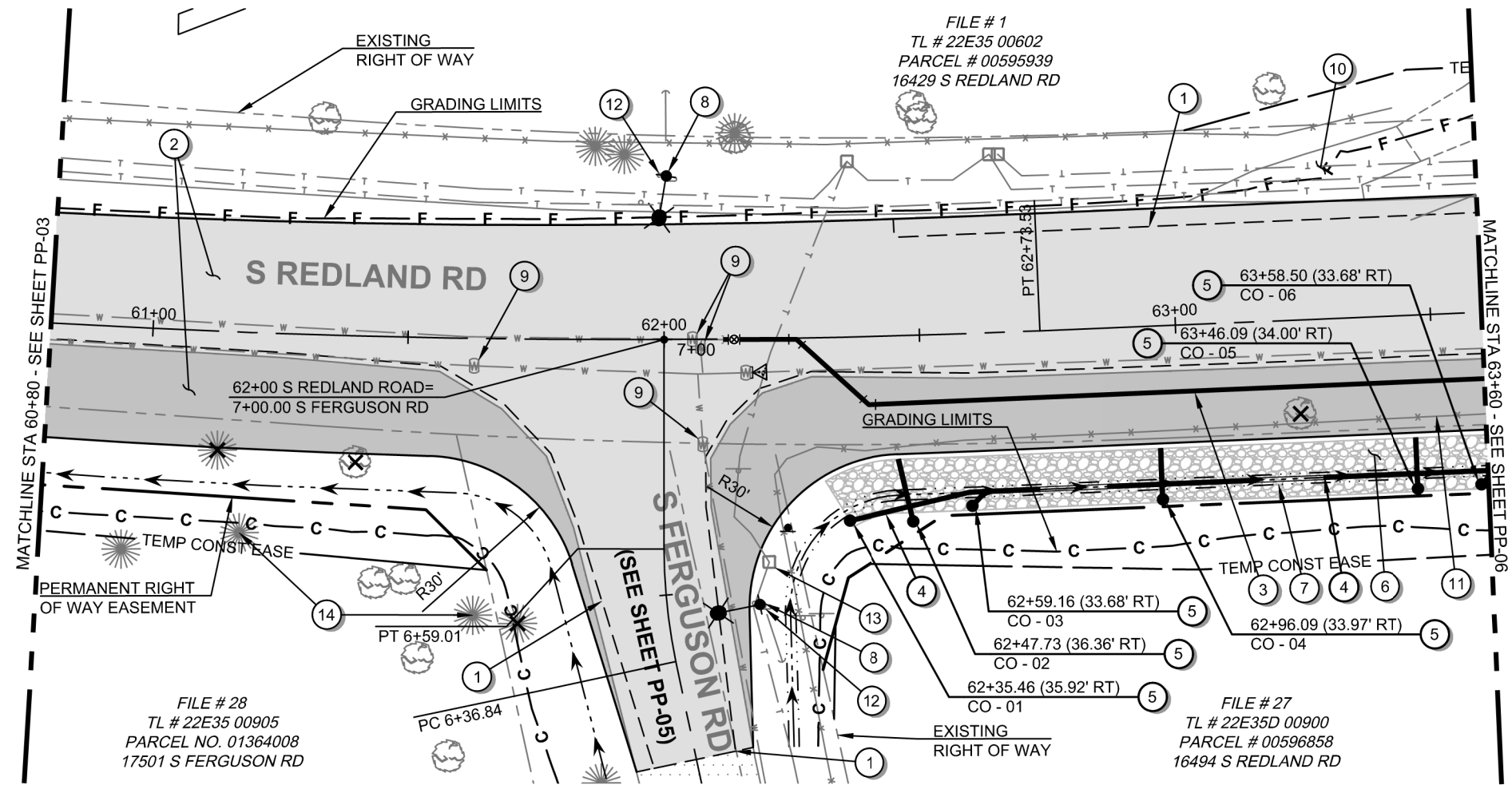


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CONSTRUCTION NOTES:

- ① SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCDTD STD. DWG. U275)
- ② CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- ③ CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- ④ INSTALL 10" PERFORATED PIPE ON MAINLINE AND LATERALS
- ⑤ INSTALL CLEANOUT AND CONCRETE COLLAR TO FINISHED GRADE SLOPE (FOR DETAILS, SEE WES STD. DWG. ST-4.0) - 6
- ⑥ CONSTRUCT STORMWATER ROCK GALLERY (FOR DETAILS, SEE SHT. SW-01)
- ⑦ CONSTRUCT WATER QUALITY SWALE (FOR DETAILS, SEE SHTS TS-01 & SW-01)
- ⑧ INSTALL LUMINAIRE ON EXISTING UTILITY POLE (SEE ILLUMINATION PLANS)
- ⑨ ADJUST WATER VALVE BOXES TO FINISH GRADE - 4
- ⑩ REMOVE EXISTING GRAVEL DRIVEWAY AND REGRADE WITH SHOULDER. (FOR DETAILS, SEE SHT. TS-01)
- ⑪ REMOVE FENCE
- ⑫ PROTECT UTILITY POLE
- ⑬ RELOCATE TELEPHONE RISER (BY OTHERS)
- ⑭ PRESERVE AND PROTECT TREE

TREE REMOVAL

LOCATION	TYPE	SIZE (in)
61+14 (23' R)	E	18
61+40 (25' R)	D	18
61+72 (56' R)	E	6
63+24 (18' R)	D	36

E = EVERGREEN
D = DECIDUOUS
TOTAL = 5 TREES



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ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

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

DIRECTOR
DAN JOHNSON

DESIGNED BY: MDB
DRAFTED BY: PPG
CHECKED BY: KSR

NO DATE:

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Sheet No. PP-04

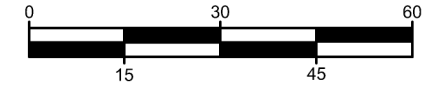
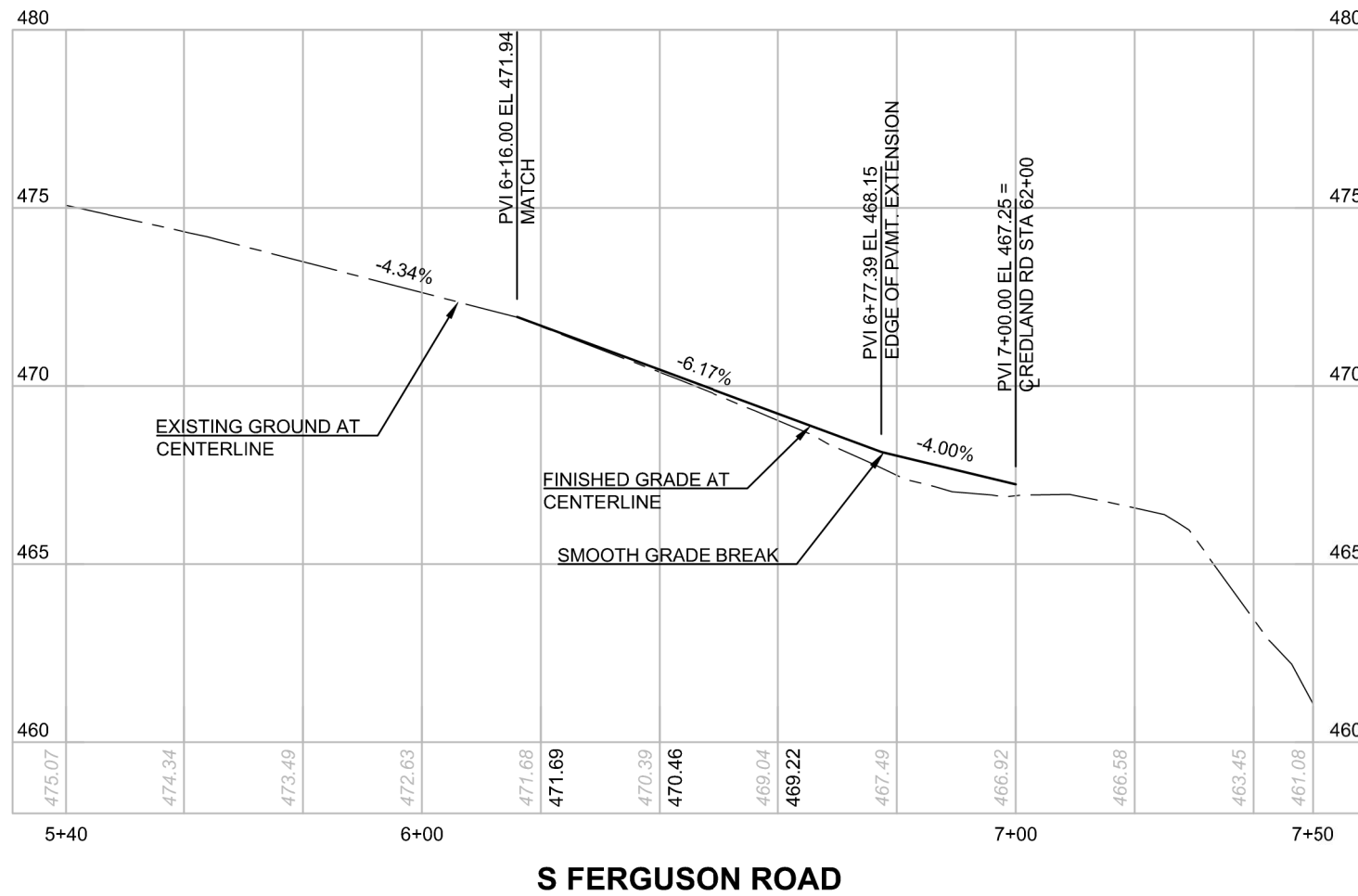
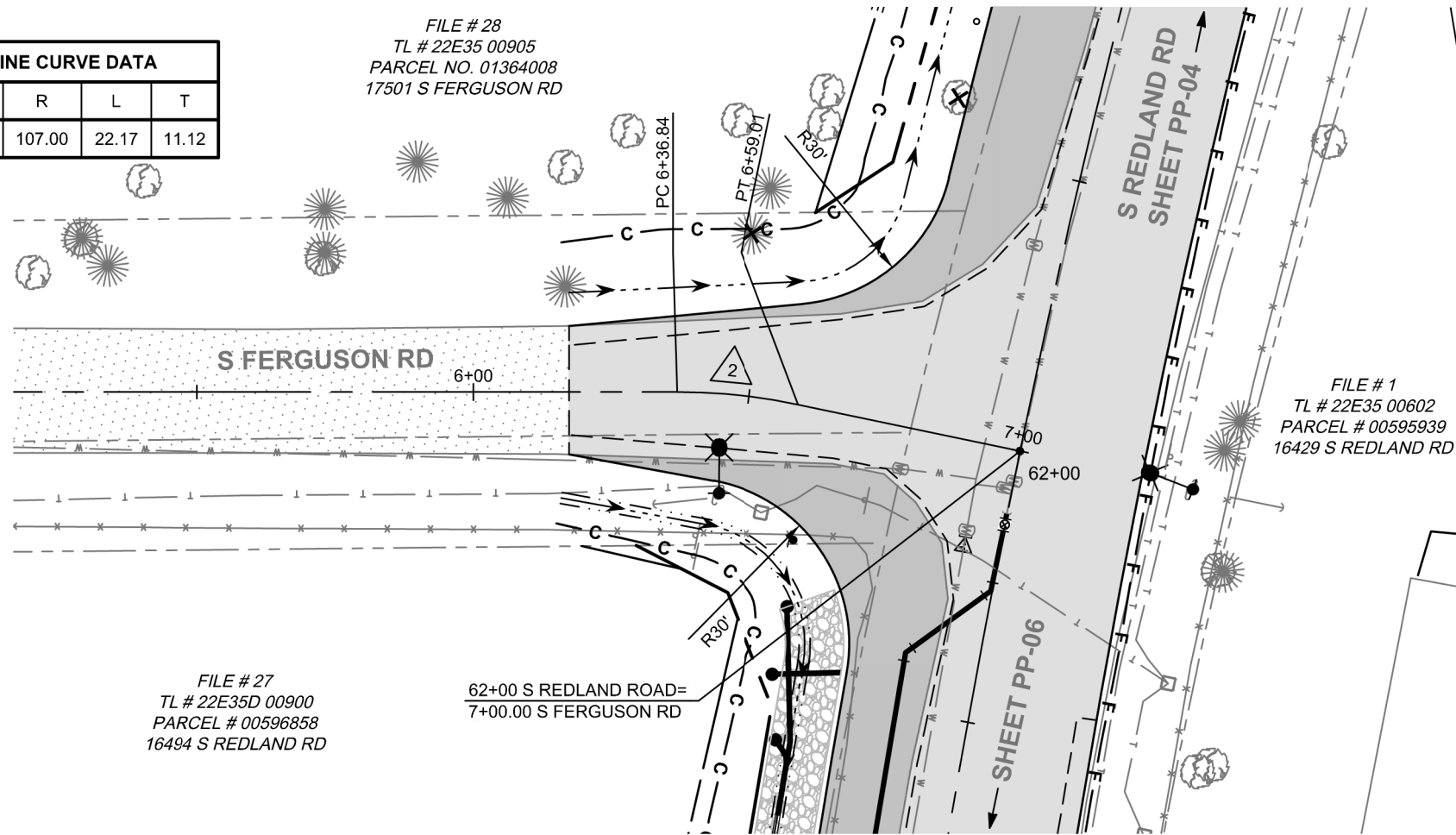
PROJECT NO.: CL-300320344
DATE: 03/20/2023

EXPIRES: 12/31/2024

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SCALE: 1"=30'

CONSTRUCTION NOTES:

SEE NOTES ON SHT. PP-04

ROADWAY PLAN & PROFILE
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

PROJECT NO.: CL-300320344
DATE: 03/20/2023

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150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR
DAN JOHNSON

DESIGNED BY: MDB
DRAFTED BY: PPG
CHECKED BY: KSR

REVISIONS

NO	DATE	DESCRIPTION

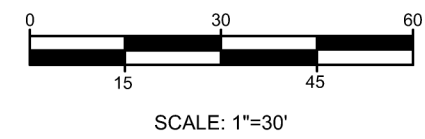
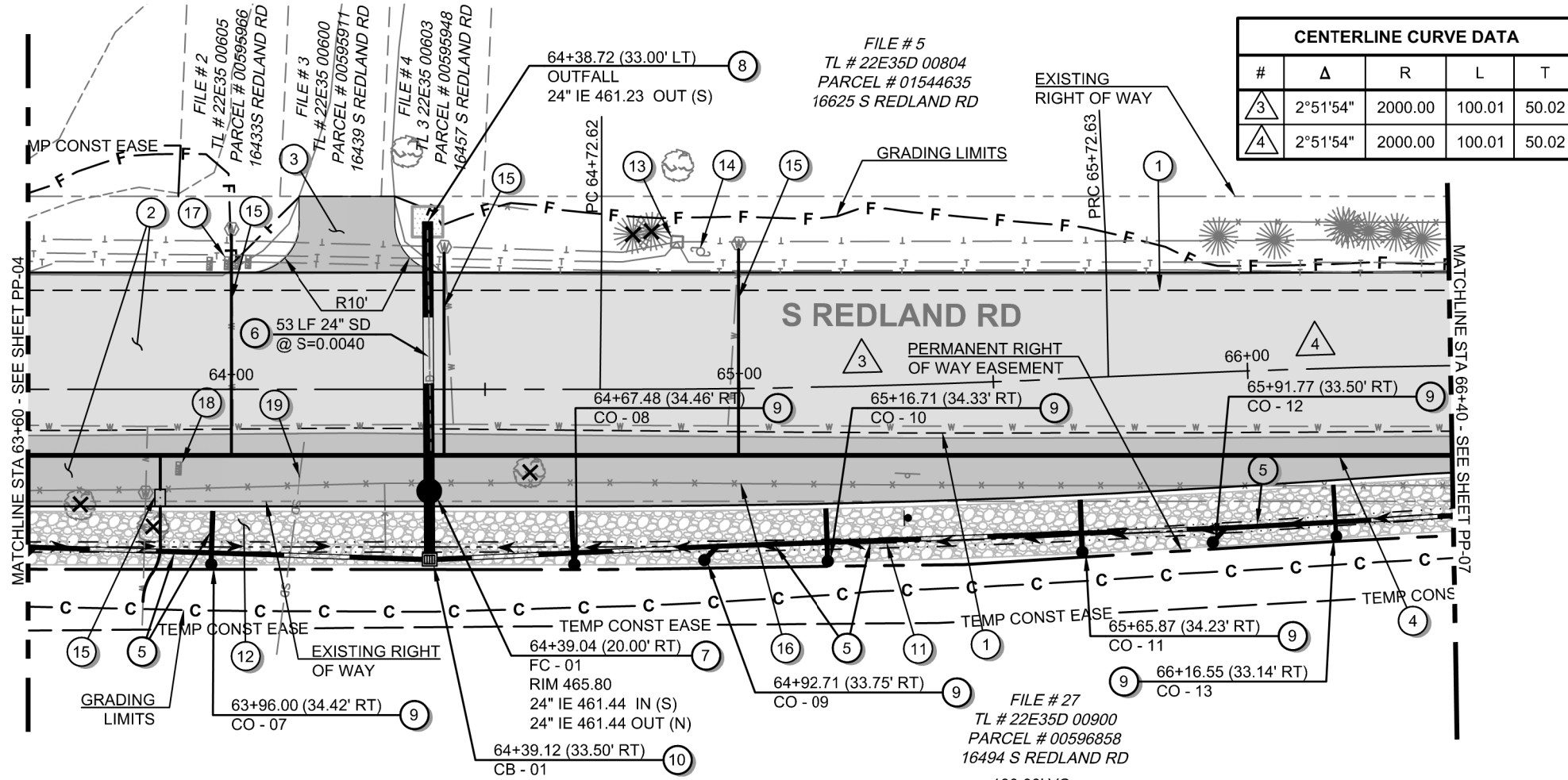
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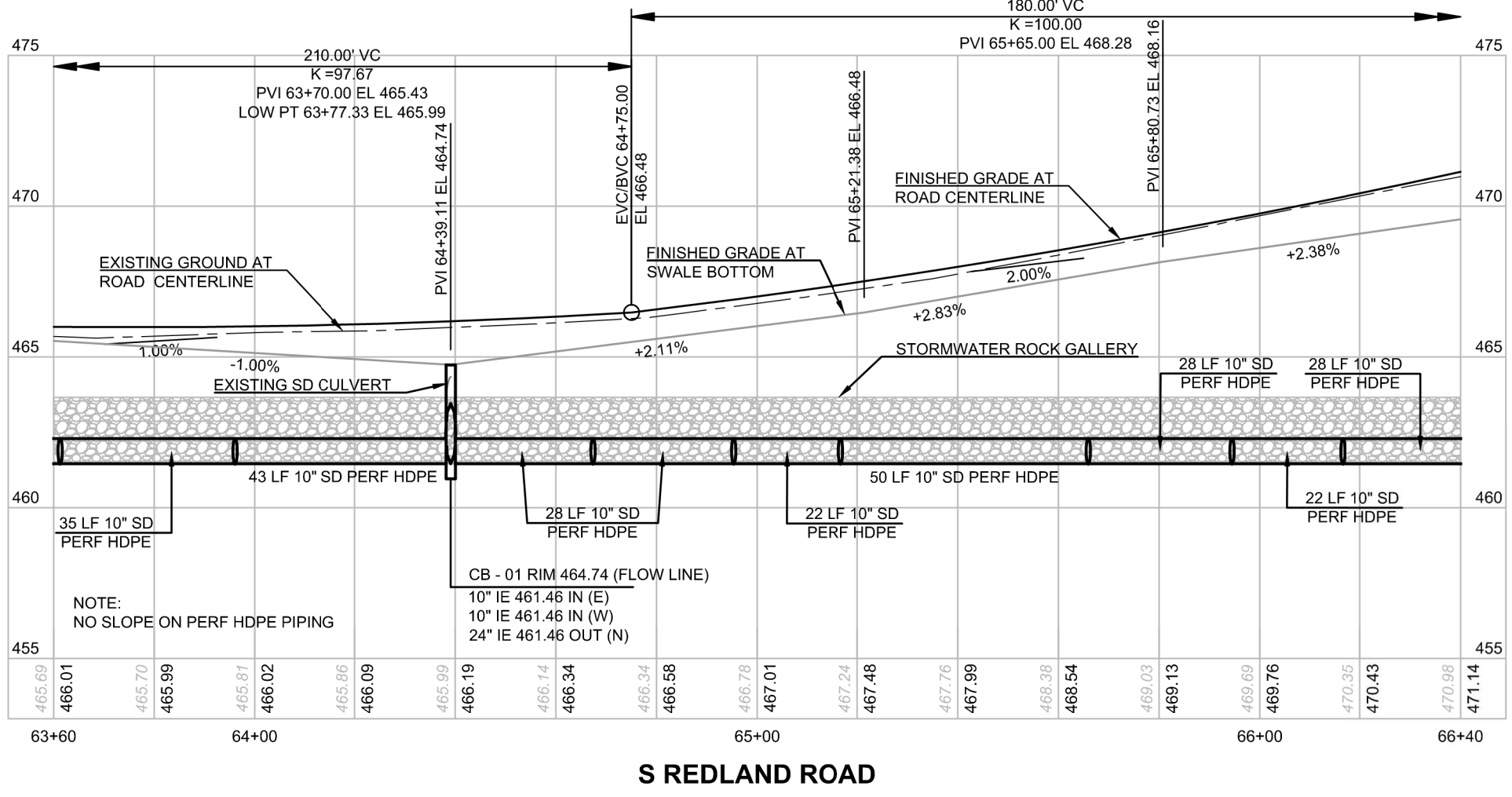


EXPIRES: 12/31/2024



CONSTRUCTION NOTES:

- 1 SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCTD STD. DWG. U275)
- 2 CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- 3 CONSTRUCT DRIVEWAY APPROACH (FOR DETAILS, SEE CCTD STD. DWG. D500)
- 4 CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- 5 INSTALL 10" PERFORATED PIPE ON MAIN LINE AND LATERALS. 50' LATERAL SPACING
- 6 REPLACE EXISTING 24" STORM PIPE. (FOR DETAILS SEE SHT. SW-01)
- 7 CONSTRUCT FLOW CONTROL MANHOLE (FOR DETAILS, SEE SHT. SW-02)
- 8 CONSTRUCT OUTFALL BASIN (FOR DETAILS, SEE SHT. SW-01 AND ODOT STD. DWG. RD317)
- 9 INSTALL CLEANOUT AND CONCRETE COLLAR TO FINISHED GRADE SLOPE - 7 (FOR DETAILS, SEE WES STD. DWG. ST-4.0)
- 10 CONSTRUCT DITCH INLET (FOR DETAILS, SEE WES STD. DWG. CB-3.0)
- 11 CONSTRUCT WATER QUALITY SWALE (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- 12 CONSTRUCT STORMWATER ROCK GALLERY (FOR DETAILS, SEE SHT. SW-01)
- 13 ADJUST TELEPHONE RISER (BY OTHERS)
- 14 PROTECT UTILITY POLE
- 15 SEE WATERLINE PLANS FOR WATER METERS AND SERVICES.
- 16 REMOVE FENCE
- 17 REMOVE MAILBOXES AND REINSTALL ON NEW MULTIPLE MAILBOX SUPPORT. (FOR DETAILS, SEE ODOT STD. DWG. RD100)
- 18 REMOVE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT. (FOR DETAILS, SEE ODOT STD. DWG. RD100)
- 19 LOCATE AND CUTOFF ROOF DRAIN PIPE AT NEW SLOPE



TREE REMOVAL

LOCATION	TYPE	SIZE (in)
63+70 (23' R)	D	8
63+85 (27' R)	D	24
64+59 (16' R)	D	12
64+79 (31' L)	E	18
64+83 (31' L)	E	24

E = EVERGREEN
D = DECIDUOUS
TOTAL = 5 TREES



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ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

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

DESIGNED BY: MDB
DRAFTED BY: PPG
CHECKED BY: KSR

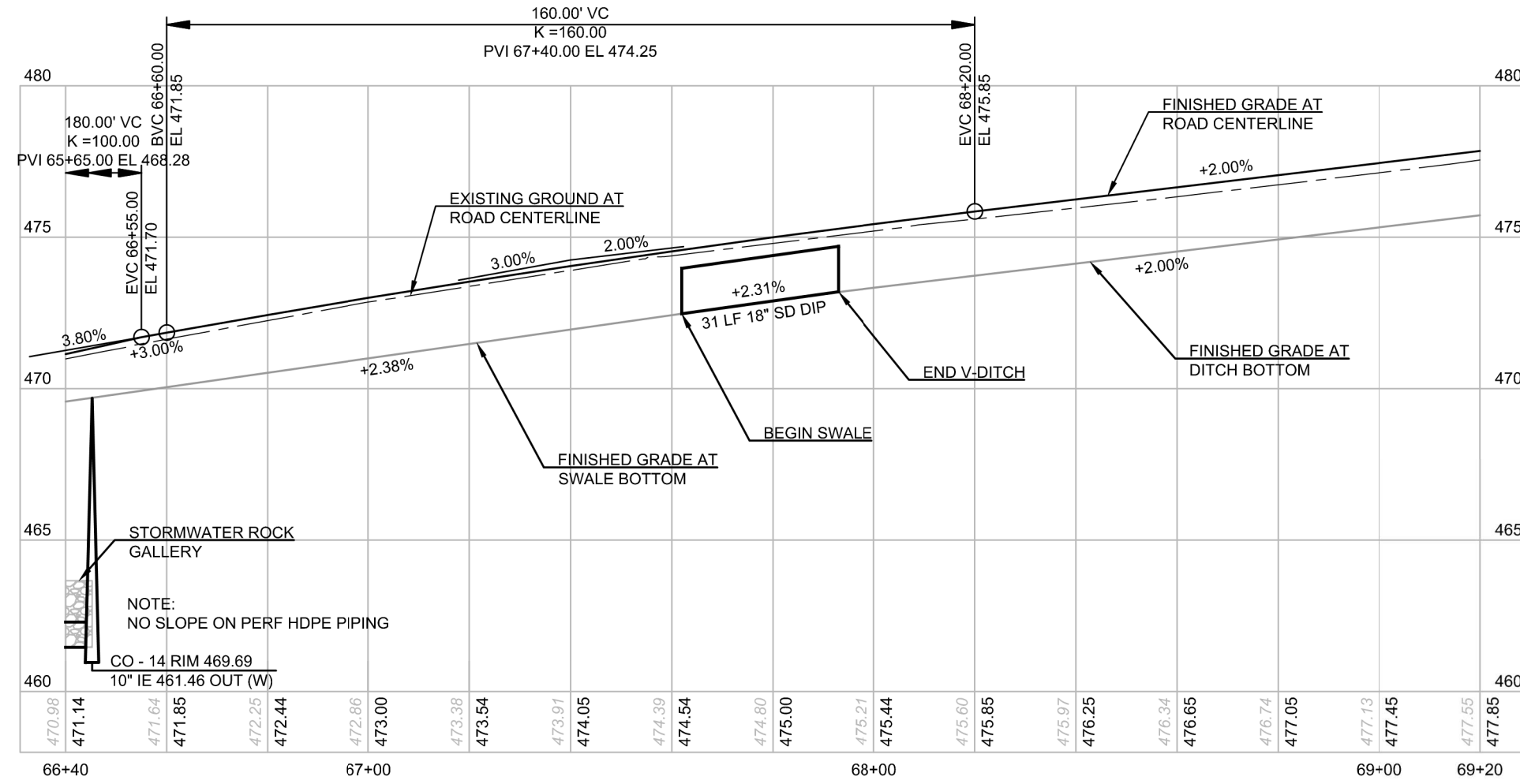
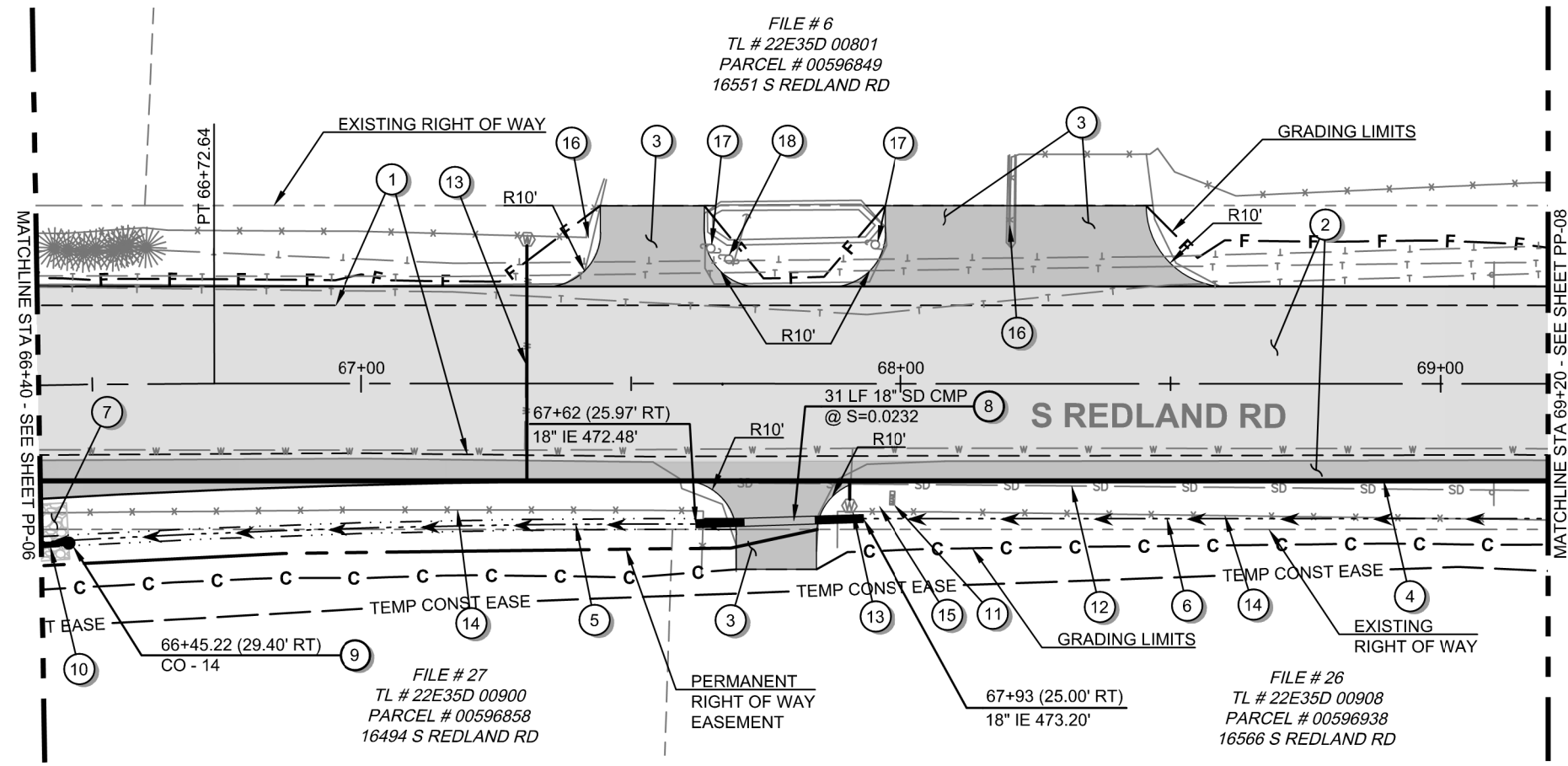
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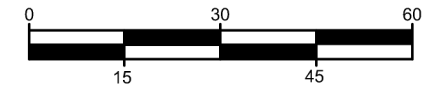
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DIRECTOR: DAN JOHNSON

PROJECT NO.: CL-300320344
DATE: 03/20/2023



S REDLAND ROAD



SCALE: 1"=30'

CONSTRUCTION NOTES:

- 1 SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCTD STD. DWG. U275)
- 2 CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- 3 CONSTRUCT DRIVEWAY APPROACH - 3 (FOR DETAILS, SEE CCTD STD. DWG. D500)
- 4 CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- 5 CONSTRUCT WATER QUALITY SWALE (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- 6 CONSTRUCT STORMWATER V-DITCH (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- 7 CONSTRUCT STORMWATER ROCK GALLERY (FOR DETAILS, SEE SHT. SW-01)
- 8 INSTALL 18" STORM CULVERT
- 9 INSTALL CLEANOUT AND CONCRETE COLLAR TO FINISHED GRADE SLOPE - 2 (FOR DETAILS, SEE WES STD. DWG. ST-4.0)
- 10 INSTALL 10" PERFORATED PIPE ON MAINLINE AND LATERALS. 50' LATERAL SPACING
- 11 REMOVE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT (FOR DETAILS, SEE ODOT STD. DWG. RD101)
- 12 REMOVE CULVERT
- 13 SEE WATERLINE PLANS FOR WATER METERS AND SERVICES.
- 14 REMOVE FENCE AS REQUIRED
- 15 RELOCATE OR ADJUST TELEPHONE RISER (BY OTHERS)
- 16 PROTECT FENCE
- 17 PROTECT PRIVATE LIGHT POSTS
- 18 PROTECT UTILITY POLE

ROADWAY PLAN & PROFILE

**REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY**

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

DIRECTOR
DAN JOHNSON

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Sheet No. PP-07

PROJECT NO.: CL-300320344
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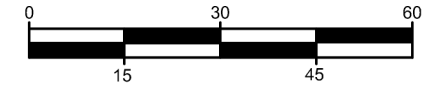
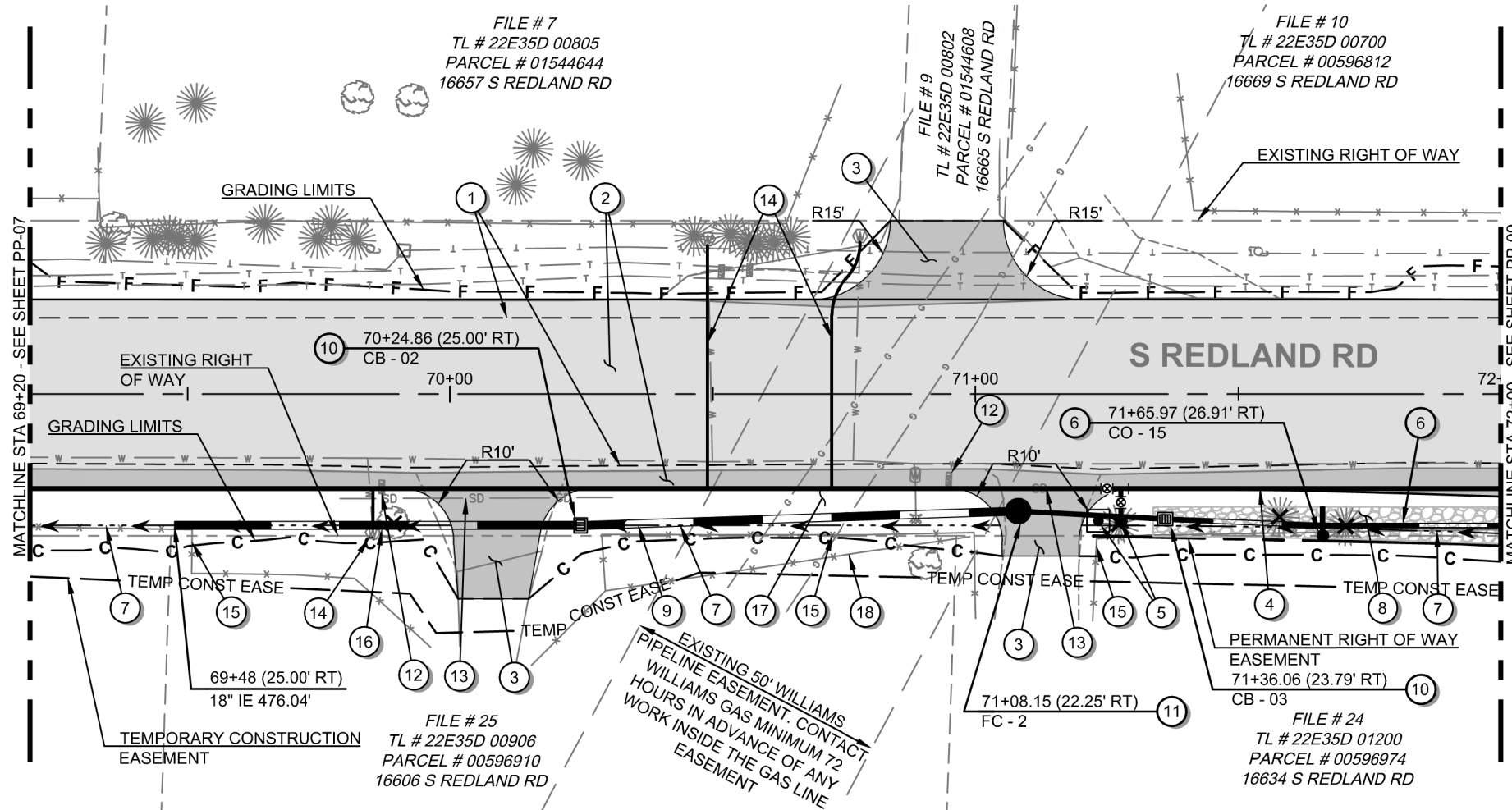


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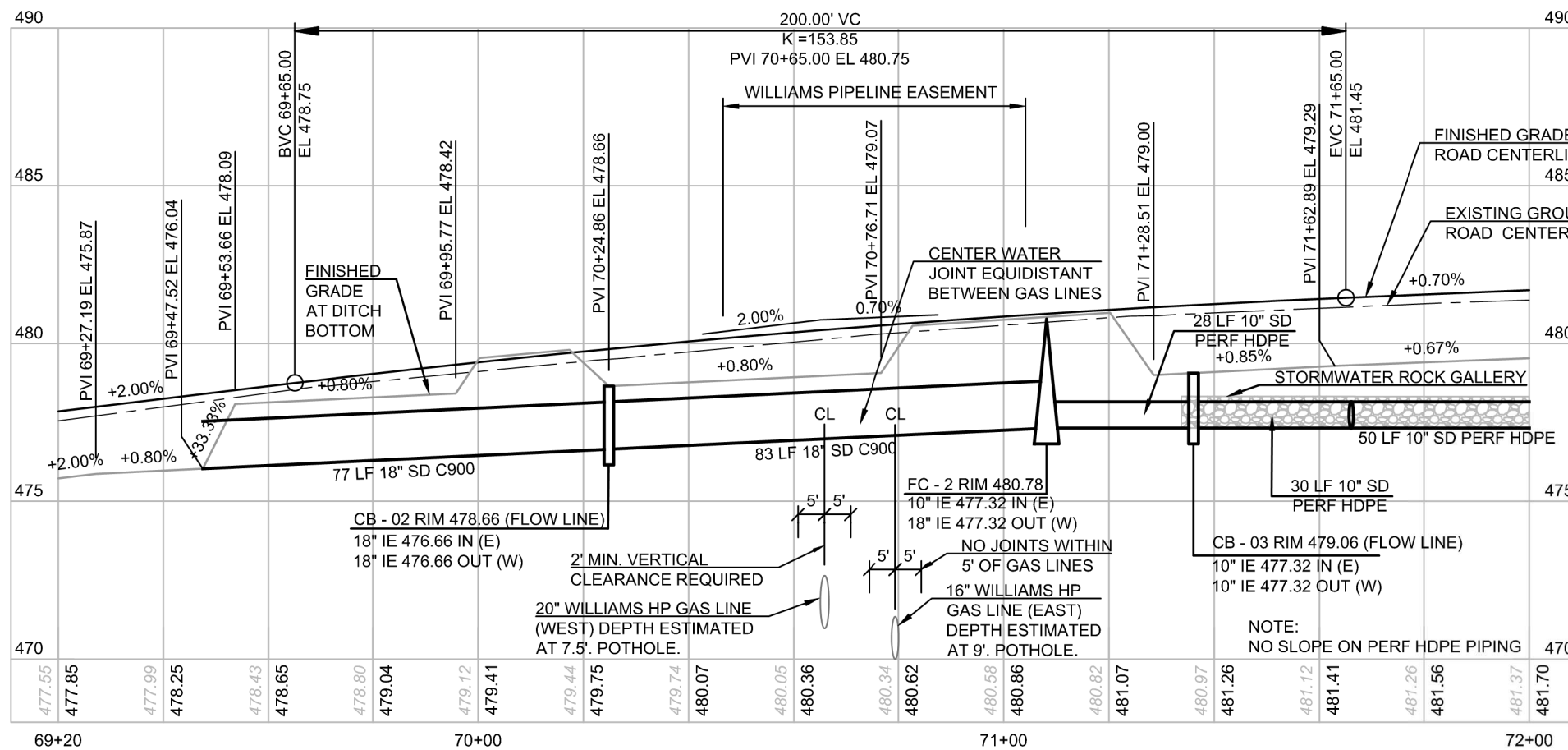
CONSTRUCTION NOTES:

- 1 SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCDTD STD. DWG. U275)
- 2 CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- 3 CONSTRUCT DRIVEWAY APPROACH - 3 (FOR DETAILS, SEE CCDTD STD. DWG. D500)
- 4 CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- 5 CONSTRUCT HYDRANT ASSEMBLY (SEE WATERLINE PLANS)
- 6 INSTALL 10" PERFORATED PIPE ON MAINLINE AND LATERALS. INSTALL CLEANOUT AND CONCRETE COLLAR TO FINISHED GRADE SLOPE (FOR DETAILS, SEE WES STD. DWG. ST-4.0)
- 7 CONSTRUCT STORMWATER V-DITCH (SEE SHTS. TS-01 & SW-01)
- 8 CONSTRUCT STORMWATER ROCK GALLERY (FOR DETAILS, SEE SHT. SW-01)
- 9 CONSTRUCT 18" STORM PIPE
- 10 CONSTRUCT DITCH INLET - 2 (FOR DETAILS, SEE WES STD. DWG. CB-3.0) ROTATE INLET (71+36) AS SHOWN. TOP INLET SECTION TO MATCH SLOPE OF ROAD SHOULDER. INSTALL PIPE OUT IN WEST SIDE OF INLET IN THE BACK CORNER TO ALLOW FOR HYDRANT CLEARANCE.
- 11 CONSTRUCT FLOW CONTROL MANHOLE. OFFSET PIPE INTO MANHOLE AS SHOWN IN DETAIL. (FOR DETAILS, SEE SHT. SW-02)
- 12 RELOCATE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT - 2 (FOR DETAILS, SEE ODOT STD. DWG. RD101)
- 13 REMOVE CULVERT - 2
- 14 SEE WATERLINE PLANS FOR WATER METERS AND SERVICES
- 15 REMOVE FENCE AS REQUIRED
- 16 RELOCATE TELEPHONE RISER (BY OTHERS)
- 17 RELOCATE WILLIAMS GAS PIPELINE BOLLARDS AND CP POST (BY OTHERS)
- 18 PROTECT BLACK VINYL COATED FENCE

TREE REMOVAL

LOCATION	TYPE	SIZE (in)
69+89 (25' R)	E	36
71+27 (25' R)	E	36
71+58 (23' R)	E	18
71+70 (25' R)	E	12

E = EVERGREEN TOTAL = 4 TREES
D = DECIDUOUS



S REDLAND ROAD

ROADWAY PLAN & PROFILE
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

PROJECT NO.: CL-300320344
DATE: 03/20/2023

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

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DRAFTED BY: PPG
CHECKED BY: KSR

REVISIONS

NO DATE:
Sheet No. PP-08



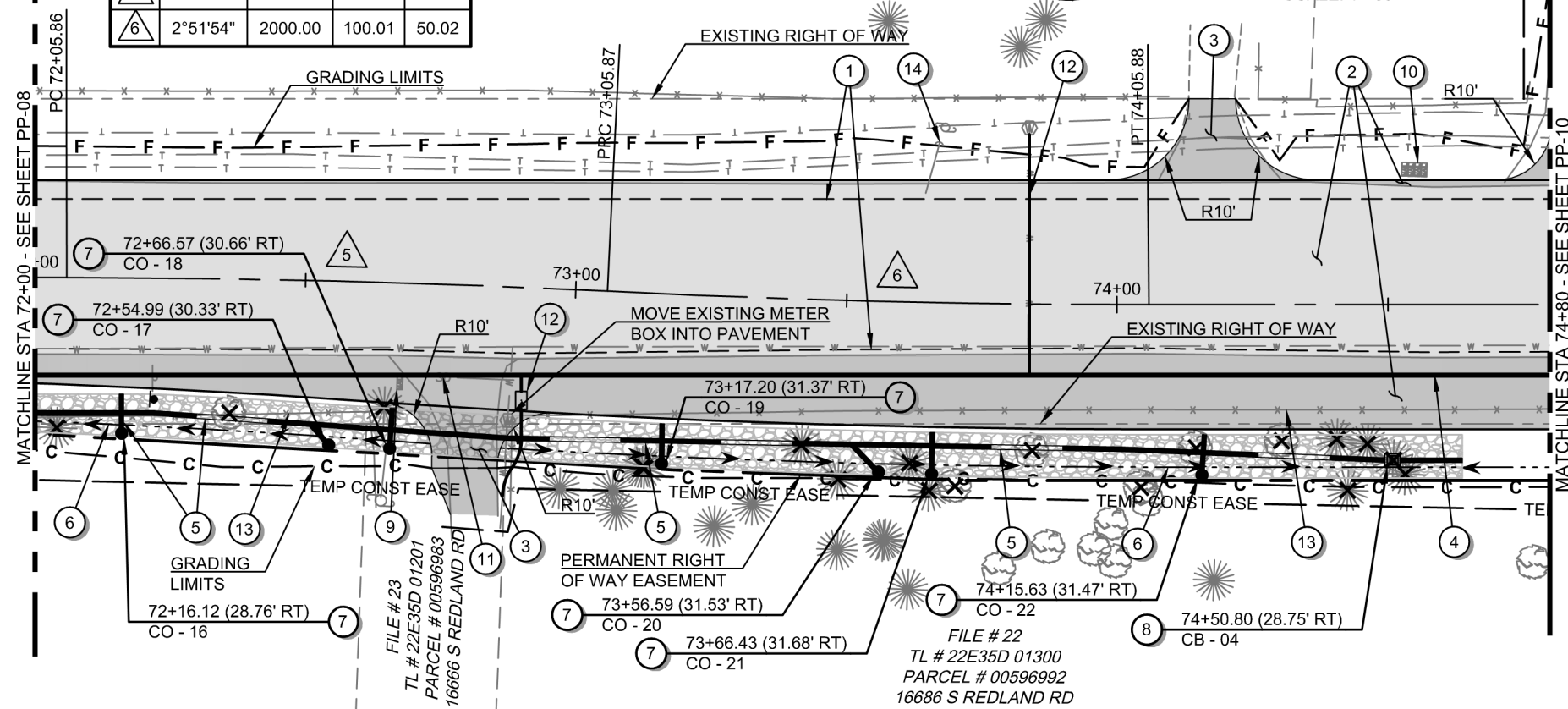
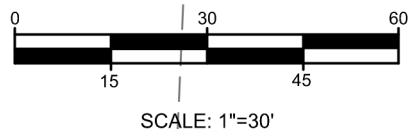
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 16669 S REDLAND RD



CONSTRUCTION NOTES:

- ① SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCTD STD. DWG. U275)
- ② CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- ③ CONSTRUCT DRIVEWAY APPROACH - 2 (FOR DETAILS, SEE CCTD STD. DWG. D500)
- ④ CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- ⑤ INSTALL 10" PERFORATED PIPE ON MAINLINE AND LATERALS. 50' LATERAL SPACING
- ⑥ CONSTRUCT STORMWATER V-DITCH (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- ⑦ INSTALL CLEANOUT AND CONCRETE COLLAR TO FINISHED GRADE SLOPE - 7 (FOR DETAILS, SEE WES STD. DWG. ST-4.0)
- ⑧ CONSTRUCT DITCH INLET (FOR DETAILS, SEE WES STD. DWG. CB-3.0) ROTATE INLET (74+51) AS SHOWN. TOP INLET SECTION TO MATCH SLOPE OF ROAD SHOULDER. INSTALL PIPE OUT AT BACK SIDE OF INLET.
- ⑨ RELOCATE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT (FOR DETAILS, SEE ODOT STD. DWG. RD101)
- ⑩ RELOCATE MAILBOXS AND REINSTALL ON NEW MULTIPLE MAILBOX SUPPORT (FOR DETAILS, SEE ODOT STD. DWG. RD100)
- ⑪ REMOVE CULVERT
- ⑫ SEE WATERLINE PLANS FOR WATER METERS AND SERVICES.
- ⑬ REMOVE FENCE AS REQUIRED
- ⑭ PROTECT UTILITY POLE AND ANCHOR

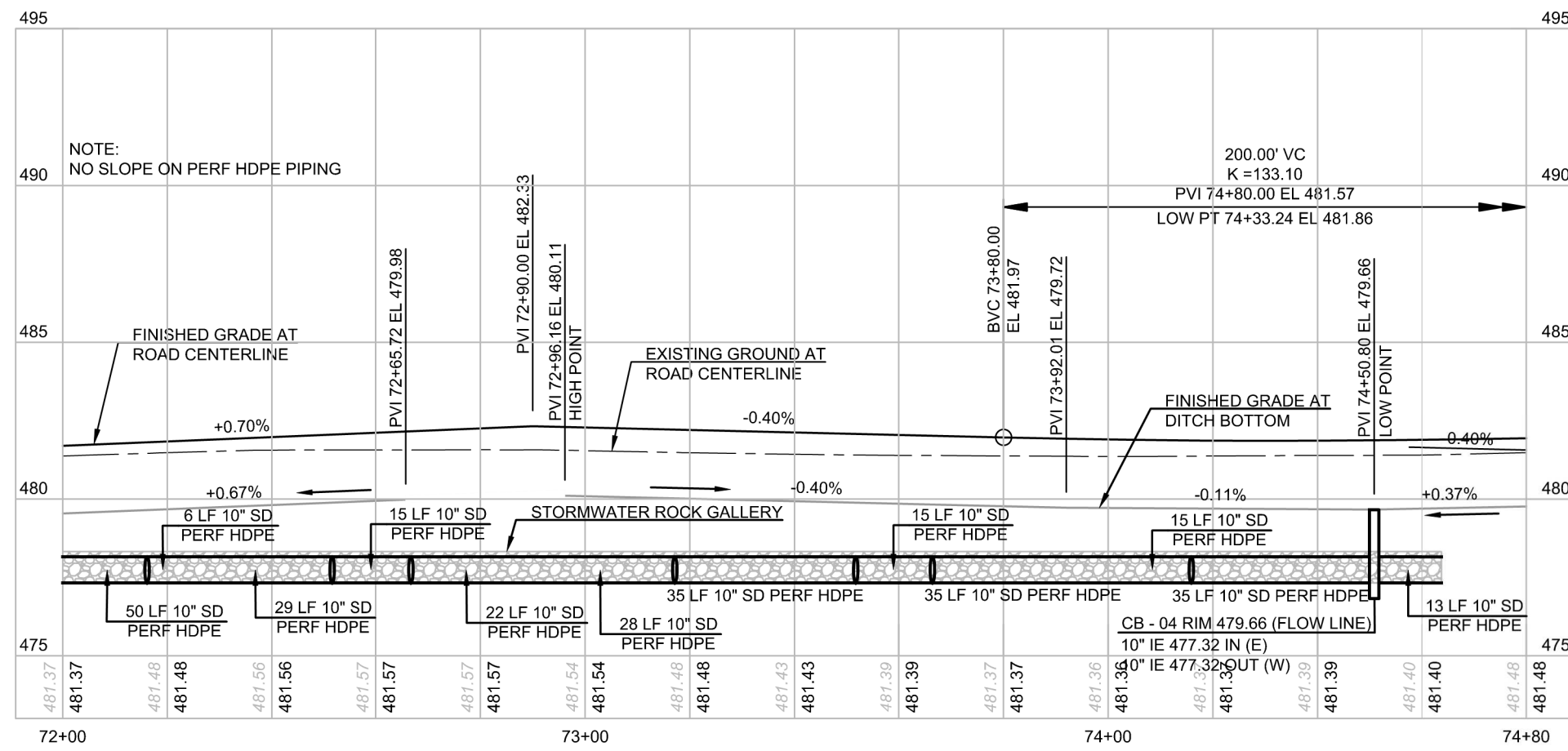
TREE REMOVAL ✕ ✖

LOCATION	TYPE	SIZE (in)
72+04 (28' R)	E	18
72+36 (25' R)	D	36
72+65 (23' R)	E	36
73+14 (32' R)	E	18
73+14 (32' R)	E	18
73+42 (27' R)	E	18
73+49 (33' R)	E	12
73+62 (30' R)	E	12
73+66 (34' R)	E	12
73+71 (33' R)	D	12

LOCATION	TYPE	SIZE (in)
73+85 (27' R)	D	24
74+04 (34' R)	D	12
74+15 (26' R)	D	12
74+30 (25' R)	D	18
74+41 (25' R)	E	12
74+43 (34' R)	E	24
74+46 (26' R)	E	30
74+51 (29' R)	E	12
74+53 (31' R)	E	12

TOTAL = 19 TREES

E = EVERGREEN
 D = DECIDUOUS



S REDLAND ROAD



ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

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

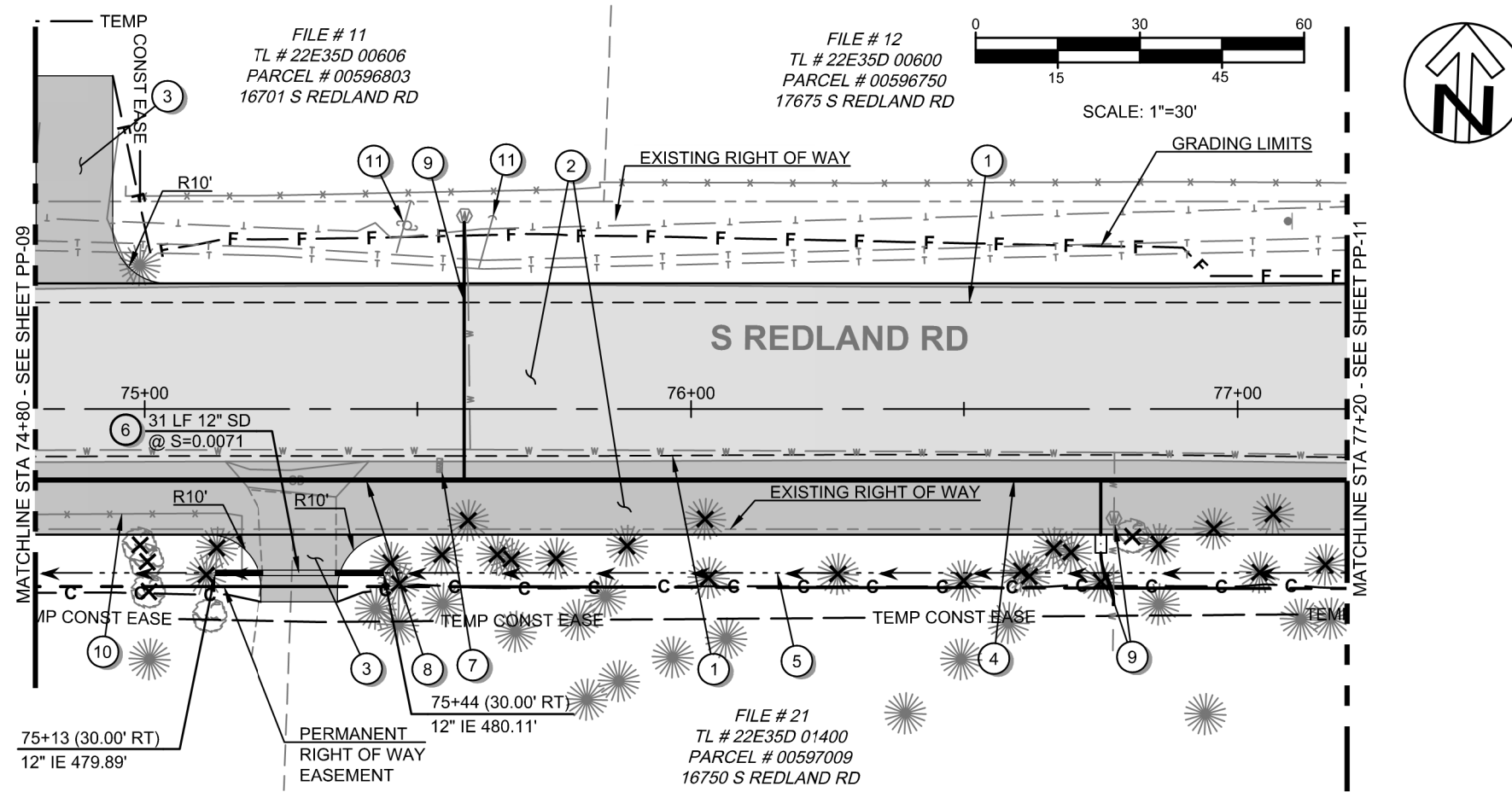
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 DAN JOHNSON

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 CHECKED BY: KSR

NO DATE: _____

Sheet No. **PP-09**

PROJECT NO.: CL-300320344
 DATE: 03/20/2023



CONSTRUCTION NOTES:

- 1 SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCDTD STD. DWG. U275)
- 2 CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- 3 CONSTRUCT DRIVEWAY APPROACH - 2 SHED PAVEMENT TO WEST EDGE FOR DRAINAGE. PROTECT CONC. COLUMNS FOR NORTH DRIVEWAY. (FOR DETAILS, SEE CCDTD STD. DWG. D500)
- 4 CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- 5 CONSTRUCT STORMWATER V-DITCH (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- 6 INSTALL 12" STORM CULVERT
- 7 RELOCATE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT (FOR DETAILS, SEE ODOT STD. DWG. RD101)
- 8 REMOVE CULVERT
- 9 SEE WATERLINE PLANS FOR WATER METERS AND SERVICES
- 10 REMOVE FENCE
- 11 PROTECT UTILITY POLE AND ANCHOR

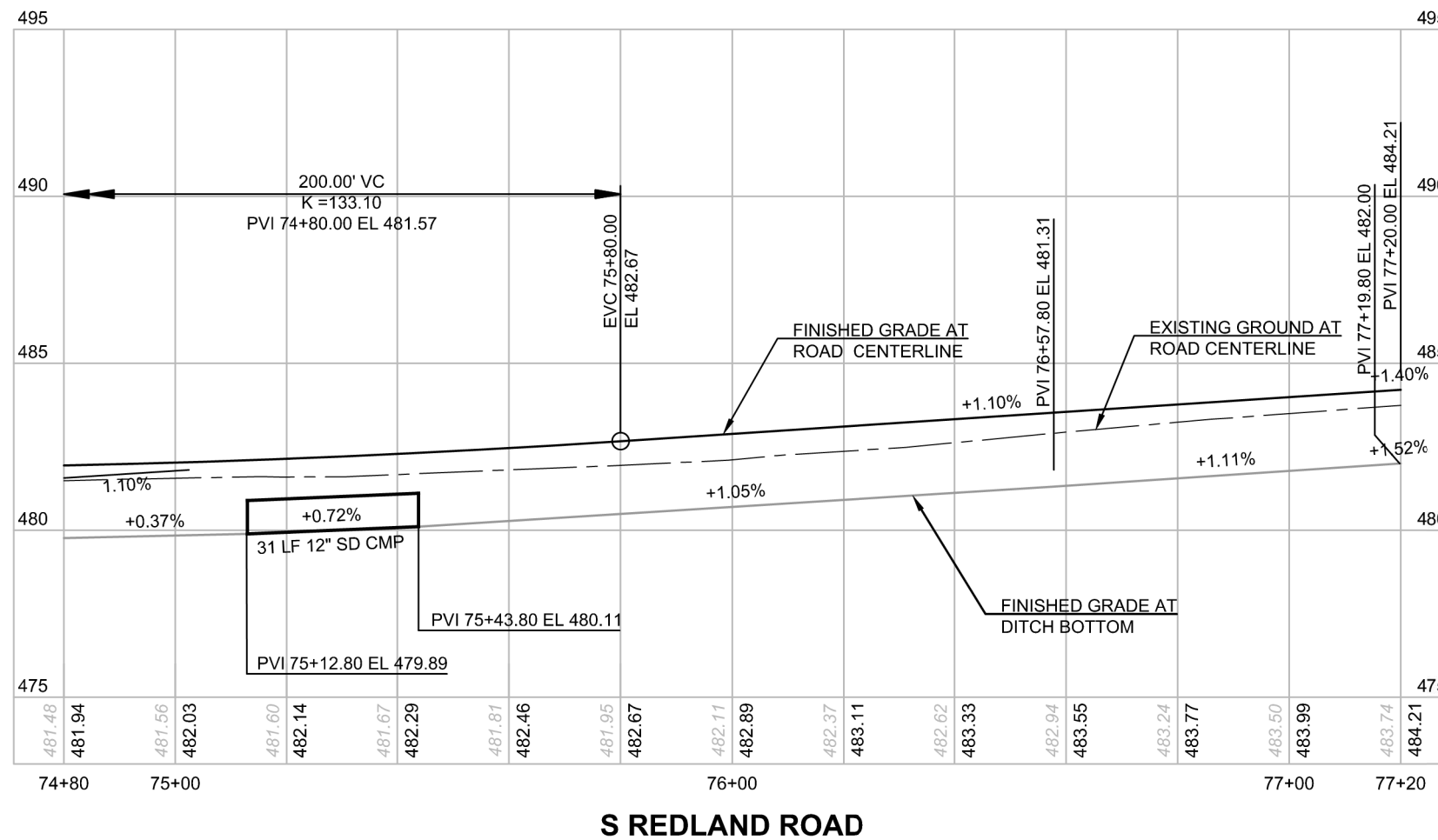
TREE REMOVAL

LOCATION	TYPE	SIZE (in)
74+99 (25' R)	D	12
75+01 (28' R)	D	24
75+01 (33' R)	D	18
75+11 (30' R)	E	12
75+13 (25' R)	E	6
75+45 (28' R)	E	6
75+47 (32' R)	E	6
75+54 (27' R)	E	24
75+59 (20' R)	E	18
75+65 (27' R)	E	18
75+67 (27' R)	E	6
75+75 (27' R)	E	30
75+88 (25' R)	E	30
76+03 (20' R)	E	30

LOCATION	TYPE	SIZE (in)
76+03 (31' R)	E	12
76+27 (30' R)	E	24
76+50 (31' R)	E	12
76+60 (30' R)	E	12
76+62 (40' R)	E	6
76+66 (25' R)	E	12
76+70 (26' R)	E	6
76+75 (32' R)	E	12
76+81 (23' R)	D	18
76+86 (25' R)	E	6
76+96 (22' R)	E	30
77+04 (30' R)	E	18
77+06 (19' R)	E	24
77+16 (29' R)	E	18

E = EVERGREEN
D = DECIDUOUS

TOTAL = 28 TREES



ROADWAY PLAN & PROFILE
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY
PROJECT NO.: CL-300320344
DATE: 03/20/2023

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

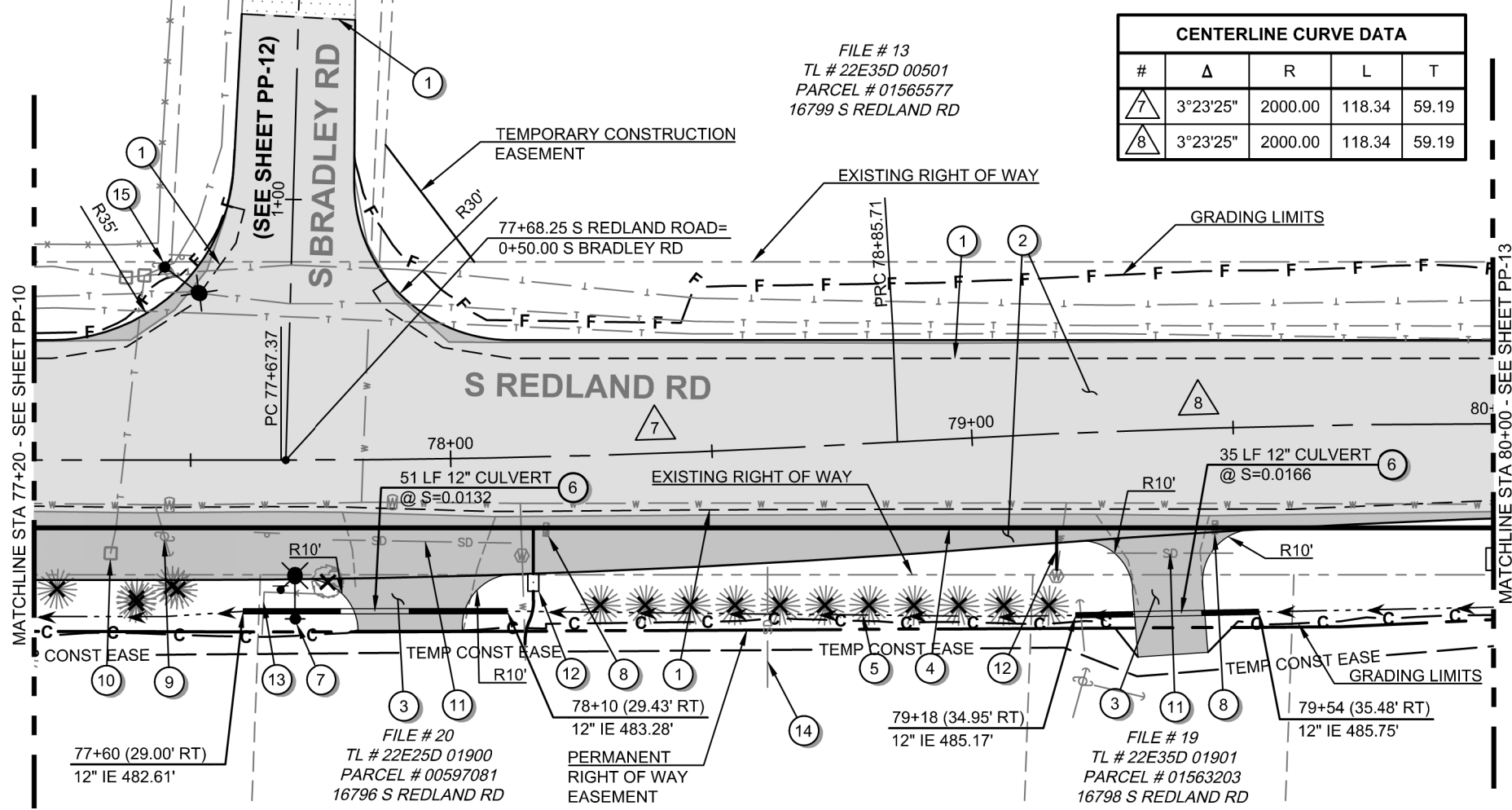
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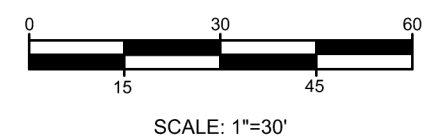
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Sheet No.
PP-10





CENTERLINE CURVE DATA				
#	Δ	R	L	T
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8	3°23'25"	2000.00	118.34	59.19



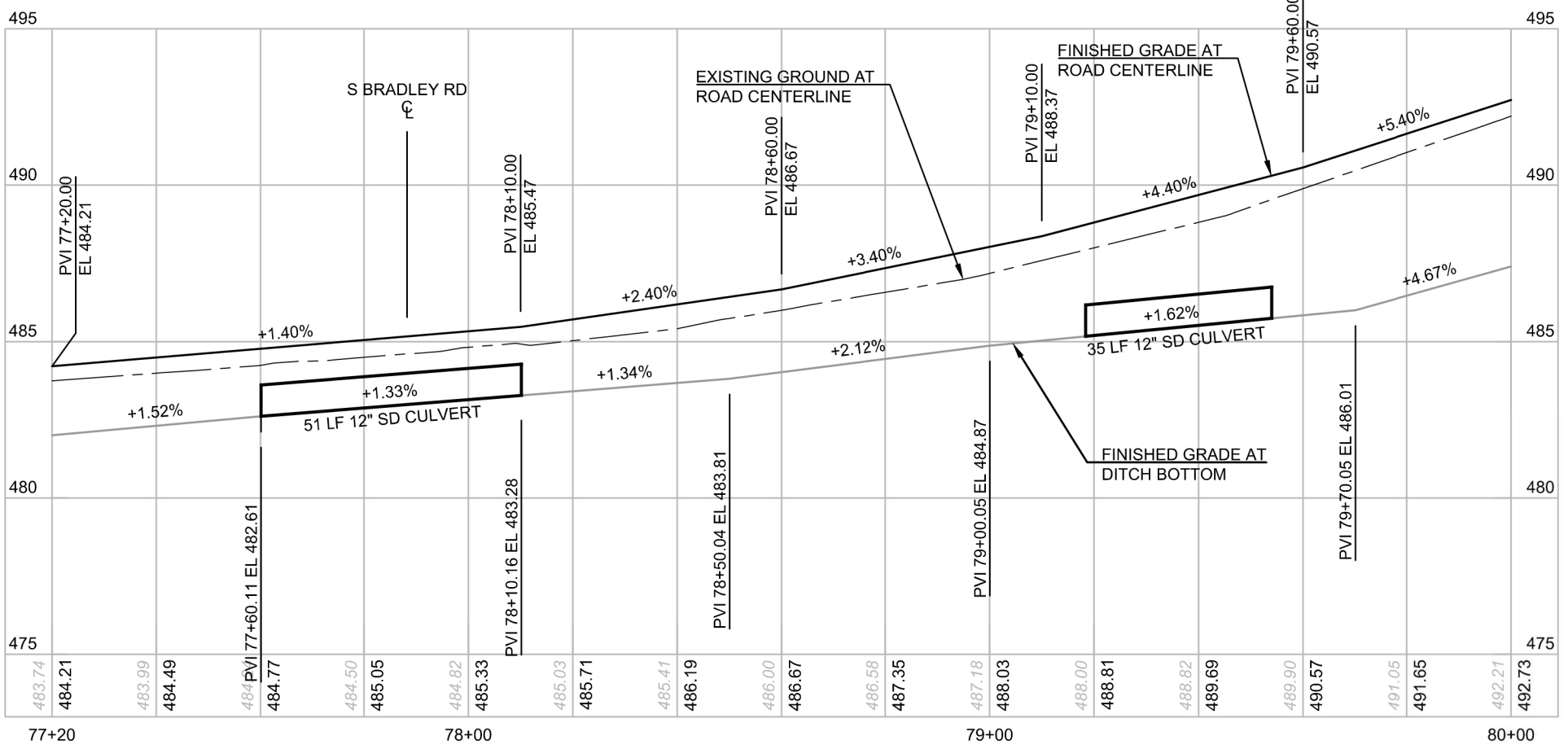
CONSTRUCTION NOTES:

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- 3 CONSTRUCT DRIVEWAY APPROACH - 2 (FOR DETAILS, SEE CCDDT STD. DWG. D500)
- 4 CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- 5 CONSTRUCT STORMWATER V-DITCH (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- 6 INSTALL 12" STORM CULVERT
- 7 INSTALL LIGHT POLE (FOR DETAILS, SEE ILLUMINATION PLANS)
- 8 RELOCATE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT - 2 (FOR DETAILS, SEE ODOT STD. DWG. RD101)
- 9 RELOCATE UTILITY POLE (BY OTHERS)
- 10 RELOCATE TELEPHONE RISER (BY OTHERS)
- 11 REMOVE CULVERT - 2
- 12 SEE WATERLINE PLANS FOR WATER METERS AND SERVICES
- 13 REMOVE FENCE
- 14 CUT OFF EXISTING ROOF DRAIN PIPE AT NEW DITCH SLOPE
- 15 PROTECT UTILITY POLE. ADJUST LUMINAIRE ARM. (FOR DETAILS, SEE ILLUMINATION PLANS)

TREE REMOVAL

LOCATION	TYPE	SIZE (in)
77+24 (25' R)	E	6
77+40 (26' R)	E	24
77+40 (27' R)	E	24
77+46 (24' R)	E	12
77+48 (25' R)	E	18
77+76 (23' R)	D	36
78-79 (30' R, 11 TOTAL)	E	20 (AVG)

E = EVERGREEN
D = DECIDUOUS
TOTAL = 17 TREES



S REDLAND ROAD

ROADWAY PLAN & PROFILE
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

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

DIRECTOR
DAN JOHNSON

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CHECKED BY: KSR

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Sheet No. PP-11

PROJECT NO.: CL-300320344
DATE: 03/20/2023

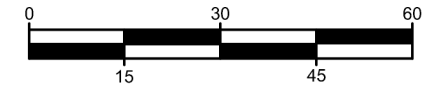
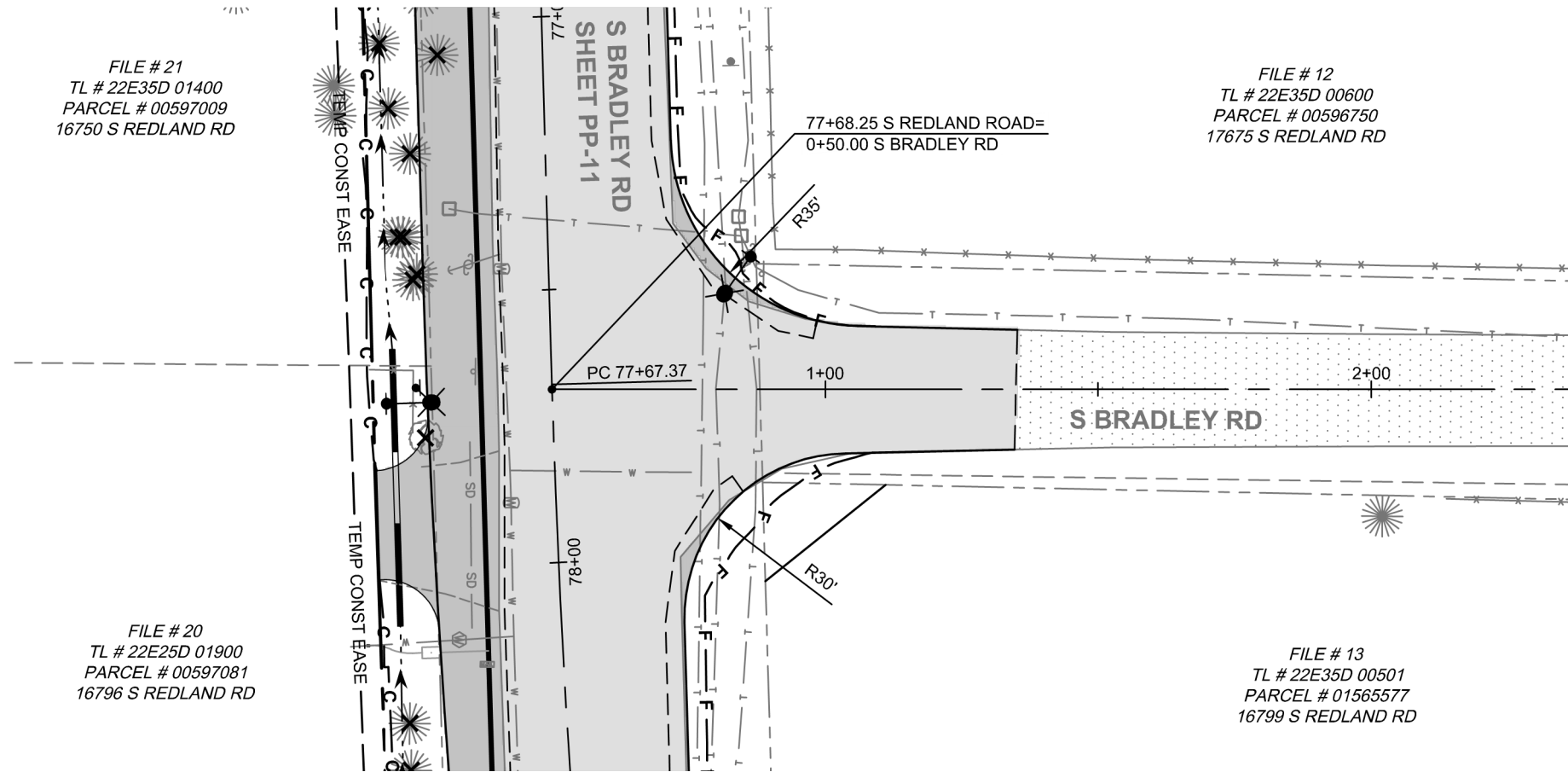


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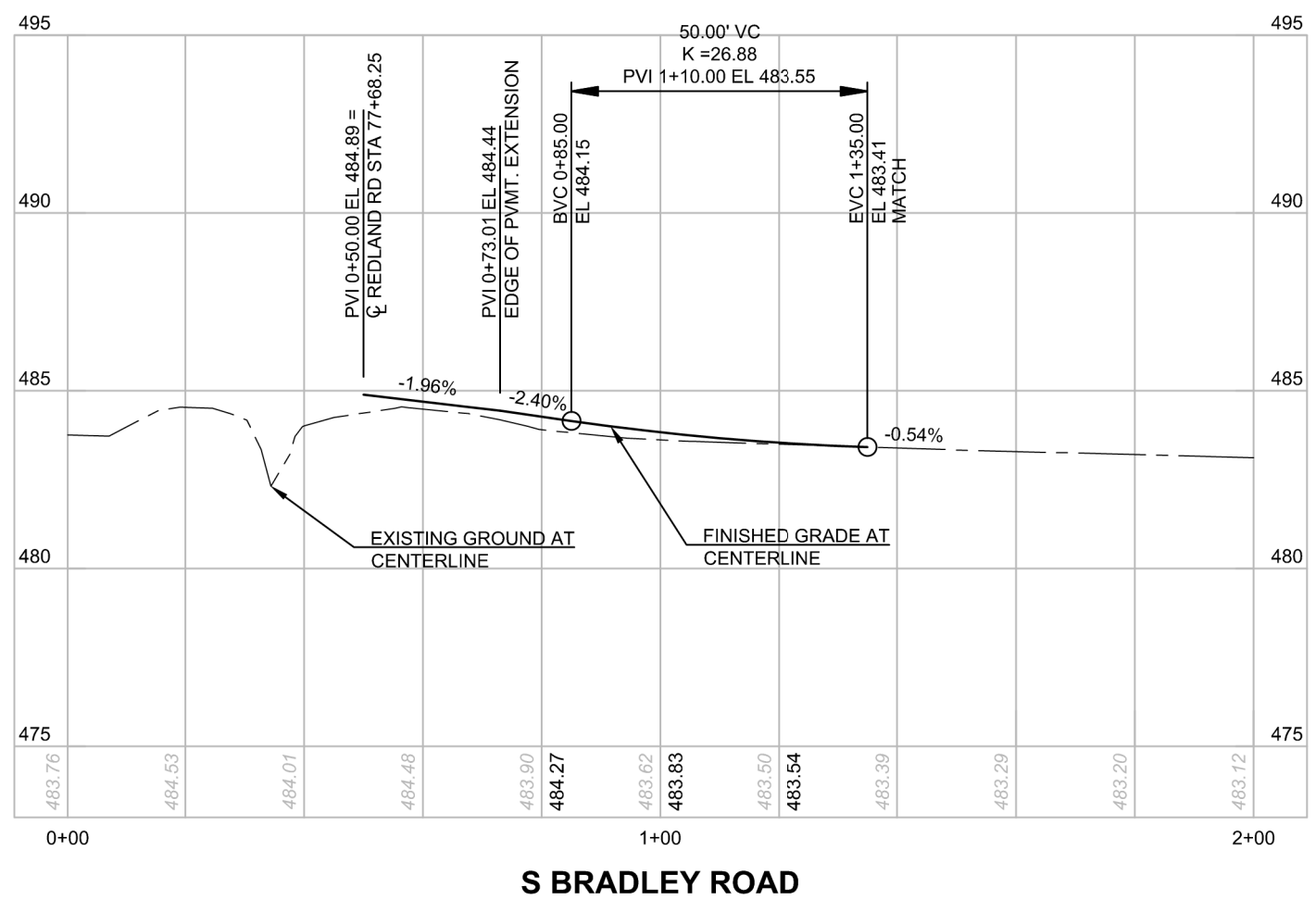
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SCALE: 1"=30'

CONSTRUCTION NOTES:

SEE NOTES ON SHT. PP-11



ROADWAY PLAN & PROFILE
 REDLAND ROAD TURN LANES AT
 FERGUSON & BRADLEY
 PROJECT NO.: CL-300320344
 DATE: 03/20/2023

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

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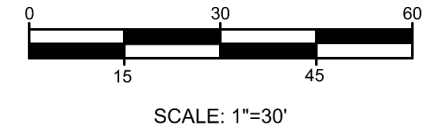
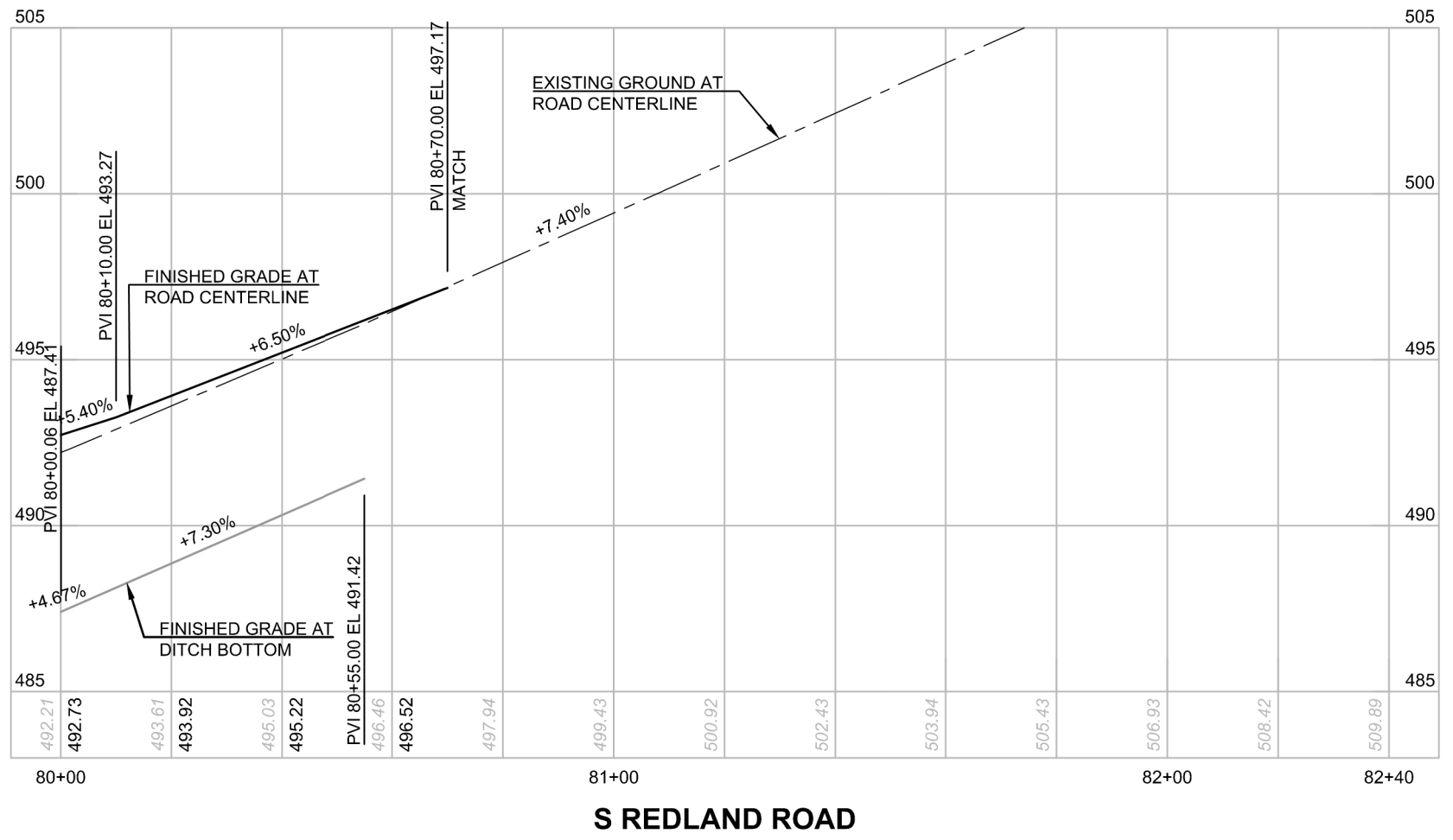
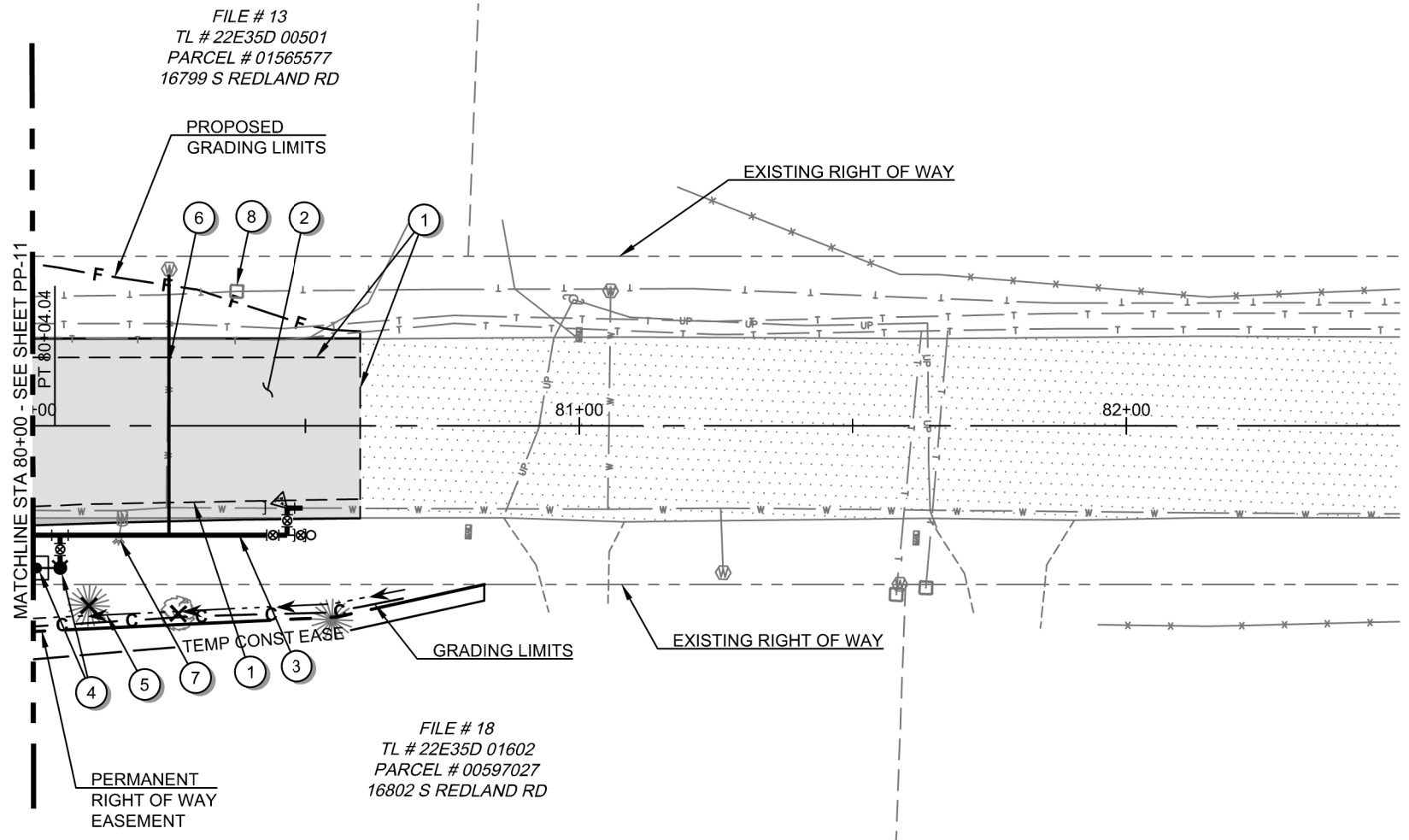
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EXPIRES: 12/31/2024



CONSTRUCTION NOTES:

- ① SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCDTD STD. DWG. U275)
- ② CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- ③ CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- ④ CONSTRUCT HYDRANT ASSEMBLY (SEE WATERLINE PLANS)
- ⑤ CONSTRUCT STORMWATER V-DITCH AND MATCH INTO EXISTING (FOR DETAILS, SEE SHTS. TS-01 & SW-01)
- ⑥ SEE WATERLINE PLANS FOR WATER METERS AND SERVICES
- ⑦ REMOVE HYDRANT ASSEMBLY (SEE WATERLINE PLANS)
- ⑧ PROTECT TELEPHONE RISER

TREE REMOVAL

LOCATION	TYPE	SIZE (in)
80+10 (33' R)	E	24
80+27 (34' R)	D	36

E = EVERGREEN
D = DECIDUOUS
TOTAL = 2 TREES



EXPIRES: 12/31/2024

ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

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

DIRECTOR
DAN JOHNSON

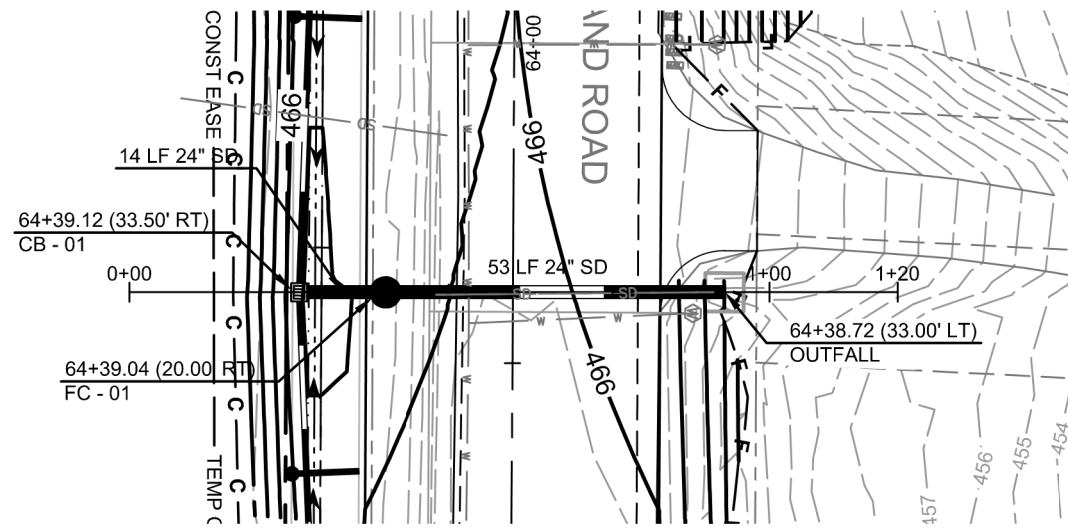
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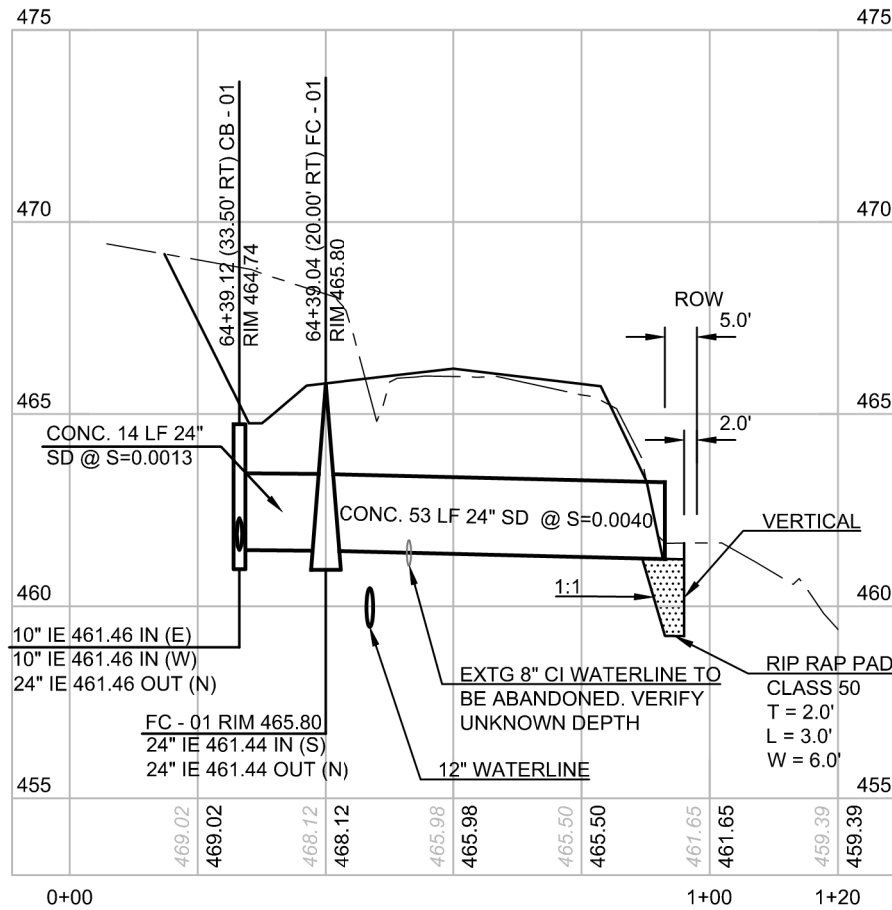
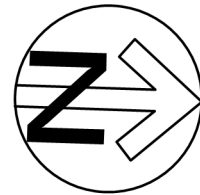
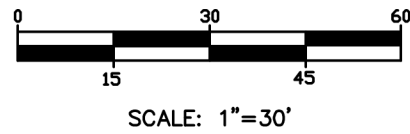
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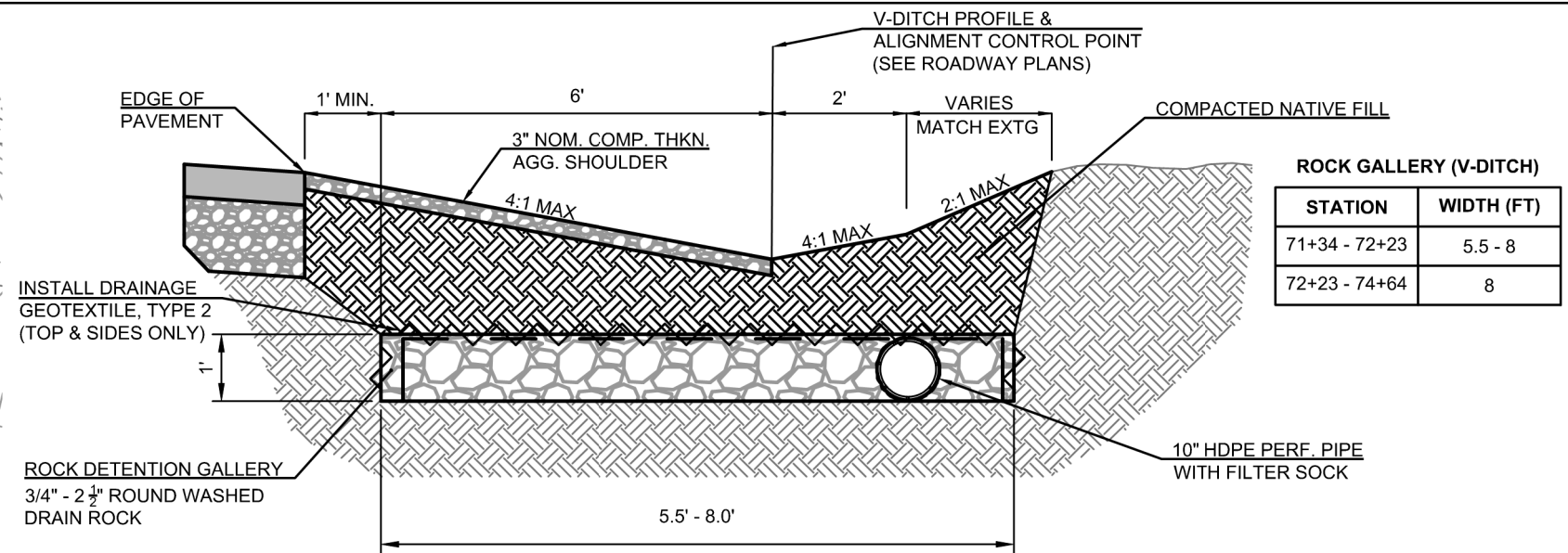
PROJECT NO.: CL-300320344
DATE: 03/20/2023



24" STORM PIPE PLAN



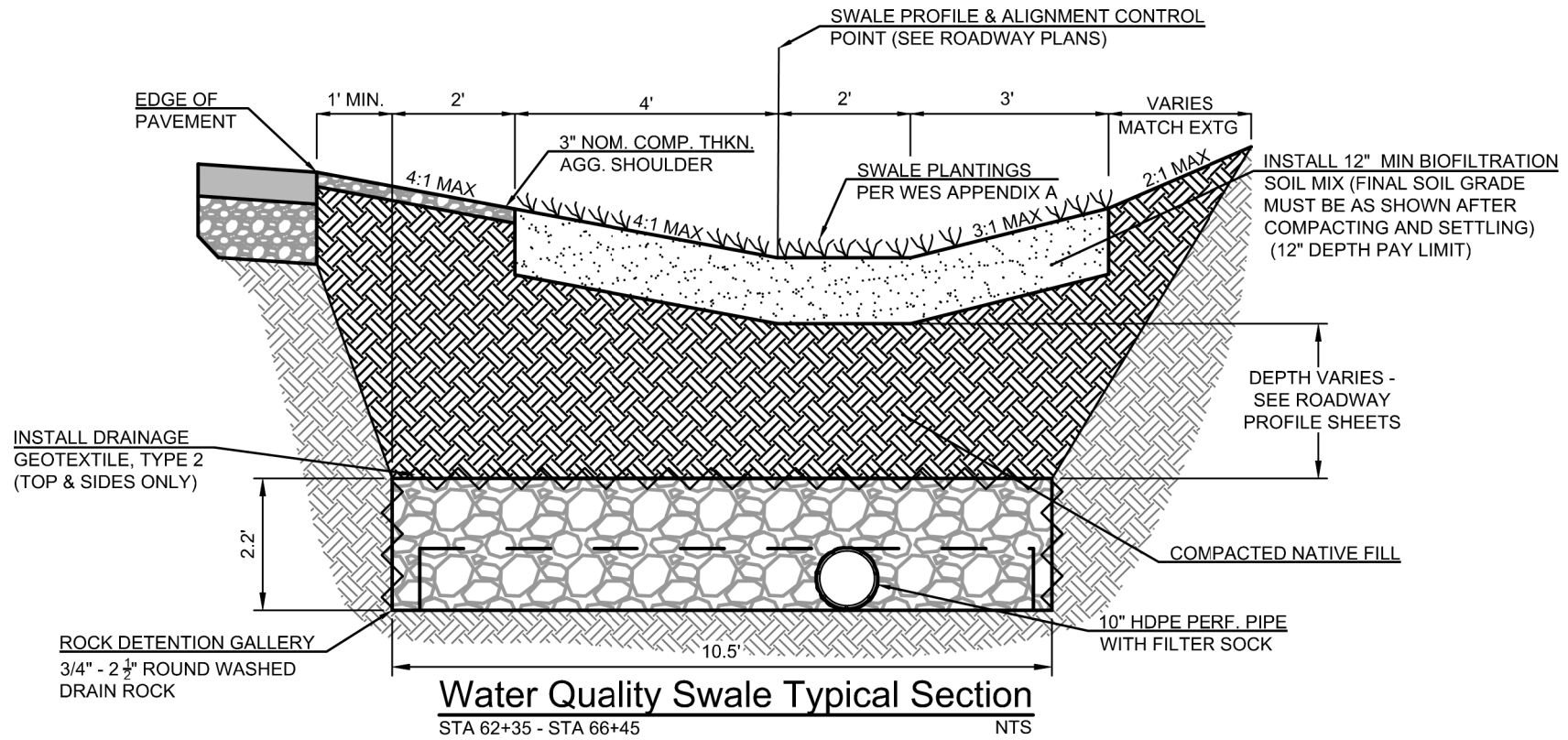
24" STORM PIPE PROFILE



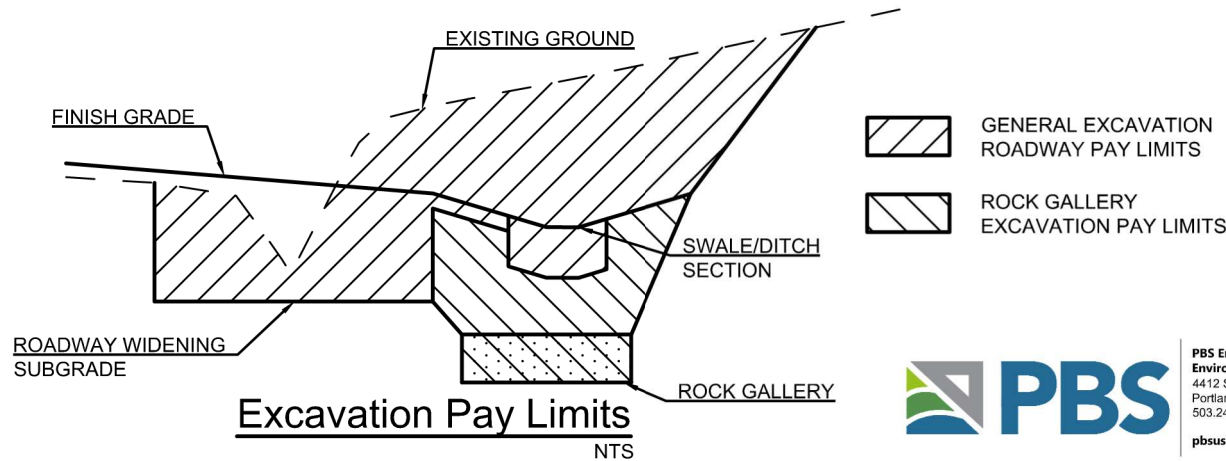
V-Ditch Typical Section
NTS

ROCK GALLERY (V-DITCH)

STATION	WIDTH (FT)
71+34 - 72+23	5.5 - 8
72+23 - 74+64	8



Water Quality Swale Typical Section
STA 62+35 - STA 66+45
NTS



Excavation Pay Limits
NTS

STORMWATER SECTION DETAILS
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
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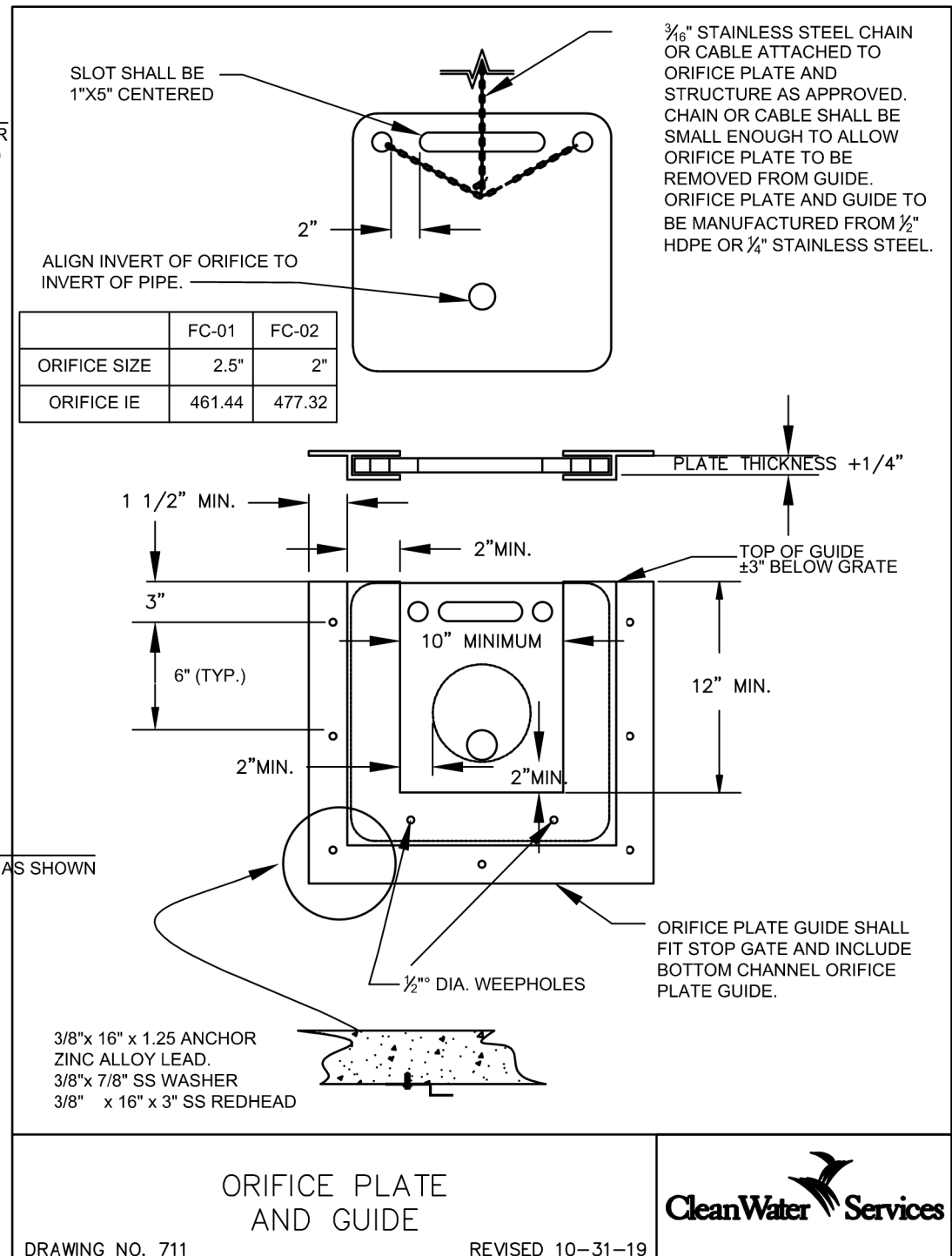
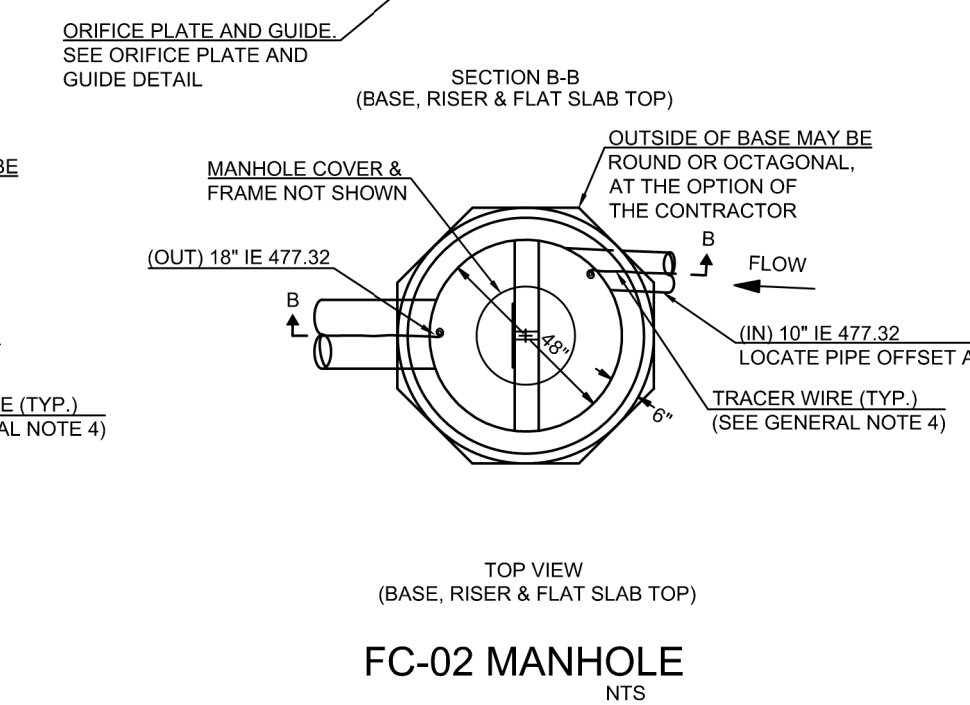
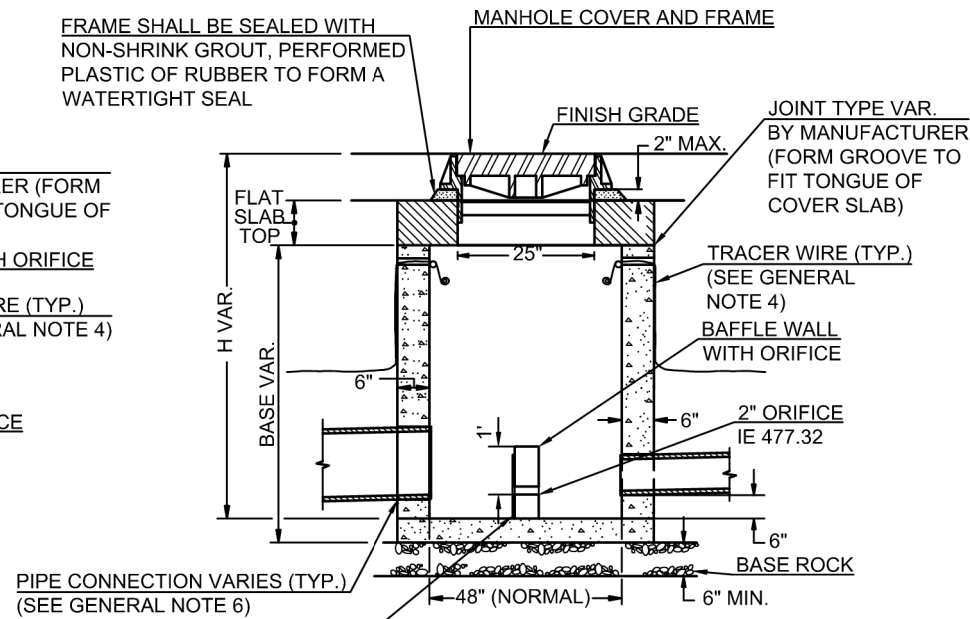
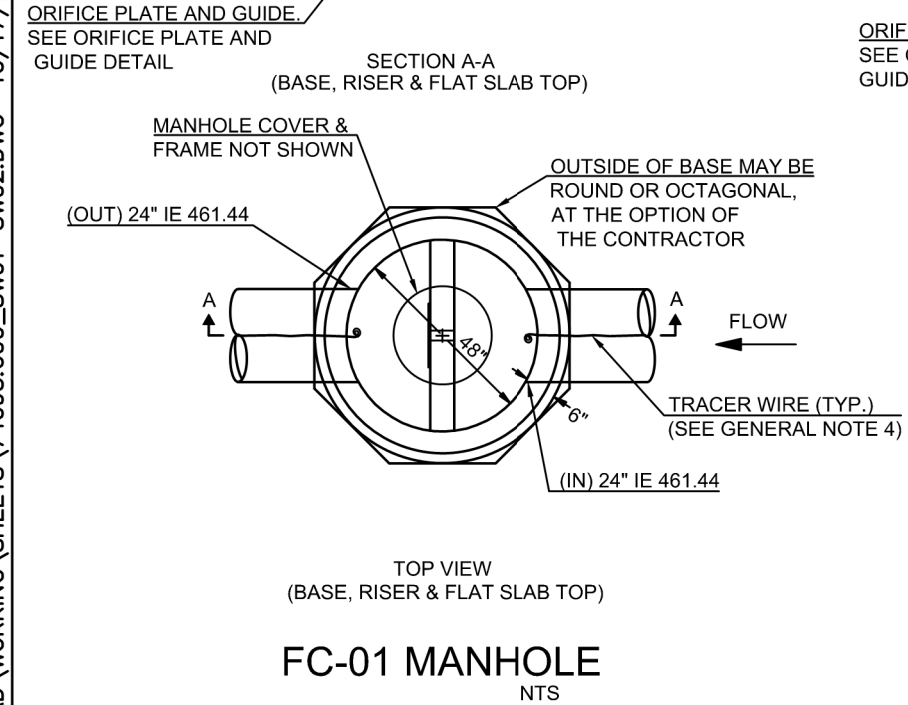
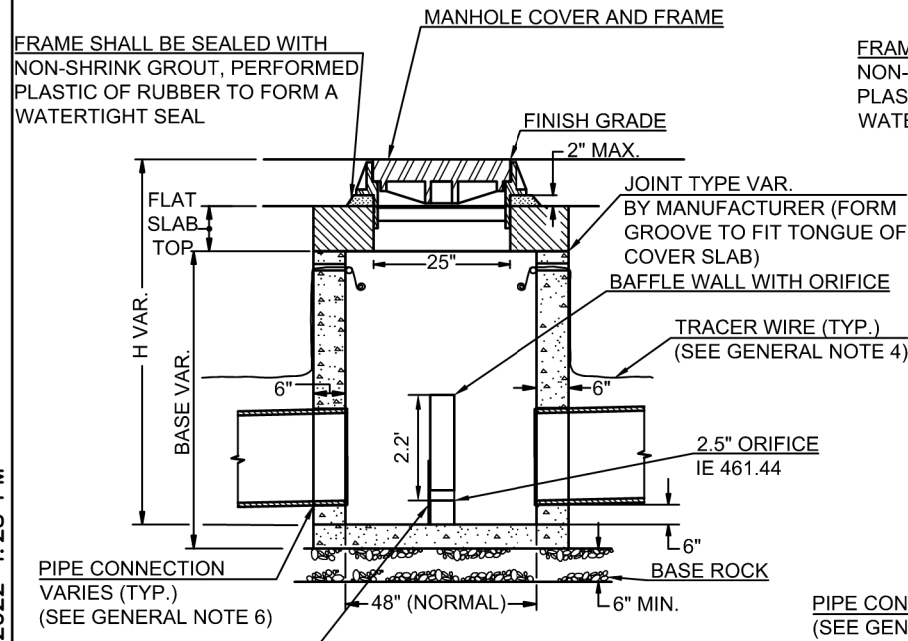
PROJECT NO.: CL-300320344
DATE: 03/20/2023

DIRECTOR
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GENERAL NOTES:

1. MINIMUM LENGTH IF LATERALS OR CONNECTIONS ARE INSERTED: OUTSIDE DIAMETER OF PIPE + 17".
2. BASE MAY BE PRECAST OR CAST-IN-PLACE.
3. ALL PRECAST PRODUCTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C478.
4. SEE ODOT STD. DWG. RD336 FOR DETAILS NOT SHOWN.
5. SEE ODOT STD. DWG. RD344 FOR MANHOLE BASE SECTION.
6. SEE ODOT STD. DWG. RD345 FOR PIPE TO MANHOLE CONNECTION.
7. SEE ODOT STD. DWG. RD356 FOR MANHOLE COVERS AND FRAMES.
8. ALL CONCRETE SHALL BE COMMERCIAL GRADE CONCRETE.
9. MAX. PIPE DIAMETER VARIES WITH PIPE MATERIAL.
10. LOCATION, ELEVATION, DIAMETER, SLOPE, AND NUMBER OF PIPE(S) VARIES, SEE ROADWAY PLANS.
11. WHEN H=42" OR LESS MAKE HOLE FOR FRAME IN CENTER OF COVER SLAB AND OMIT STEPS.
12. MANHOLE AND BAFFLE WALL SHALL CONFORM TO ASTM C478.

LEGEND

- CAST-IN-PLACE CONCRETE
- PRECAST CONCRETE
- 1: 2 CEMENT MORTAR



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STORMWATER FLOW CONTROL DETAILS

REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

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

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NO DATE:

Sheet No. SW-02

PROJECT NO.: CL-300320344
DATE: 03/20/2023

TRAFFIC CONTROL & STAGING NOTES

1. ALL SIGN DIMENSIONS LISTED IN INCHES UNLESS NOTED OTHERWISE
2. ALL SIGNS TO BE IN ACCORDANCE WITH OSSC SECTION 00222.10(B)
3. SEE TC SHEETS FOR TYPICAL ADVANCE WARNING SIGN LOCATIONS. ADJUST SIGNS TO AVOID DRIVEWAY ACCESSES AND SIGHT DISTANCE. MOVE SIGNS AS NEEDED FOR EXTENDED TRAFFIC QUEUES OR WHEN SIGHT DISTANCE IS RESTRICTED.
4. TEMPORARY ONE LANE CLOSURE FLAGGING AS NEEDED WITH COUNTY APPROVAL PER ODOT STD. DWG. TM855
5. 2-LANE, 2-WAY SHOULDER CLOSURE TO CONFORM TO ODOT STD. DWG. TM855
6. CONTRACTOR SHALL COORDINATE DRIVEWAY CONSTRUCTION, ACCESS, AND TIMING WITH PROPERTY OWNERS
7. CONTRACTOR MAY PROPOSE AND SUBMIT AN ALTERNATIVE TRAFFIC CONTROL AND STAGING PLAN IN ACCORDANCE TO SPECIAL PROVISION.
8. MAINTAIN AND PROTECT EXISTING SIGNS UNLESS THERE IS A CONFLICT WITH TRAFFIC STAGING. PROVIDE A MINIMUM OF 75' SPACING BETWEEN SIGNS.
9. TUBULAR MARKERS SHALL BE AT 20' MAXIMUM SPACINGS WHEN CHANNELIZING TRAFFIC AWAY FROM WORK ZONE AND 10' AROUND INTERSECTION CORNERS.
10. INSTALL TEMPORARY SIGN SUPPORTS ACCORDING TO ODOT STD. DWGS. TM800 AND TM821.
11. TUBULAR MARKERS SHALL BE MOVED BACK TO THE EXISTING EDGE OF PAVEMENT AT THE END OF EACH WORKDAY.
12. TEMPORARY STOP SIGNS WILL NEED TO BE TEMPORARILY PLACED AFTER REMOVAL OF EXISTING SIGNS.
13. ALL TRAFFIC CONTROL IS TO BE IN ACCORDANCE WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION AND OREGON SUPPLEMENT.
14. FOR CONSTRUCTION WORK REQUIRING TRAFFIC CONTROL DEVICES FOR 3 DAYS OR LESS, THE CONTRACTOR SHALL FOLLOW "OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK FOR OPERATIONS OF THREE DAYS OR LESS." ALL OTHER OPERATIONS SHALL FOLLOW ODOT'S TRAFFIC CONTROL STANDARD PLANS THAT MAY APPLY.
15. COORDINATE AND WORK WITH UTILITY COMPANIES FOR ALL REQUIRED TEMPORARY AND PERMANENT RELOCATIONS.
16. CONTRACTOR TO FILL IN EXISTING RUMBLE STRIPS WITH ACP IF STAGING REQUIRES TRAFFIC TO CROSS. CONTRACTOR TO SUBMIT METHOD TO ENGINEER FOR APPROVAL.

STAGE 1

- INSTALL ALL EROSION CONTROL
- INSTALL TEMPORARY FENCING WHERE REQUIRED
- CLEAR, GRUB, AND REMOVE TREES
- FINISH RELOCATING UTILITIES (BY OTHERS)
- POTHOLE UTILITIES AT CROSSING
- CONSTRUCT WATERLINE AND SERVICES
- CONSTRUCT STORMWATER ROCK GALLERIES
- CONSTRUCT STORMWATER SWALE
- INSTALL STORM PIPING AND CULVERTS
- CONSTRUCT ROADWAY WIDENING
- CONSTRUCT DRIVEWAY APPROACHES
- INSTALL LIGHTING
- BASE PAVE ROADWAY TO 2" BELOW FINISH GRADE
- INSTALL SIGNS
- REINSTALL MAILBOXES
- FINISH GRADE SLOPES AND SEED

STAGE 2

- CONSTRUCT SHOULDER WIDENING
- BASE PAVE ROADWAY SLIVER WIDENING
- CONSTRUCT DRIVEWAY APPROACHES
- INSTALL SIGNS
- REINSTALL MAILBOXES
- FINISH GRADE SLOPES AND SEED

FINAL STAGE

- FINISH ASPHALT LEVELING
- PAVE WEARING COURSE
- INSTALL STRIPING



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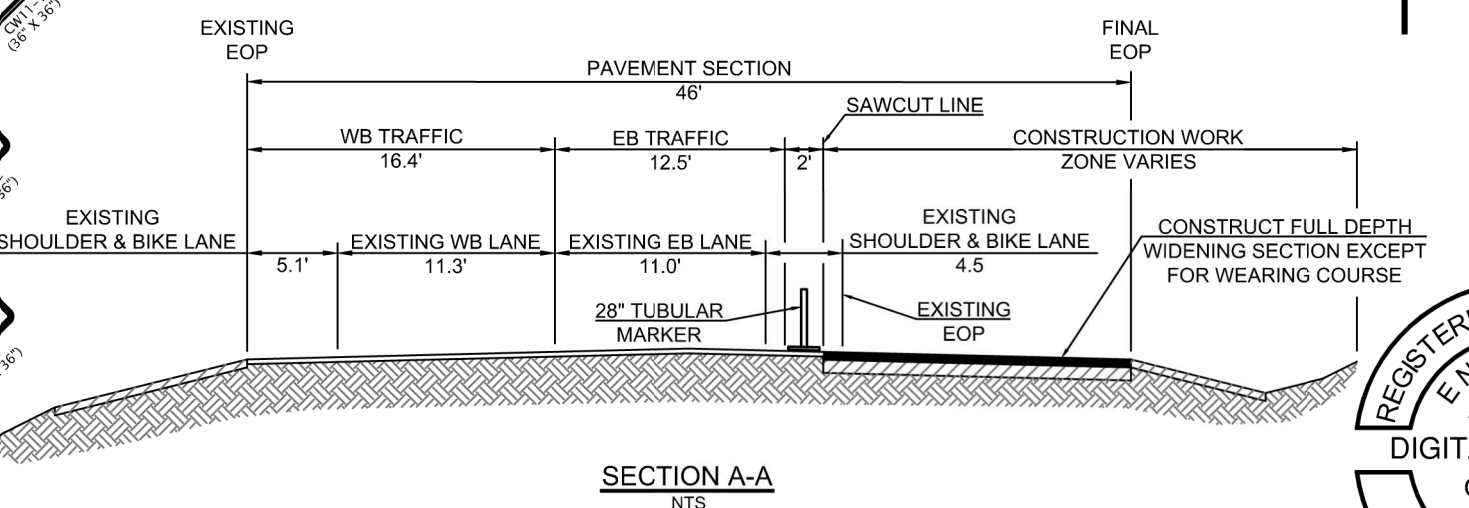
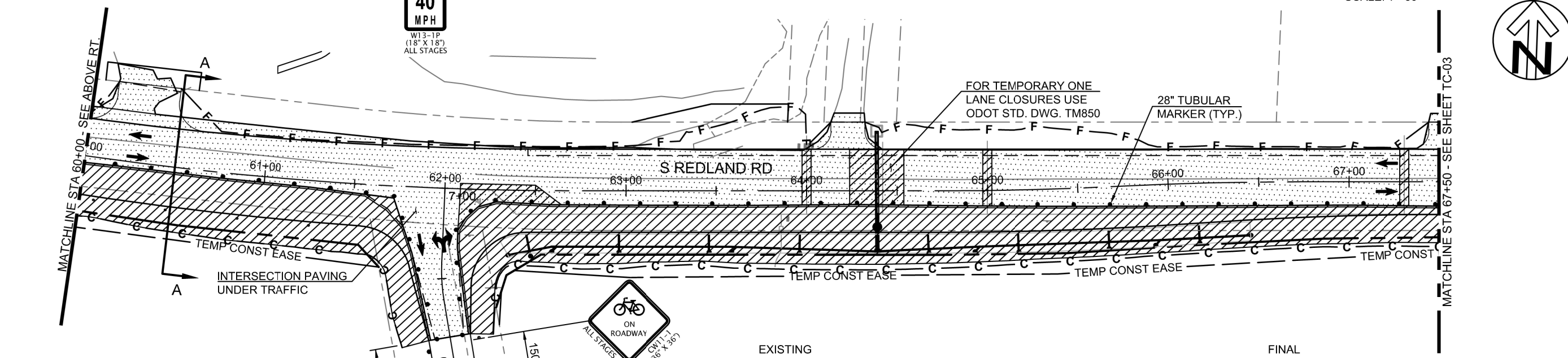
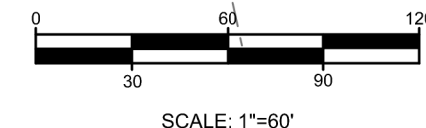
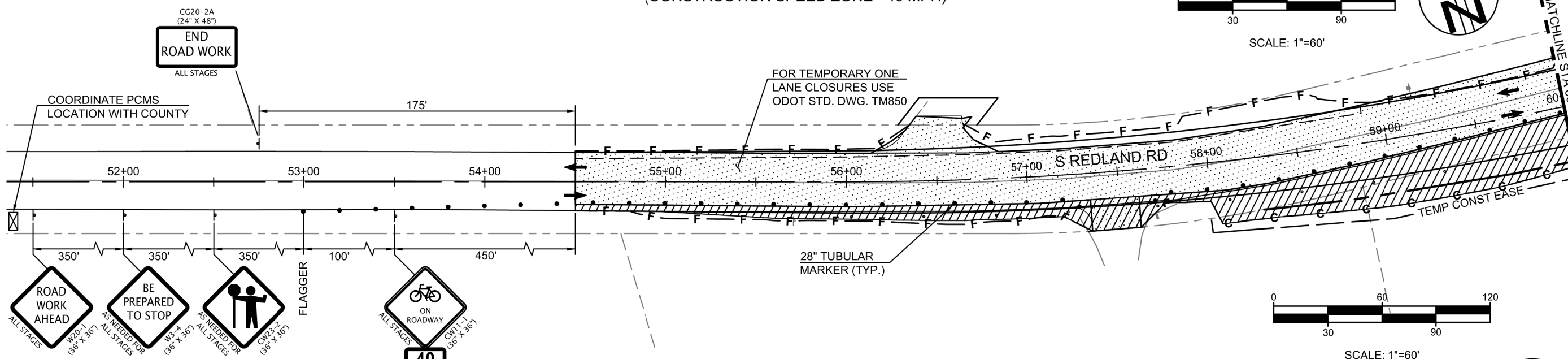
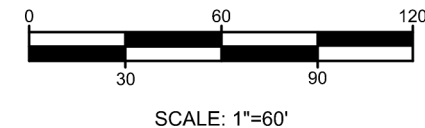
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150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

TRAFFIC CONTROL & STAGING NOTES
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY
DATE: 03/20/2023
PROJECT NO.: CL-300320344

STAGE I

(CONSTRUCTION SPEED ZONE - 40 MPH)



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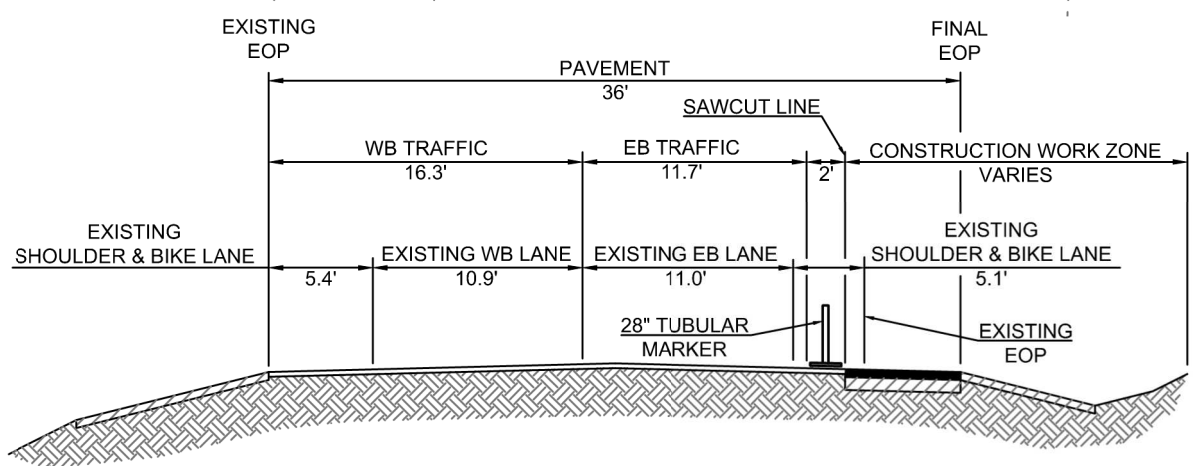
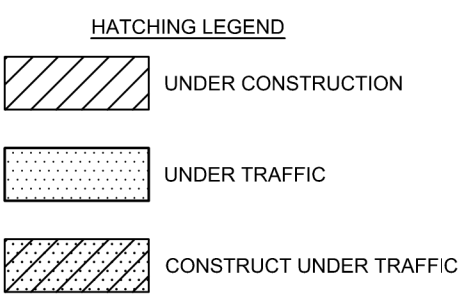
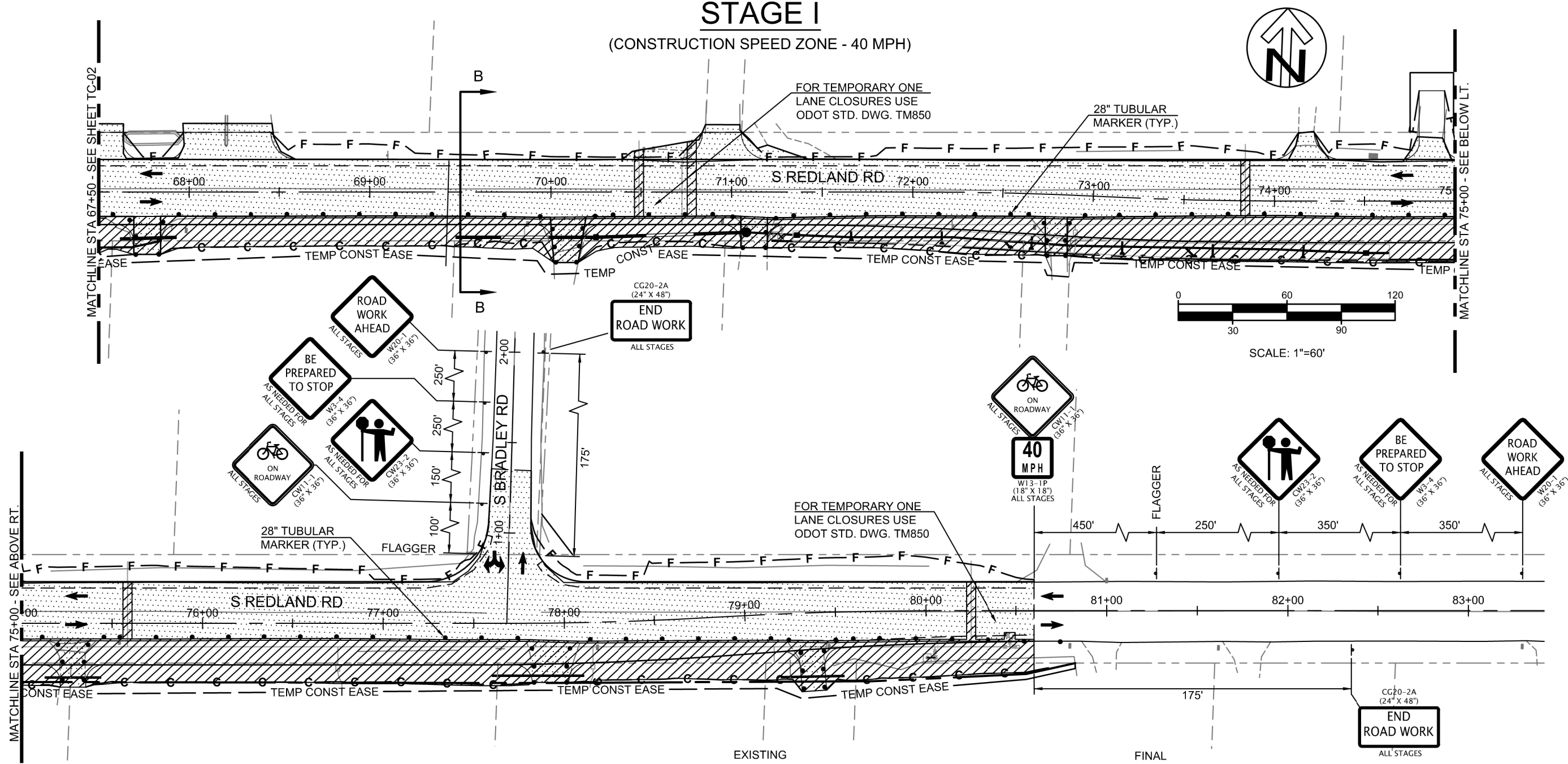
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TRAFFIC CONTROL & STAGING PLAN		REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY		PROJECT NO.: CL-300320344
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045		DIRECTOR DAN JOHNSON		DATE: 03/20/2023
DESIGNED BY: PPG	DRAFTED BY: PPG	CHECKED BY: KSR	REVISIONS	NO. DATE:
Sheet No.			TC-02	

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STAGE I

(CONSTRUCTION SPEED ZONE - 40 MPH)



SECTION B-B
NTS



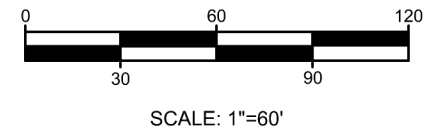
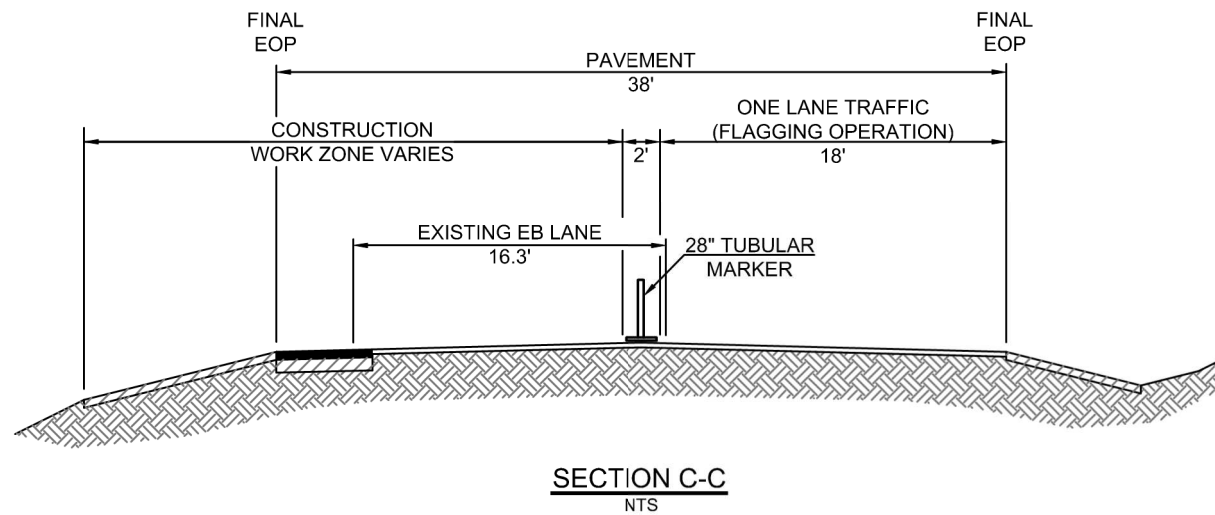
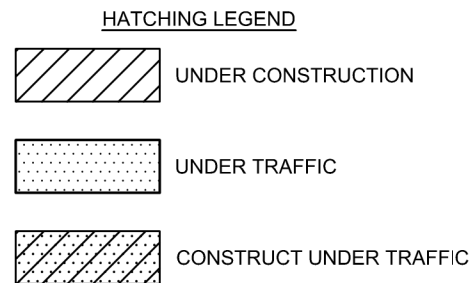
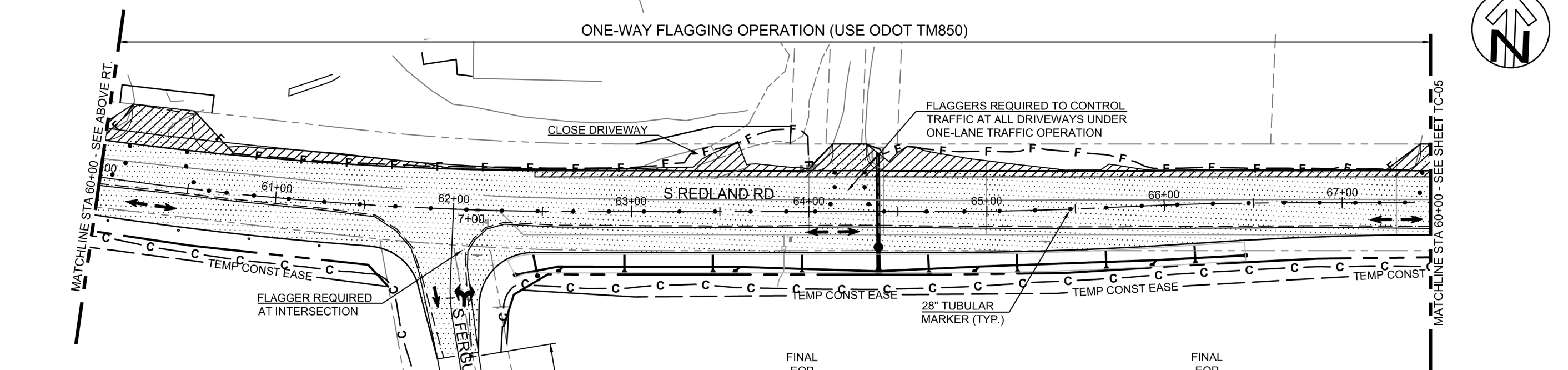
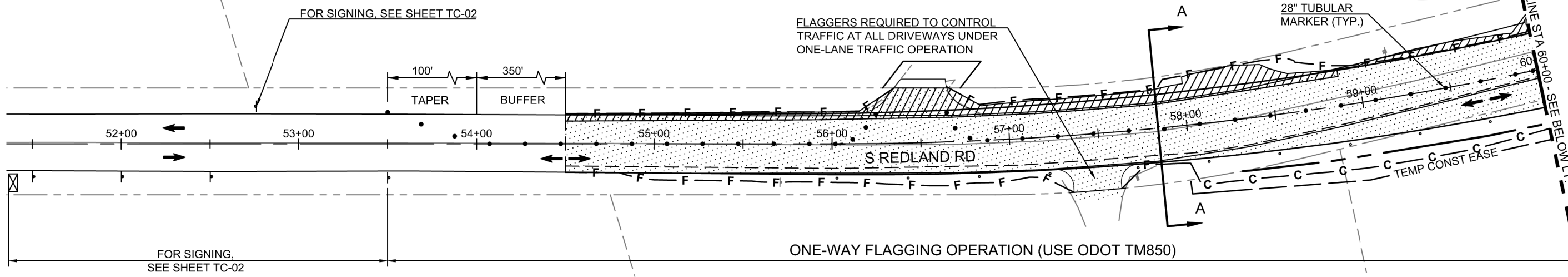
PBS
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 4412 S Corbett Avenue
 Portland, OR 97239
 503.248.1939
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TRAFFIC CONTROL & STAGING PLAN		REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY		PROJECT NO.: CL-300320344
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045		DIRECTOR DAN JOHNSON		DATE: 03/20/2023
DESIGNED BY: PPG	DRAFTED BY: PPG	CHECKED BY: KSR	REVISIONS	
NOT DATE:				
Sheet No.			TC-03	

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STAGE II

(CONSTRUCTION SPEED ZONE - 40 MPH)



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EXPIRES: 12/31/2024

<p>TRAFFIC CONTROL & STAGING PLAN</p> <p>REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY</p>		<p>PROJECT NO.: CL-300320344</p>
<p>CLACKAMAS COUNTY</p> <p>DEPT. OF TRANSPORTATION AND DEVELOPMENT</p> <p>150 BEAVERCREEK ROAD</p> <p>OREGON CITY, OR 97045</p>		<p>DATE: 03/20/2023</p>
<p>DIRECTOR</p> <p>DAN JOHNSON</p>		<p>DESIGNED BY: PPG</p> <p>DRAFTED BY: PPG</p> <p>CHECKED BY: KSR</p>
<p>REVISIONS</p>	<p>NO. DATE:</p>	<p>SHEET NO.</p> <p>TC-04</p>

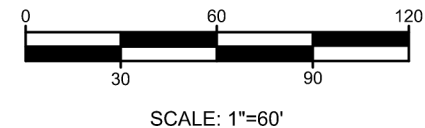
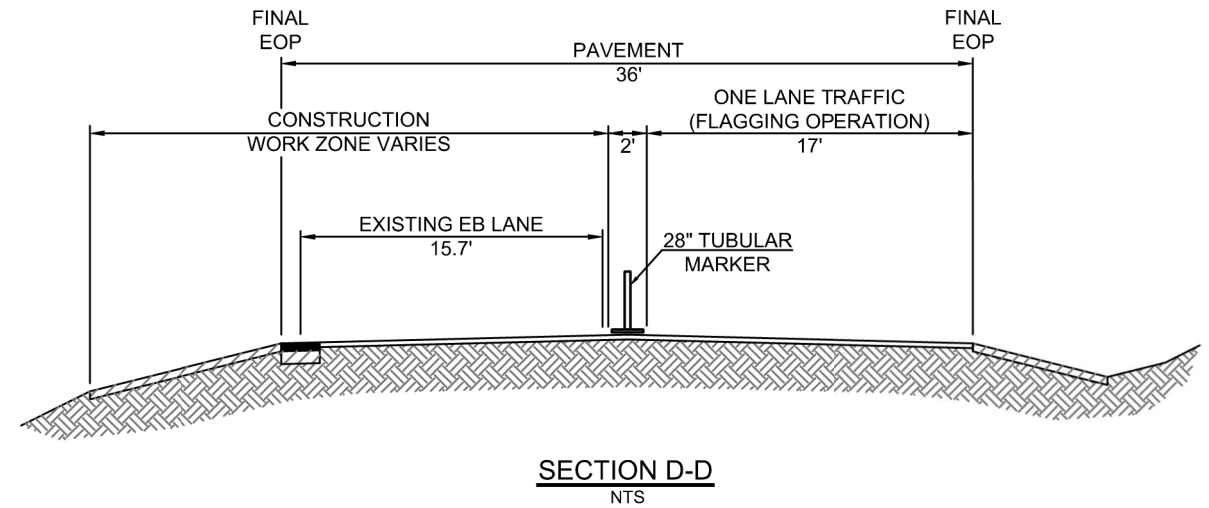
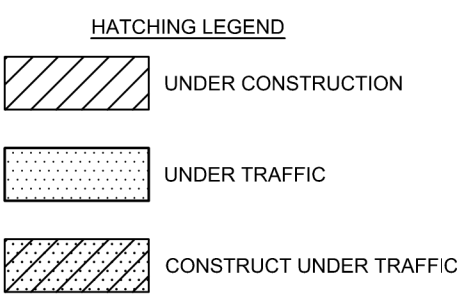
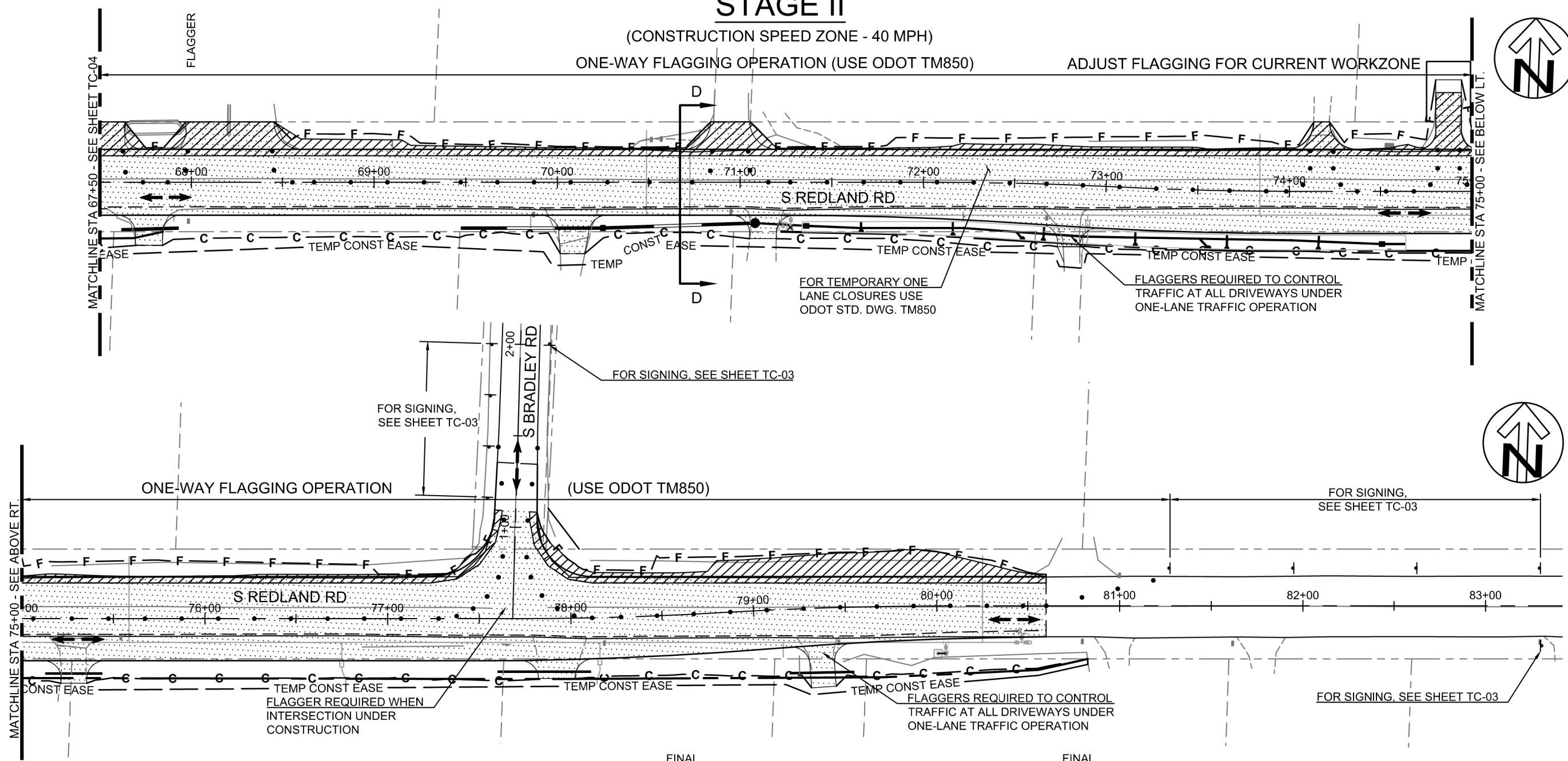
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STAGE II

(CONSTRUCTION SPEED ZONE - 40 MPH)

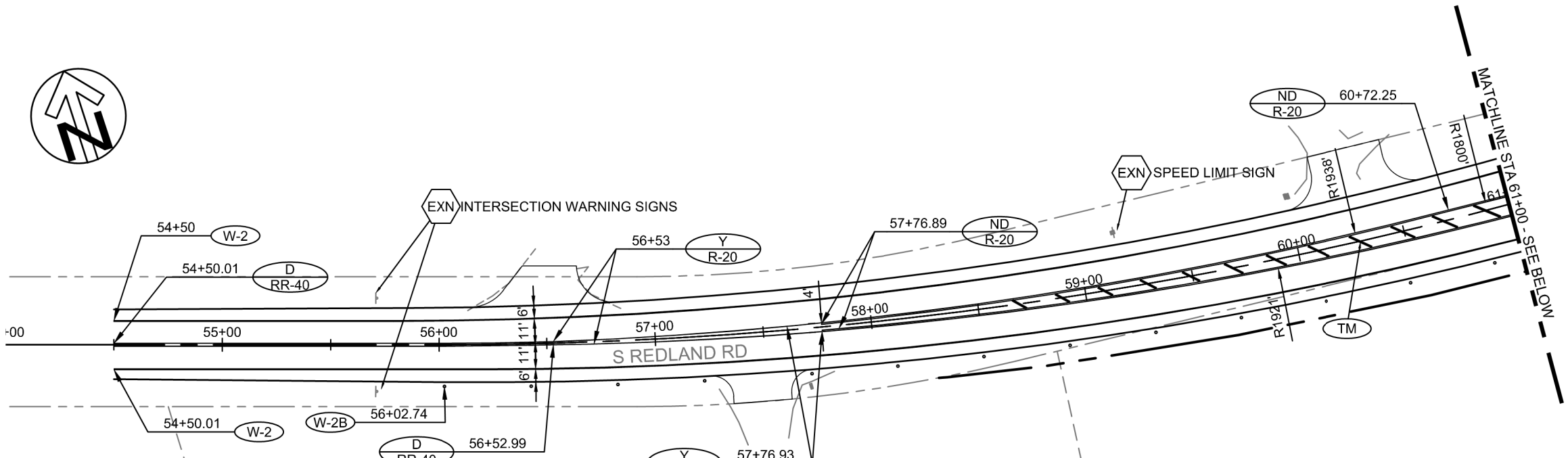
ONE-WAY FLAGGING OPERATION (USE ODOT TM850)

ADJUST FLAGGING FOR CURRENT WORKZONE



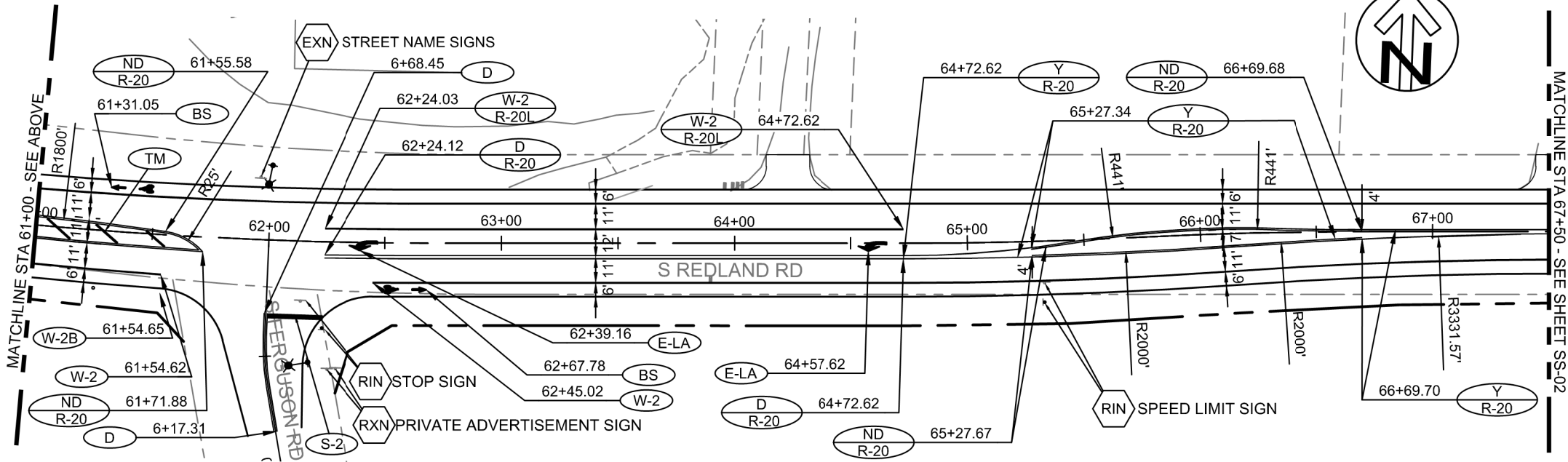
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<p>CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045</p>		<p>TRAFFIC CONTROL & STAGING PLAN REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY</p>	<p>PROJECT NO.: CL-300320344 DATE: 03/20/2023</p>
<p>DESIGNED BY: PPG DRAFTED BY: PPG CHECKED BY: KSR</p>		<p>DIRECTOR DAN JOHNSON</p>	<p>NO DATE: [] [] [] []</p>
<p>REVISIONS</p>		<p>Sheet No. TC-05</p>	<p>EXPIRES: 12/31/2024</p>



LEGEND FOR STRIPING

- DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STD DWG TM500
- 8" WHITE LINE PER ODOT STD DWG TM500
- STOP BAR 2' WHITE BAR PER CCDD. SEE ODOT STD DWG TM503
- BIKE LANE STANDARD STENCIL PER ODOT STD DWG TM503
- NARROW DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STD DWG TM500
- TRANSVERSE MEDIAN BARS 1' YELLOW BARS AT 20' SPACING PER ODOT STD DWG TM500
- ELONGATED LEFT TURN ARROW PER ODOT STD DWG TM501
- YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE PER ODOT STD DWG TM502
- DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES PER ODOT STD DWG TM502.
- DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS AND RUMBLE STRIPS WITH TWO 4" YELLOW LINES PER STD DETAIL ON SS03
- NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES PER ODOT STD DWG TM502
- CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE PER ODOT STD DWG TM502
- INSTALL TYPE - 2 FLEXIBLE PLASTIC POSTS TRAFFIC DELINEATORS WITH BACKSIDE PATTERN "W-2B" AT 40' SPACING PER ODOT STD DWG TM570. REMOVE EXISTING FLEXIBLE PLASTIC POSTS.
- BLUE REFLECTIVE MARKERS ARE REQUIRED IN THE STREET 4.5 FEET NORTH FROM CENTERLINE PERPENDICULAR TO THE HYDRANT LOCATION. MARKER SHALL BE RECESSED IN PAVEMENT PER BI-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL ON ODOT STD DWG TM517.
- BLUE REFLECTIVE MARKERS ARE REQUIRED IN THE STREET 4.5 FEET SOUTH FROM CENTERLINE PERPENDICULAR TO THE HYDRANT LOCATION. MARKER SHALL BE RECESSED IN PAVEMENT PER BI-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL ON ODOT STD DWG TM517.



SIGNING NOTES

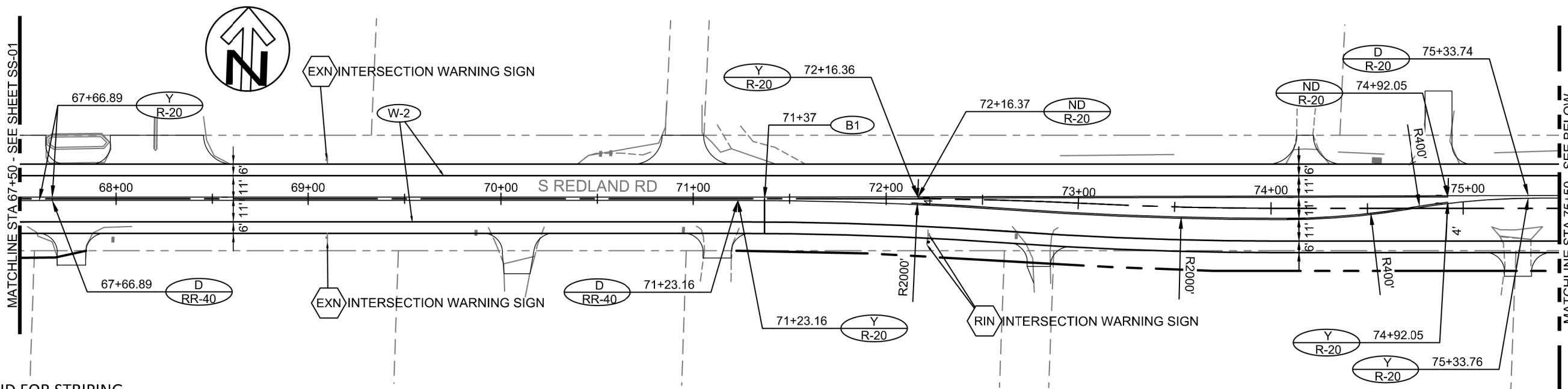
1. EXISTING SIGN LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY EXACT SIGN LOCATION.
2. ALL SIGNS ARE TO BE INSTALLED PER ODOT STD DWG TM200.

LEGEND FOR SIGNING

- MAINTAIN AND PROTECT EXISTING SIGN AND SUPPORT
- PRESERVE, PROTECT, AND REMOVE EXISTING PRIVATE ADVERTISEMENT SIGN AND SUPPORT. RETURN SIGN TO PROPERTY OWNER.
- REMOVE AND REINSTALL EXISTING SIGN TO PROPOSED SIGN LOCATION. INSTALL NEW SIGN SUPPORT

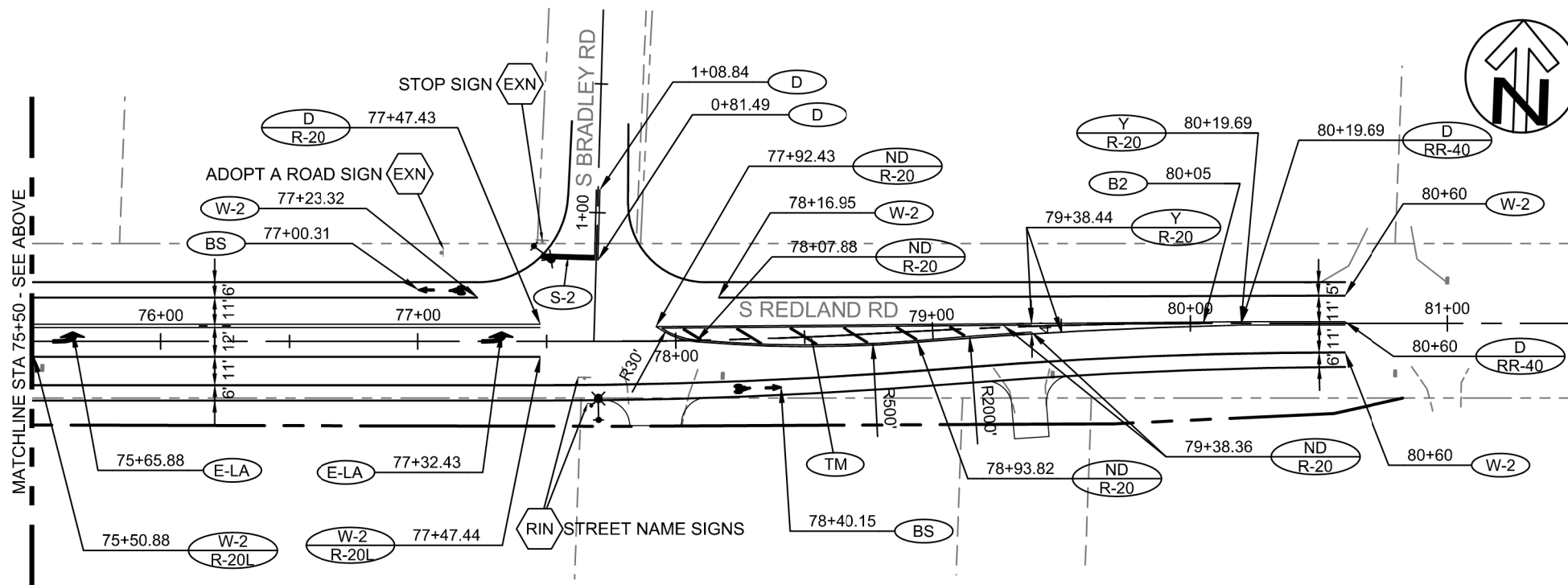


SIGNING & STRIPING PLAN	
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY	
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DIRECTOR DAN JOHNSON
DESIGNED BY: MDB DRAFTED BY: PPG CHECKED BY: KSR	PROJECT NO.: CL-300320344 DATE: 03/20/2023
REVISIONS NO. DATE:	SHEET NO. SS-01



LEGEND FOR STRIPING

- DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STD DWG TM500
- 8" WHITE LINE PER ODOT STD DWG TM500
- STOP BAR 2' WHITE BAR PER CCDD. SEE ODOT STD DWG TM503
- BIKE LANE STANDARD STENCIL PER ODOT STD DWG TM503
- NARROW DOUBLE NO-PASS TWO 4" YELLOW LINES PER ODOT STD DWG TM500
- TRANSVERSE MEDIAN BARS 1' YELLOW BARS AT 20' SPACING PER ODOT STD DWG TM500
- ELONGATED LEFT TURN ARROW PER ODOT STD DWG TM501
- YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE PER ODOT STD DWG TM502
- DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES PER ODOT STD DWG TM502.
- DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS AND RUMBLE STRIPS WITH TWO 4" YELLOW LINES PER STD DETAIL ON SS03
- NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES PER ODOT STD DWG TM502
- CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE PER ODOT STD DWG TM502
- INSTALL TYPE - 2 FLEXIBLE PLASTIC POSTS TRAFFIC DELINEATORS WITH BACKSIDE PATTERN "W-2B" AT 40' SPACING PER ODOT STD DWG TM570. REMOVE EXISTING FLEXIBLE PLASTIC POSTS.
- BLUE REFLECTIVE MARKERS ARE REQUIRED IN THE STREET 4.5 FEET NORTH FROM CENTERLINE PERPENDICULAR TO THE HYDRANT LOCATION. MARKER SHALL BE RECESSED IN PAVEMENT PER BI-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL ON ODOT STD DWG TM517.
- BLUE REFLECTIVE MARKERS ARE REQUIRED IN THE STREET 4.5 FEET SOUTH FROM CENTERLINE PERPENDICULAR TO THE HYDRANT LOCATION. MARKER SHALL BE RECESSED IN PAVEMENT PER BI-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL ON ODOT STD DWG TM517.



SIGNING NOTES

1. EXISTING SIGN LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY EXACT SIGN LOCATION.
2. ALL SIGNS ARE TO BE INSTALLED PER ODOT STD DWG TM200.

LEGEND FOR SIGNING

- MAINTAIN AND PROTECT EXISTING SIGN AND SUPPORT
- PRESERVE, PROTECT, AND REMOVE EXISTING PRIVATE ADVERTISEMENT SIGN AND SUPPORT. RETURN SIGN TO PROPERTY OWNER.
- REMOVE AND REINSTALL EXISTING SIGN TO PROPOSED SIGN LOCATION. INSTALL NEW SIGN SUPPORT



SCALE: 1"=60'



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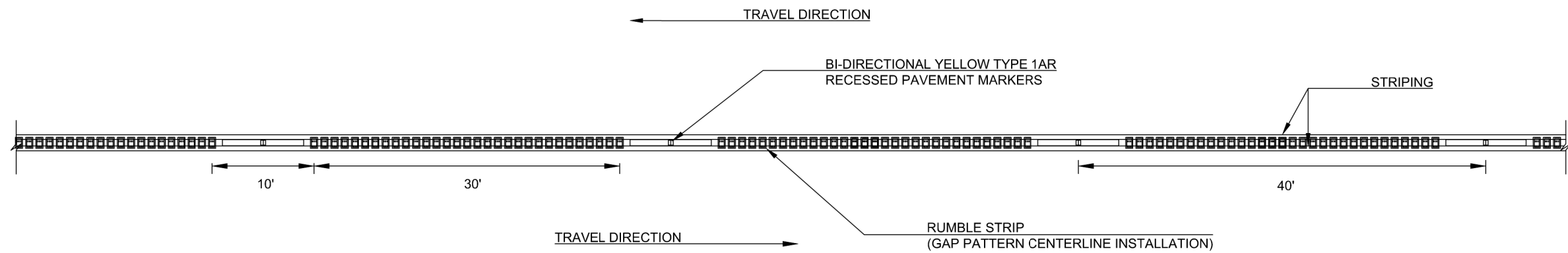
EXPIRES: 12/31/2024

SIGNING & STRIPING PLAN
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY
PROJECT NO.: CL-300320344
DATE: 03/20/2023

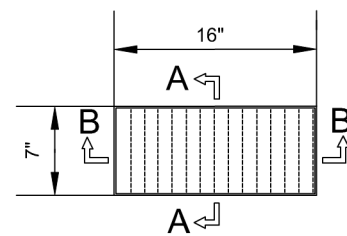
CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DIRECTOR
DAN JOHNSON

DESIGNED BY:	MDB
DRAFTED BY:	PPG
CHECKED BY:	KSR
REVISIONS	
NO. DATE:	
Sheet No.	SS-02

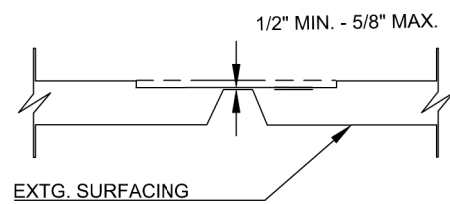
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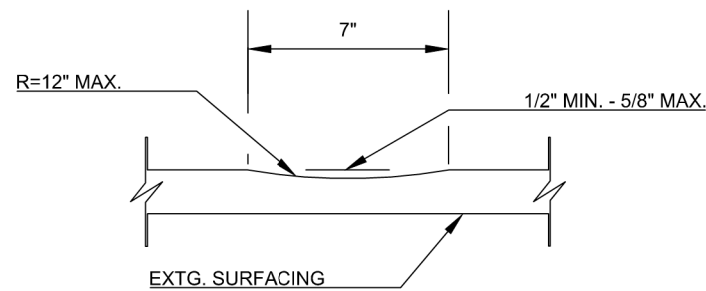
CENTERLINE RUMBLE STRIP PLACEMENT WITH RECESSED PAVEMENT MARKS



PLAN



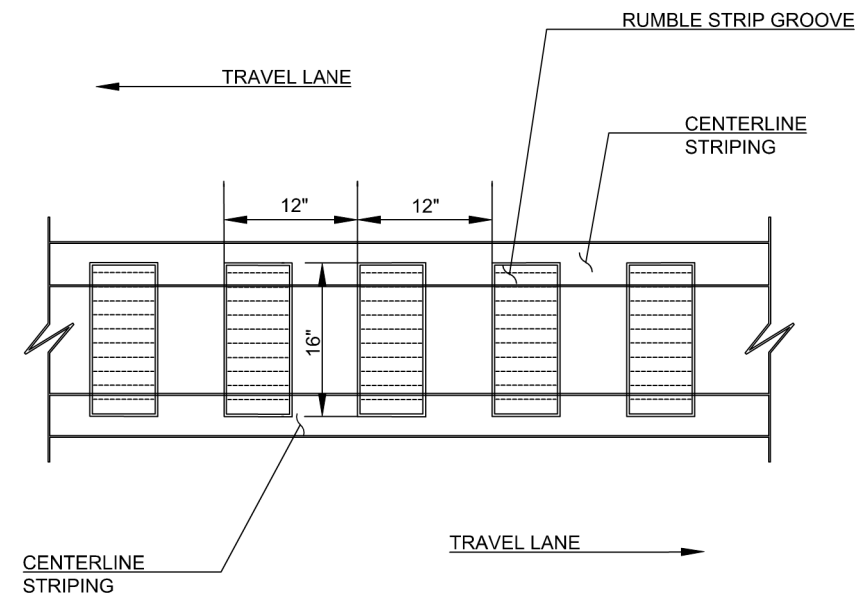
SECTION B-B



SECTION A-A

RUMBLE STRIP GROOVE
NTS

DIRECTION OF TRAFFIC



RUMBLE STRIP GAP PATTERN CENTERLINE INSTALLATION
NTS



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NOT DATE:

Sheet No.

SS-03

DESIGNED BY:
MDB

DRAFTED BY:
PPG

CHECKED BY:
KSR

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



DAN JOHNSON
DIRECTOR

SIGNING & STRIPING DETAILS

REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

DATE: 03/20/2023

PROJECT NO.: CL-300320344

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CONSTRUCTION NOTES:

PHOTOMETRIC NOTES:

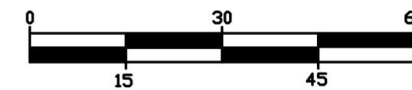
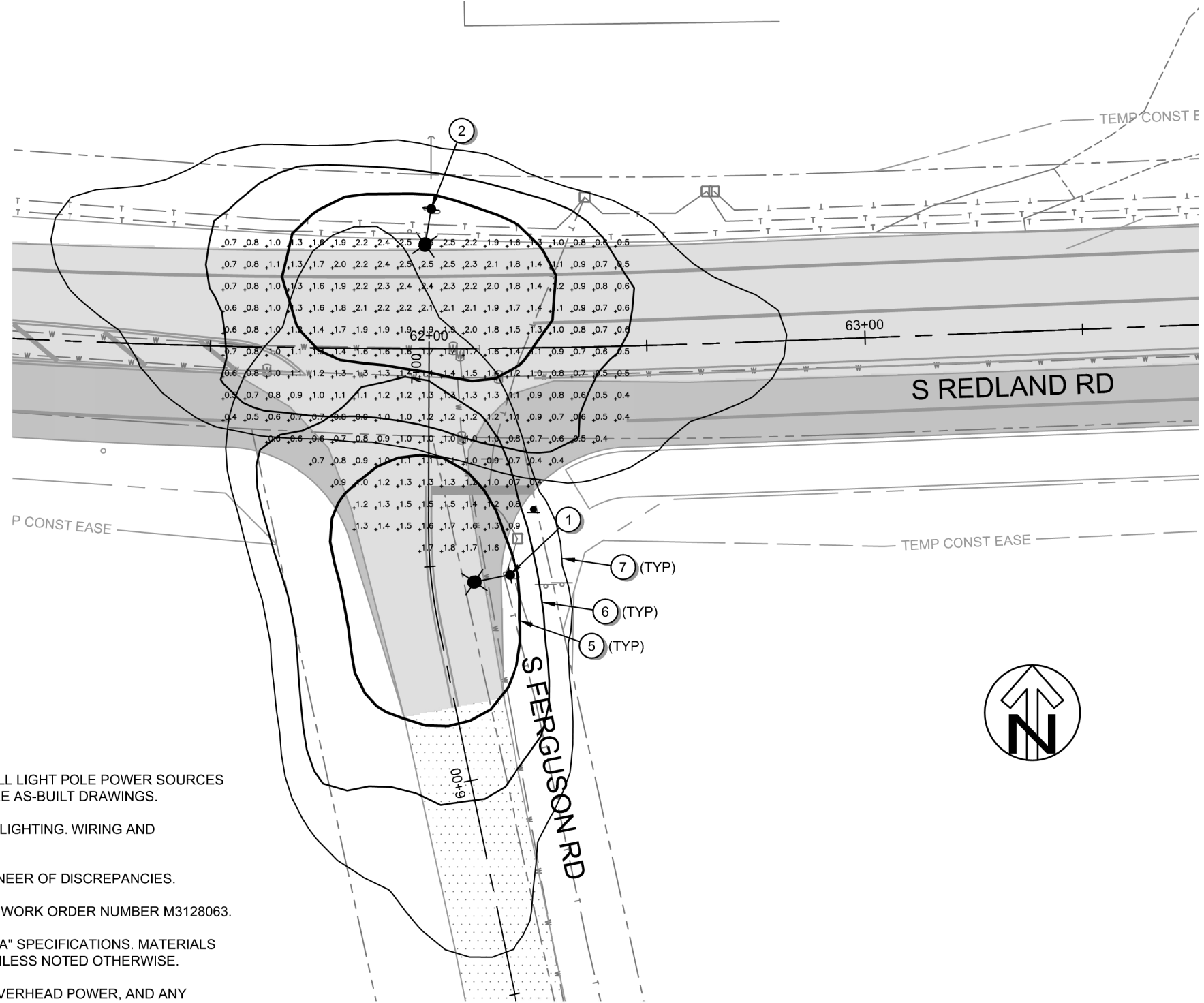
- ① PROPOSED LEOTEK GREEN COBRA MIDSIZE (GCM2, 88W) LUMINAIRE AT 30FT MOUNTING HEIGHT ON EXISTING UTILITY POLE, SEE POLE AND LUMINAIRE SCHEDULE, SHEET LL-03, AND PGE APPROVED EQUIPMENT LIST, SHEET LL-03. INSTALL LIGHT 10° COUNTER-CLOCKWISE FROM PERPENDICULAR TO THE CENTERLINE OF S FERGUSON ROAD.
- ② REMOVE EXISTING LIGHT AND INSTALL PROPOSED LEOTEK GREEN COBRA MIDSIZE (GCM2, 88W) LUMINAIRE AT 27FT MOUNTING HEIGHT ON EXISTING UTILITY POLE, SEE POLE AND LUMINAIRE SCHEDULE, SHEET LL-03, AND PGE APPROVED EQUIPMENT LIST, SHEET LL-03. INSTALL LIGHT 10° CLOCKWISE FROM PERPENDICULAR TO THE CENTERLINE OF S REDLAND ROAD.
- ③ NOT USED.
- ④ NOT USED.
- ⑤ ISOLUMEN LINE REPRESENTING 1.0 FC.
- ⑥ ISOLUMEN LINE REPRESENTING 0.5 FC.
- ⑦ ISOLUMEN LINE REPRESENTING 0.25 FC.

ILLUMINANCE STATISTICS

ZONE	STANDARDS FOR MAJOR/MAJOR ISOLATED INTERSECTIONS (PER IES/ANSI RP-8-14)	RESULTS FOR S REDLAND ROAD & S FERGUSON ROAD
AVERAGE (FC)	0.9	1.2
MAXIMUM (FC)	--	2.6
MINIMUM (FC)	--	0.4
MAX/MIN RATIO	--	6.5:1
AVG/MIN RATIO	3.0:1	3.0:1

STREET LIGHT CONSTRUCTION NOTES:

- 1. POWER SOURCE LOCATIONS TO BE DETERMINED BY PORTLAND GENERAL ELECTRIC (PGE). ALL LIGHT POLE POWER SOURCES SHALL BE VERIFIED WITH PGE PLANS. CHANGES IN POWER SOURCE LOCATIONS WILL REQUIRE AS-BUILT DRAWINGS.
- 2. THIS PLAN DEPICTS THE MINIMUM AT-OR-ABOVE-GRADE EQUIPMENT REQUIRED FOR STREET LIGHTING. WIRING AND OVERHEAD POWER DESIGN WILL BE PREPARED BY PGE.
- 3. PGE TO VERIFY MOUNTING HEIGHT AND CLEARANCES TO OVERHEAD UTILITIES. NOTIFY ENGINEER OF DISCREPANCIES.
- 4. CALL PGE AT 503-323-6700 FOR UTILITY COORDINATION ON STREET LIGHTS. REFERENCE PGE WORK ORDER NUMBER M3128063.
- 5. STREET LIGHT EQUIPMENT AND MATERIALS SHALL CONFORM TO PGE SCHEDULE 95 OPTION "A" SPECIFICATIONS. MATERIALS SUBMITTALS AND INSTALLATIONS SHALL BE APPROVED BY PGE PRIOR TO CONSTRUCTION UNLESS NOTED OTHERWISE.
- 6. PGE SHALL INSTALL ALL EQUIPMENT INDICATED ON THESE PLANS AS WELL AS ALL WIRING, OVERHEAD POWER, AND ANY OTHER EQUIPMENT OR MATERIALS NECESSARY FOR THE STREET LIGHTING SYSTEM'S FUNCTIONING.
- 7. ALL ELECTRICAL EQUIPMENT SHALL CONFORM TO THE CURRENT STANDARDS OF THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AND THE UNDERWRITERS LABORATORY (UL) WHEREVER APPLICABLE. IN ADDITION TO THE REQUIREMENTS OF THE PLANS, STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE, THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AND ANY APPLICABLE LOCAL ORDINANCES.
- 8. LUMINAIRES ARE ORIENTED PERPENDICULAR TO THE REFERENCED CENTERLINE ALIGNMENT UNLESS NOTED OTHERWISE.



SCALE: 1"=30'



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EXPIRES: 12/31/24

ILLUMINATION PLAN

REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

PROJECT NO.: CL-300320344

DATE: 03/20/2023

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



DIRECTOR

DAN JOHNSON

DESIGNED BY: DAH
DRAFTED BY: ASW
CHECKED BY: JAM

REVISIONS

NO	DATE	DESCRIPTION

Sheet No.

LL-01

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CONSTRUCTION NOTES:

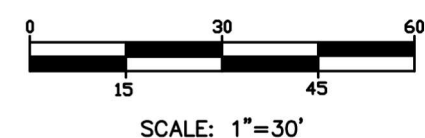
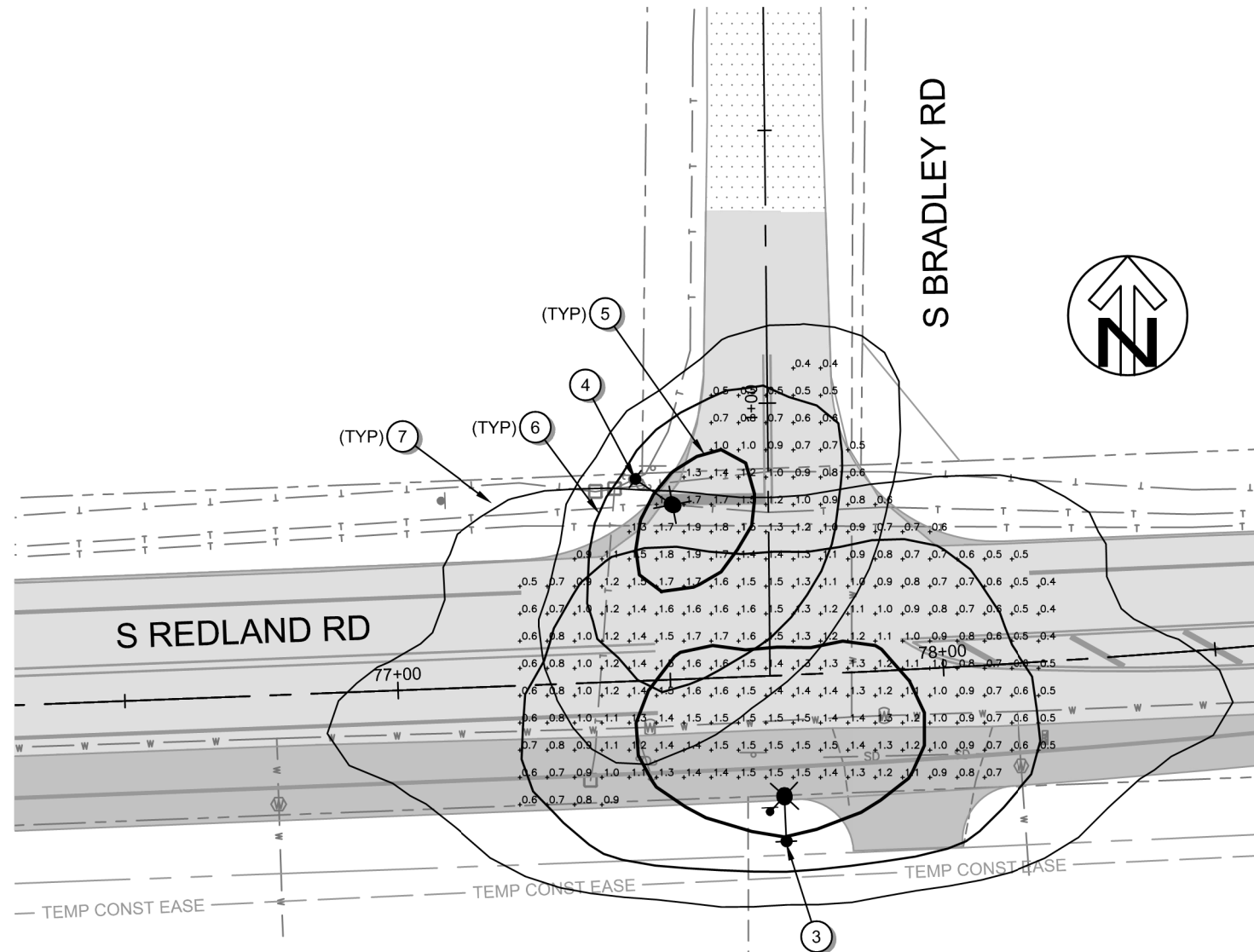
PHOTOMETRIC NOTES:

- ① NOT USED.
- ② NOT USED.
- ③ PROPOSED LEOTEK GREEN COBRA MIDSIZE (GCM2, 88W) LUMINAIRE AT 30FT MOUNTING HEIGHT, SEE POLE AND LUMINAIRE SCHEDULE, SHEET LL-03, AND PGE APPROVED EQUIPMENT LIST, SHEET LL-03.
- ④ ROTATE EXISTING LIGHT ON EXISTING UTILITY POLE TO BE ORIENTED 50° CLOCKWISE FROM PERPENDICULAR TO THE CENTERLINE OF S REDLAND ROAD, SEE POLE AND LUMINAIRE SCHEDULE, SHEET LL-03.
- ⑤ ISOLUMEN LINE REPRESENTING 1.0 FC.
- ⑥ ISOLUMEN LINE REPRESENTING 0.5 FC.
- ⑦ ISOLUMEN LINE REPRESENTING 0.25 FC.

ILLUMINANCE STATISTICS		
ZONE	STANDARDS FOR MAJOR/MAJOR ISOLATED INTERSECTIONS (PER IES/ANSI RP-8-14)	RESULTS FOR S REDLAND ROAD & S BRADLEY ROAD
AVERAGE (FC)	0.9	1.1
MAXIMUM (FC)	--	1.9
MINIMUM (FC)	--	0.4
MAX/MIN RATIO	--	4.8:1
AVG/MIN RATIO	3.0:1	2.8:1

STREET LIGHT CONSTRUCTION NOTES:

1. POWER SOURCE LOCATIONS TO BE DETERMINED BY PORTLAND GENERAL ELECTRIC (PGE). ALL LIGHT POLE POWER SOURCES SHALL BE VERIFIED WITH PGE PLANS. CHANGES IN POWER SOURCE LOCATIONS WILL REQUIRE AS-BUILT DRAWINGS.
2. THIS PLAN DEPICTS THE MINIMUM AT-OR-ABOVE-GRADE EQUIPMENT REQUIRED FOR STREET LIGHTING. WIRING AND OVERHEAD POWER DESIGN WILL BE PREPARED BY PGE.
3. PGE TO VERIFY MOUNTING HEIGHT AND CLEARANCES TO OVERHEAD UTILITIES. NOTIFY ENGINEER OF DISCREPANCIES.
4. CALL PGE AT 503-323-6700 FOR UTILITY COORDINATION ON STREET LIGHTS. REFERENCE PGE WORK ORDER NUMBER M3128063.
5. STREET LIGHT EQUIPMENT AND MATERIALS SHALL CONFORM TO PGE SCHEDULE 95 OPTION "A" SPECIFICATIONS. MATERIALS SUBMITTALS AND INSTALLATIONS SHALL BE APPROVED BY PGE PRIOR TO CONSTRUCTION UNLESS NOTED OTHERWISE.
6. PGE SHALL INSTALL ALL EQUIPMENT INDICATED ON THESE PLANS AS WELL AS ALL WIRING, OVERHEAD POWER, AND ANY OTHER EQUIPMENT OR MATERIALS NECESSARY FOR THE STREET LIGHTING SYSTEM'S FUNCTIONING.
7. ALL ELECTRICAL EQUIPMENT SHALL CONFORM TO THE CURRENT STANDARDS OF THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AND THE UNDERWRITERS LABORATORY (UL) WHEREVER APPLICABLE. IN ADDITION TO THE REQUIREMENTS OF THE PLANS, STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE, THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AND ANY APPLICABLE LOCAL ORDINANCES.
8. LUMINAIRES ARE ORIENTED PERPENDICULAR TO THE REFERENCED CENTERLINE ALIGNMENT UNLESS NOTED OTHERWISE.



EXPIRES: 12/31/24

ILLUMINATION PLAN	
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY	
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DIRECTOR DAN JOHNSON
DESIGNED BY: DAH	DRAFTED BY: ASW
NO. DATE:	CHECKED BY: JAM
REVISIONS	
Sheet No. LL-02	
PROJECT NO.: CL-300320344 DATE: 03/20/2023	

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POLE AND LUMINAIRE SCHEDULE

#	Pole Type*	Alignment	Station	Offset**	Luminaire*						Mounting Height (feet)	Mast Arm Length (feet)*	Luminaire Options*	PGE Schedule and Option
					Manufacturer & Series	Lamp Watts	Initial Lumens	Light Loss Factor (LLF)	Line Volt	B-U-G** * Rating				
1	Existing Pole	S FERGUSON ROAD	6+46	18' RT	Leotek GCM LED Street Light H-series	88	10,230	0.74	120V-277 V	2-0-2	30	8	ANSI 7-wire Photo-control Receptacle (PCR7), Rubber Wildlife Guard (RWG), Utility Wattage Label (WL), Fixed Drive Current (FDC), 3000K color temperature (3K), & Type II Distribution	95 A
2	Existing Pole	S REDLAND ROAD	62+01	32' LT							27	6		
3	Wood, Single Arm		77+70	32' RT							30	10		
4	Existing Pole		77+45	37' LT							Existing Light			

* See approved street light equipment tables, this sheet, for specifications or model options.

** Offset is measured between roadway construction centerline and the center of the pole.

*** B = backlight, U = uplight, G = glare

SELECTED PORTLAND GENERAL ELECTRIC (PGE) -APPROVED STREET LIGHT EQUIPMENT

LUMINAIRES*: LED Street Light (TYPE II)	
Size	Leotek
88 Watt LED, 10,230 Lumens	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE

*OR APPROVED EQUAL FROM CURRENT PGE APPROVED MATERIALS LIST

POLE OPTIONS*:		
DOUGLAS FIR WOODEN POLE		
Length	Class	Diameter At Ground Line
45-foot	CL3	11.90 inches

*OR APPROVED EQUAL FROM CURRENT PGE APPROVED MATERIALS LIST

PHOTO CONTROL OPTIONS*:			
EXTENDED LIFE TWIST LOCK			
Type	Ripley	DTL	Intermatic
Photoelectric Control	RD8645	DLL 1271.5 J50	EK4536K

*OR APPROVED EQUAL FROM CURRENT PGE APPROVED MATERIALS LIST

MAST ARM OPTIONS ON WOOD POLES*:		
Length	Salco	Maclean Power Systems
6 feet, No Brace	WP-125-6-S	S-125-6G
8 feet, Single Brace	WPSG-125-8-S-PGE	S-125-85G-30R
10 feet, Double Brace	WPDG-125-10-S	S-125-10DG

*OR APPROVED EQUAL FROM CURRENT PGE APPROVED MATERIALS LIST

ILLUMINATION DETAILS

REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY

PROJECT NO.: CL-300320344

DATE: 03/20/2023

CLACKAMAS COUNTY

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



DIRECTOR

DAN JOHNSON

DESIGNED BY:
DAH

DRAFTED BY:
ASW

CHECKED BY:
JAM

REVISIONS

NO. DATE:

Sheet No.

LL-03



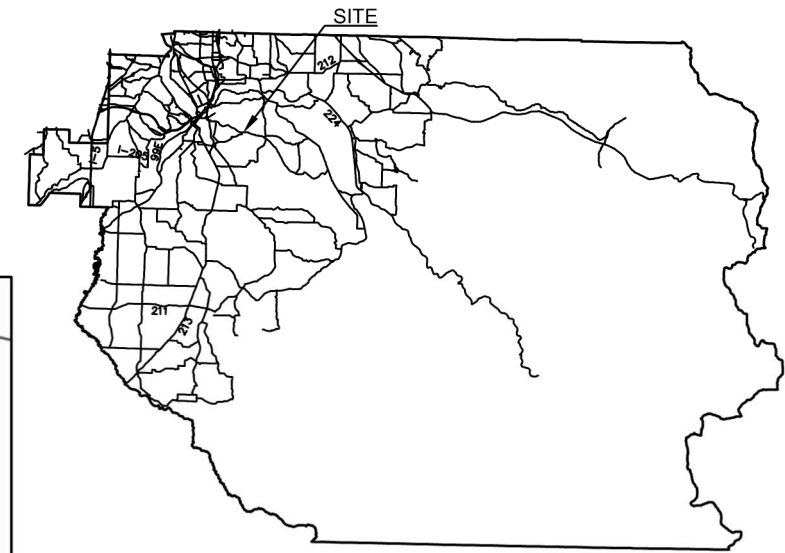
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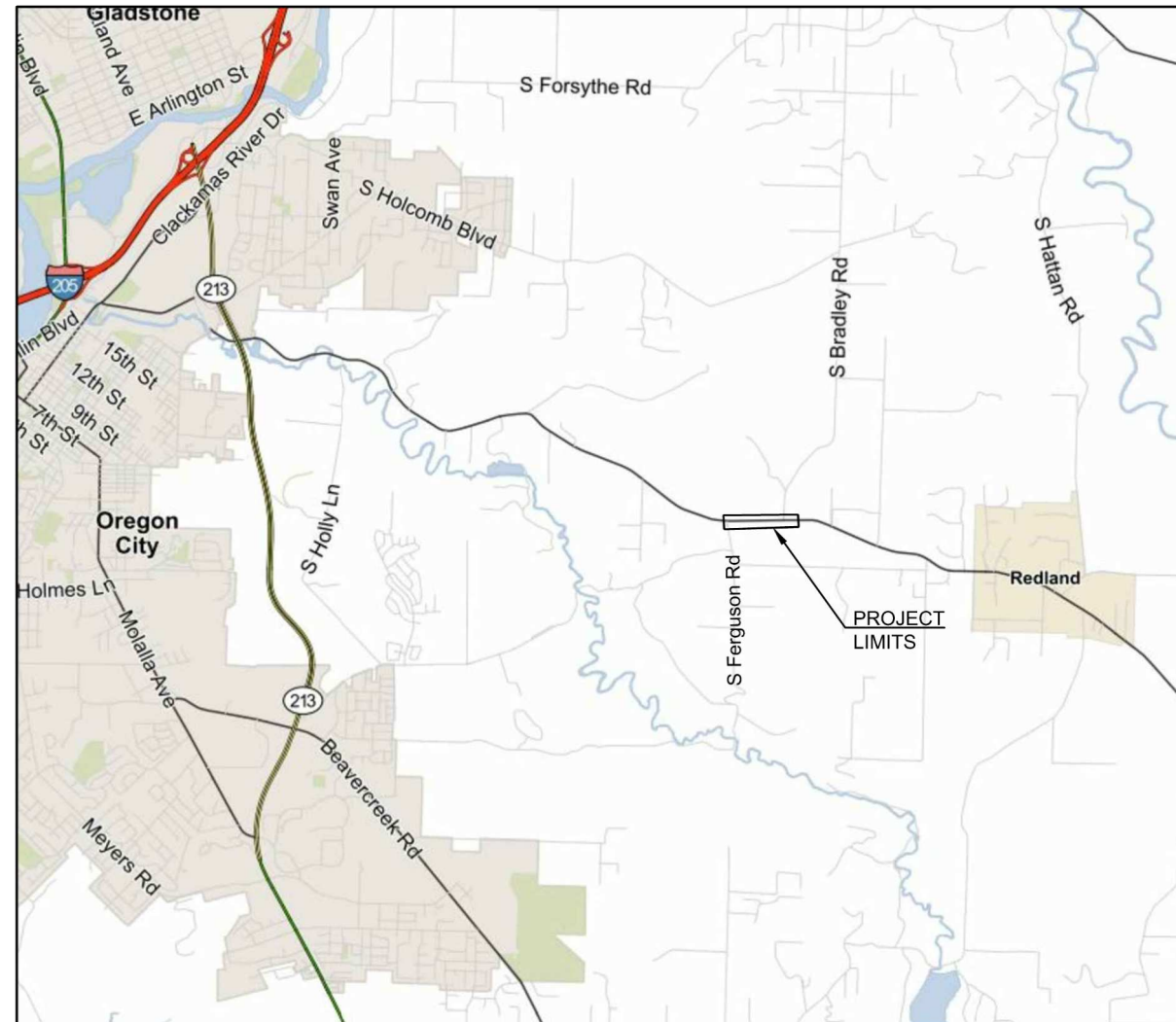
EXPIRES: 12/31/24

CLACKAMAS RIVER WATER (CRW) REDLAND ROAD WATERLINE

CLACKAMAS COUNTY, OREGON
APRIL 2023



Sheet List Table	
Sheet ID	Sheet Title
C-01	WATERLINE COVER SHEET
C-02	GENERAL NOTES - CLACKAMAS RIVER WATER
C-03	GENERAL NOTES - WILLIAMS GAS PIPELINE
WP-01	WATERLINE PLAN & PROFILE
WP-02	WATERLINE PLAN & PROFILE
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WP-04	WATERLINE PLAN & PROFILE
WP-05	WATERLINE PLAN & PROFILE
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WP-07	WATERLINE PLAN & PROFILE
WP-08	WATERLINE PLAN & PROFILE
WP-09	WATERLINE CONNECTION DETAILS
WP-10	WATER DETAILS
WP-11	WATER DETAILS



VICINITY MAP
NOT TO SCALE



BIDDING NOTICE TO CONTRACTORS

DUE TO THE ONGOING DELAYS IN MANUFACTURING AND DELIVERY OF MATERIALS, CRW PRE-ORDERED PIPING, FITTINGS, AND OTHER MATERIALS TO CONSTRUCT THE WATERLINE IMPROVEMENTS. CONTRACTOR SHALL ARRANGE WITH CRW AND PICKUP MATERIALS FROM THEIR FACILITY LOCATED AT 9100 SE MANGAN DR. CLACKAMAS, OR 97015. CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL ALL MISCELLANEOUS MATERIALS NOT PROVIDED BY CRW AS REQUIRED FOR A COMPLETE PROJECT ASSEMBLY. THE LIST OF CRW FURNISHED MATERIALS IS PROVIDED ON SHEET WP-11.

CONTACT INFORMATION:

Clackamas River Water
16770 SE 82nd Dr
Clackamas, OR 97015
503-722-9220
www.crvwater.com
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Civil Engineer:
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(503) 729-8880, mobile

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)



EXPIRES: 12/31/2024

WATERLINE COVER SHEET
REDLAND ROAD WATERLINE
PROJECT NO.: CL-300320344



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NO	DATE	REVISIONS

Sheet No. C-01

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GENERAL CONSTRUCTION NOTES:

- NOTICE OF WORK:** THE CONTRACTOR SHALL FOLLOW THE CLACKAMAS RIVER WATER (CRW), CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (DTD), AND OTHER AFFECTED JURISDICTIONS' ADVANCE NOTIFICATION REQUIREMENTS PRIOR TO CONSTRUCTION START.
- CONSTRUCTION STANDARDS AND SPECIFICATIONS:** ALL CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE MOST RECENT VERSION OF CLACKAMAS RIVER WATER STANDARD SPECIFICATIONS, OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, CCDDT'S SPECIAL PROVISIONS FOR REDLAND ROAD TURN LANES AND FERGUSON & BRADLEY PROJECT, CLACKAMAS COUNTY WATER ENVIRONMENTAL SERVICES (WES) STANDARDS (INCLUDING EROSION PREVENTION AND SEDIMENT CONTROL) AND THE OREGON ADMINISTRATIVE RULES (OAR), CHAPTER 333, UNLESS NOTED ON THE PLANS OR SPECIFIED OTHERWISE.
- CONSTRUCTION PLANS:** THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL HAVE AT LEAST ONE SET OF DISTRICT-APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES.
- INSURANCE:** A COPY OF THE CONTRACTOR'S CERTIFICATE OF INSURANCE SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES.
- CONSTRUCTION STAKING:** THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING, INCLUDING WATERLINE ALIGNMENT STAKING AND OFFSETS, UTILIZING DESIGN SURVEY INFORMATION AS PROVIDED BY CRW AND PBS ENGINEERING AND ENVIRONMENTAL.
- PERMITS:** THE CONTRACTOR SHALL OBTAIN AND PAY ALL REQUIRED FEES, BONDS AND WARRANTIES FOR THE REQUIRED JURISDICTION'S UTILITY PLACEMENT AND/OR STREET OPENING PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL OTHER PERMITS REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL COMPLY WITH ALL STIPULATED PERMIT CONDITIONS.
- EROSION CONTROL:** EFFECTIVE EROSION CONTROL, DUST CONTROL, AND DRAINAGE CONTROL IS REQUIRED AND SHALL BE MAINTAINED AT ALL TIMES, IN ACCORDANCE WITH THE PERMITTING JURISDICTION'S EROSION CONTROL REQUIREMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF ALL WORK AREAS, AND ANY ADJACENT AND DOWNSTREAM PROPERTIES FROM EROSION AND RUNOFF DURING THE COURSE OF THE WORK. ANY DAMAGE RESULTING FROM SUCH EROSION OR RUNOFF SHALL BE CORRECTED AT THE CONTRACTOR'S SOLE EXPENSE. THE ABSENCE OF IDENTIFIED EROSION CONTROL PLACEMENT LOCATIONS ON THE DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM SUPPLYING PROPER EROSION CONTROL MEASURES WHICH MEET SPECIFIED REQUIREMENTS.
- TRAFFIC CONTROL:** THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEETING THE REQUIREMENTS OF THE OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK, 2011, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED AND APPROVED BY DTD PRIOR TO COMMENCEMENT OF WORK.
- MATERIAL SUBMITTALS:** THE CONTRACTOR SHALL PROVIDE SUBMITTALS OF ALL MATERIALS TO BE INCORPORATED INTO THE WORK. ALL MATERIAL SUBMITTALS SHALL INCLUDE PROOF OF MATERIALS TESTING IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS. ANY MATERIAL NOT IN CONFORMANCE WITH APPROVED SUBMITTALS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST TO THE OWNER.
- UTILITY LOCATIONS:** LOCATIONS AND GRADES OF EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND SHALL BE CONSIDERED APPROXIMATE ONLY AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER, AS SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090. THE CONTRACTOR SHALL HAVE UTILITIES LOCATED IN ACCORDANCE WITH ORS 757.541 THROUGH 757.571 PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL ALSO FIELD VERIFY DEPTHS OF EXISTING UTILITIES TO IDENTIFY POTENTIAL CONFLICTS, AND AS MAY BE REQUIRED FOR CONNECTIONS TO EXISTING SYSTEMS.
- UTILITY POTHOLING:** THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION, DEPTH, TYPE, AND SIZE OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION OF NEW WATERLINE AND SERVICE PIPE. THE CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AT LEAST 200 FEET AHEAD OF LAYING PIPE AT ALL CROSSINGS TO ALLOW REQUIRED ELEVATION ADJUSTMENTS TO BE ACCOMPLISHED WITHOUT ADDITIONAL BENDS, FITTINGS OR OTHER WORK. ELEVATION ADJUSTMENTS MAY BE REQUIRED AND ARE INCIDENTAL TO THE WORK. DEFLECT PIPE AS REQUIRED TO AVOID EXISTING UTILITIES AND TO COMPLETE TIE-INS (ALLOWABLE DEFLECTION IS 50% OF MANUFACTURER RECOMMENDED MAXIMUM). IF CONFLICTS ARISE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A PLAN DETAILING THE INVESTIGATIVE POTHOLING TO BE COMPLETED PRIOR TO BEGINNING THE WORK. POTHOLING PLAN SHALL INDICATE THE LOCATION AND NUMBER OF POTHOLES AND THE EQUIPMENT USED TO POTHOLE.
- UTILITY DISTURBANCE AND REPAIR:** IF THE CONTRACTOR DAMAGES, DESTROYS, OR OTHERWISE DISTURBS AN EXISTING UTILITY, DTD AND THE UTILITY OWNER SHALL BE IMMEDIATELY CONTACTED, AND THE UTILITY SHALL BE REPAIRED WITHOUT DELAY OR COST TO THE DISTRICT OR DTD.
- UTILITIES ABANDONED IN PLACE:** UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL SEAL AND CAP THE REMAINING EXPOSED ABANDONED UTILITIES WITH NON-SHRINK GROUT TO 1 FOOT LENGTH INTO PIPE, OR AS OTHERWISE SPECIFIED.
- PERFORMANCE OF THE WORK:** THE CONTRACTOR SHALL PERFORM ALL THE WORK SHOWN ON THE

DRAWINGS AND ALL INCIDENTAL WORK CONSIDERED NECESSARY TO COMPLETE THE PROJECT IN AN ACCEPTABLE MANNER, USING EQUIPMENT, TOOLS AND METHODS THAT FOLLOW GENERALLY ACCEPTED INDUSTRY AND TRADE PRACTICES FOR THE REQUIRED WORK. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY.

- CONSTRUCTION SEQUENCING:** THE CONTRACTOR SHALL PLAN AND SEQUENCE THE WORK IN CONJUNCTION WITH DTD'S REDLAND ROAD PROJECT AND AS REQUIRED TO MINIMIZE DISRUPTION OF SERVICE, INCLUDING TEMPORARY CONNECTIONS AND BYPASSES AS NECESSARY.
- SYSTEM CONNECTION:** CONNECTIONS TO EXISTING WATERLINES SHALL NOT BE MADE UNTIL ALL REQUIRED INSPECTIONS AND TESTS HAVE BEEN COMPLETED ON THE NEW WORK AND IT IS FOUND TO CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.
- CHANGES OR DEVIATIONS TO WORK:** ANY CHANGE OR DEVIATION FROM THE APPROVED CONSTRUCTION PLANS MUST BE SUBMITTED IN WRITING TO DTD AND CRW AND APPROVED BY CRW A MINIMUM OF FOUR (4) WORKING DAYS PRIOR TO STARTING THE MODIFIED WORK.
- FIELD PLACEMENT OF SYSTEM COMPONENTS:** FINAL LOCATIONS OF ALL VALVES AND VALVE BOXES, FIRE HYDRANTS, AIR RELEASE ASSEMBLIES, AND SERVICE CONNECTION CORPORATION STOPS MAY VARY FROM LOCATIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE FIELD ADJUSTED LOCATIONS OF THESE AND SIMILAR ITEMS WITH DTD AND THE DISTRICT.
- AS-BUILT DRAWINGS:** THE CONTRACTOR SHALL SUBMIT COMPLETE "AS-BUILT" DRAWINGS AFTER FINAL COMPLETION INDICATING ALL CHANGES IN GRADE, ALIGNMENT, FITTINGS, AND MATERIALS INSTALLED AND ANY OTHER UTILITIES OR OBSTACLES NOT SO INDICATED ON THE APPROVED CONSTRUCTION PLANS.
- MAINTENANCE OF WORK AREA:** MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN CONDITION, FREE FROM OBSTRUCTIONS AND HAZARDS AS REQUIRED BY THE LOCAL JURISDICTIONAL STANDARDS.
- SITE RESTORATION AT END OF WORKDAY:** AT THE END OF EACH WORKDAY ALL TRENCHES SHALL BE BACKFILLED, AND ALL TRENCHES WITHIN STREETS SHALL BE TEMPORARILY RESTORED TO THE SATISFACTION OF THE DISTRICT AND DTD. USE OF STEEL SHEETS FOR TEMPORARY RESTORATION SHALL BE ONLY AS ALLOWED BY APPLICABLE PERMITS. PERMANENT AC PAVEMENT SHALL BE HOT MIX BITUMINOUS ASPHALT, UNLESS OTHERWISE SPECIFIED. TEMPORARY AC PAVEMENT MAY BE HMAC OR COLD MIX ASPHALT, "EASY STREET" OR EQUAL PENDING APPROVAL BY DTD. NO TRENCH, ON-SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR ANY HAZARDS OR DAMAGE RESULTING FROM HIS PROSECUTION OF THE WORK.
- ACCESS TO DRIVEWAYS:** THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS. IF A DRIVEWAY MUST BE BLOCKED TEMPORARILY, THE CONTRACTOR SHALL GIVE THE PROPERTY OWNER AND/OR BUILDING TENANT 24 HOURS' NOTICE AND SHALL ENSURE ACCESS TO DRIVEWAYS AT THE END OF EACH WORKDAY.
- PROTECTION OF PROPERTY:** THE CONTRACTOR SHALL EXERCISE ALL DUE CARE IN PROTECTING PROPERTY WITHIN AND ADJACENT TO THE JOB SITE. THIS PROTECTION SHALL INCLUDE, BUT NOT BE LIMITED TO, TREES, YARDS, FENCES, DRAINAGE LINES, MAILBOXES, DRIVEWAYS, SHRUBS, LAWNS, AND IRRIGATION SYSTEMS WITHIN ANY RIGHTS-OF-WAY OR EASEMENTS. IF ANY PROPERTY DISTURBANCE OCCURS, THE CONTRACTOR SHALL RESTORE TO AS NEAR ORIGINAL CONDITION AS POSSIBLE OR REPLACE IN KIND.
- SURVEY MONUMENTS:** ALL SURVEY MONUMENTS SHALL BE LOCATED AND PROTECTED, EXCEPT AS SPECIFICALLY DIRECTED BY THE COUNTY SURVEYOR OR LOCAL JURISDICTION'S ENGINEER.
- SITE RESTORATION AT PROJECT COMPLETION:** UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIALS.

GENERAL WATERLINE NOTES:

- CRW SPECIFICATIONS:** ALL WORK SHALL BE DONE IN ACCORDANCE WITH CLACKAMAS RIVER WATER STANDARD SPECIFICATIONS AND DETAILS, AS INCLUDED IN DTD'S REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY PROJECT.
- NOTICE OF SERVICE DISRUPTION:** UNLESS OTHERWISE DIRECTED, THE CONTRACTOR SHALL PROVIDE CRW, DTD, AND ANY AFFECTED UTILITIES A MINIMUM OF SEVEN (7) DAYS ADVANCE NOTICE OF CONSTRUCTION AND/OR PLANNED DISRUPTION OF SERVICE. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE SHUTDOWNS WITH ALL AFFECTED UTILITIES.
- NOTICE OF SERVICE DISRUPTION FOR CRW CUSTOMERS:** CRW WILL PROVIDE NOTIFICATION TO AFFECTED WATER USERS FOR PLANNED SERVICE DISRUPTIONS.
- OPERATION OF SYSTEM:** OPERATION OF VALVES AND ANY OTHER COMPONENTS OF THE PUBLIC WATER SYSTEM SHALL ONLY BE PERFORMED BY CRW.
- EXISTING WATER SERVICE:** EXISTING WATER MAINS AND SERVICES SHALL BE KEPT IN OPERATION UNTIL NEW MAINS ARE CONNECTED AND IN SERVICE.
- WATERLINE BURY DEPTH:** ALL PIPING SHALL HAVE A MINIMUM OF 42 INCHES OF COVER FROM TOP OF PIPE TO STREET GRADE OR OTHER FINISHED GRADE, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

- UTILITY CROSSINGS:** AS MAY BE REQUIRED BY THE DISTRICT, THE CONTRACTOR SHALL PROVIDE PVC SHIELDING AND/OR POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH AWWA C105.
- WATERLINE PIPE:** ALL NEW PIPE SHALL BE CLASS 52 CEMENT-LINED DUCTILE IRON PIPE PER AWWA C151, OF NEW MANUFACTURE AND APPROVED BY THE DISTRICT. ALL PIPE SHALL BE PUSH-ON JOINT UNLESS OTHERWISE SPECIFIED.
- WATERLINE FITTINGS:** WATERLINE FITTINGS SHALL BE CEMENT-LINED DUCTILE OR CAST IRON WITH MECHANICAL JOINTS PER AWWA C110 OR C153.
- JOINT RESTRAINTS:** ALL JOINTS AT VALVES, FITTINGS AND PIPE BELLS SHALL BE MECHANICALLY RESTRAINED. SEE SPECIFICATIONS FOR ALLOWABLE TYPES OF RESTRAINT SYSTEMS.
- FLANGED CONNECTIONS:** ALL FLANGED CONNECTIONS, WHERE REQUIRED, SHALL BE PROVIDED WITH CUT-RING GASKETS, AS SPECIFIED.
- THRUST BLOCKS:** THE USE OF CONCRETE THRUST BLOCKS IS ALLOWED ONLY AS SHOWN ON PLANS OR AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINT FOR FITTINGS AND/OR PIPING THAT WILL RECEIVE SERVICE PRESSURES BEFORE PERMANENT CONCRETE THRUST BLOCK DEVELOPS FULL STRENGTH. THE CONTRACTOR SHALL PLACE 5-MIL PLASTIC SHEETING BETWEEN THRUST BLOCK AND PIPE FITTINGS.
- CONCRETE STRENGTH:** ALL CONCRETE FOR THRUST BLOCKS SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE SPECIFIED.
- MATERIALS AND WORKMANSHIP:** ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH CRW SPECIFICATIONS AS WELL AS OTHER GENERALLY ACCEPTED INDUSTRY STANDARDS- INCLUDING AWWA, THE UNIFORM PLUMBING CODE, AND OTHERS AS APPLICABLE. ALL MATERIALS SHALL BE OF NEW MANUFACTURE. NO REBUILT OR USED MATERIALS WILL BE ALLOWED.
- BACKFILL:** ALL BACKFILL IN THE RIGHT OF WAY OR OTHER TRAFFIC AREAS SHALL BE 3/4"-0" OR 1"-0" CRUSHED ROCK, COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY PER AASHTO T-99 UNLESS OTHERWISE SPECIFIED.
- PRESSURE TESTING AND DISINFECTION PREPARATION:** WATERLINES AND APPURTENANCES SHALL BE PRESSURE TESTED AND DISINFECTED FOLLOWING COMPLETION OF ASSEMBLY AND BEFORE CONNECTION TO THE EXISTING SYSTEM AND SERVICES. PRIOR TO TESTING AND DISINFECTION, ALL LINES AND APPURTENANCES SHALL BE FLUSHED AS DIRECTED. THE CONTRACTOR SHALL INSTALL TEMPORARY BLOW-OFF ASSEMBLIES FOR TESTING AND DISINFECTION. PROVIDE TEMPORARY TAPS FOR TESTING AND CHLORINE INJECTION AS REQUIRED. PLUG TEMPORARY TAPS WITH BRASS PLUGS UPON ACCEPTANCE OF NEW WATERLINE.
- PRESSURE TESTING:** STANDARD TEST PRESSURE SHALL BE 1.5 TIMES THE SYSTEM OPERATING PRESSURE BUT IN NO CASE LESS THAN THE MINIMUM TEST PRESSURE OF 150 PSI; MEASURED AT THE HIGHEST ELEVATION OF THE PIPE BEING TESTED. ALLOWABLE LEAKAGE SHALL BE WITHIN CRW SPECIFICATION WITH NO VISIBLE LEAKAGE ALLOWED.
- DISINFECTION:** DISINFECT IN CONFORMANCE WITH CRW REQUIREMENTS, AWWA C651, OREGON HEALTH AUTHORITY GUIDELINES AND THE REQUIREMENTS OF THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY. THE CONTRACTOR SHALL DISPOSE OF SUPERCHLORINATED WATER IN AN APPROVED MANNER AND LOCATION. DO NOT ALLOW DISINFECTION WATER TO FLOW INTO A WATERWAY WITHOUT ADEQUATE DILUTION OR OTHER SATISFACTORY METHODS OF REDUCING CHLORINE RESIDUALS TO A SAFE LEVEL AS MANDATED BY DEQ. THE CONTRACTOR SHALL NOTIFY LOCAL JURISDICTIONS AS NECESSARY.
- DISINFECTION OF SHORT PIPING SECTIONS AND CONNECTIONS:** CRW AND THE CONTRACTOR SHALL IDENTIFY ALL SHORT SECTIONS OF PIPE AND/OR FITTINGS THAT CONNECT TO THE EXISTING SYSTEM THAT REQUIRE MANUAL DISINFECTION. A 300 PPM CHLORINE SOLUTION SHALL BE APPLIED BY SPRAYING AND BRUSHING TO THE INTERIOR OF ALL PIPE, VALVES, AND FITTINGS AS DIRECTED. THE CHLORINE SOLUTION SHALL REMAIN FOR 15 MINUTES BEFORE FLUSHING, UNLESS OTHERWISE DIRECTED.
- BACTERIOLOGICAL SAMPLING AND TESTING:** POST-DISINFECTION SAMPLING AND BAC-T TESTING WILL BE CONDUCTED BY CRW. PASSING TESTS ARE REQUIRED FOR PROJECT ACCEPTANCE.
- PROTECTION OF POTABLE WATER PIPING:** THE CONTRACTOR SHALL PROTECT POTABLE WATER PIPE ENDS FROM CONTAMINATED WATER AND DEBRIS AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE WATERTIGHT CAPS OR PLUGS ON PIPE ENDS AT THE END OF EACH WORKDAY.
- TRACER WIRE:** INSTALL NO. 12 AWG SOLID COPPER TRACER WIRE WITH BLUE COLORED HMWPE INSULATION ALONG THE TOP CENTERLINE OF NEW PIPE. TRACER WIRE INTERSECTIONS SHALL BE SOLDERED OR MECHANICALLY CONNECTED WITH APPROVED WATERPROOF CONNECTOR DEVICES.

GENERAL NOTES - CRW
REDLAND ROAD WATERLINE
PROJECT NO.: CL-300320344



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WILLIAMS GAS PIPELINE GENERAL NOTES

1. WILLIAMS- NORTHWEST PIPELINE LLC ("NORTHWEST") WILL REQUIRE THE EXECUTION OF AN ENCROACHMENT AGREEMENT AND ISSUE A WILLIAMS GAS PIPELINE ENCROACHMENT/FOREIGN LINE CROSSING PERMIT FOR EACH CONTRACTOR AND ACTIVITY WITHIN THE PIPELINE EASEMENT. THE AGREEMENT MUST BE EXECUTED BEFORE WORK BEGINS ON THE RIGHT OF WAY.
2. NORTHWEST WILL REQUIRE SUBMITTAL OF PLAN AND PROFILE DRAWINGS FOR PRIOR REVIEW AND APPROVAL BY NORTHWEST. ALL DRAWINGS MUST SHOW IN DETAIL, ALL OF NORTHWEST'S FACILITIES AND OTHER FEATURES THAT WILL ALLOW NORTHWEST TO DETERMINE THE EFFECTS OF THE PROPOSED CONSTRUCTION OR MAINTENANCE ACTIVITY ON ITS FACILITIES.
3. AN AUTHORIZED NORTHWEST REPRESENTATIVE MUST BE ON SITE PRIOR TO AND DURING ANY SURFACE-DISTURBING WORK OR EQUIPMENT CROSSINGS PERFORMED WITHIN THE PIPELINE RIGHT OF WAY EASEMENT. NORTHWEST REPRESENTATIVE WILL ASSIST IN DETERMINING THE LOCATION OF THE PIPELINE, THE RIGHT-OF-WAY WIDTH AND EXISTING DEPTH OF THE PIPELINE. NORTHWEST'S REPRESENTATIVE WILL SUPERVISE ALL WORK WITHIN NORTHWEST'S RIGHT-OF-WAY AND SHALL HAVE STOP WORK AUTHORITY AT ALL TIMES.
4. NORTHWEST'S REPRESENTATIVE WILL CONDUCT A SAFETY/INFORMATIONAL DISCUSSION WITH CONTRACTORS PRIOR TO CONSTRUCTION.
5. EVERY PERSON WORKING WITHIN THE NORTHWEST GAS PIPELINE RIGHT OF WAY EASEMENT MUST FOLLOW ALL REQUIREMENTS IN THE WILLIAMS DEVELOPERS' HANDBOOK AND ENCROACHMENT/FOREIGN LINE CROSSING PERMIT UNLESS IT IS WAIVED BY A NORTHWEST REPRESENTATIVE AND WRITTEN ON THE PERMIT. IN THE EVENT WORK COMMENCES ABSENT SUCH AN AGREEMENT, NORTHWEST MAY TAKE STEPS TO PREVENT FURTHER ACTIVITY.
6. ANY CROSSINGS MADE WITHOUT A NORTHWEST REPRESENTATIVE ON SITE WILL BE EXCAVATED AT THE EXCAVATOR'S EXPENSE TO PROVIDE NORTHWEST AN OPPORTUNITY TO INSPECT ALL AFFECTED PIPELINE FACILITIES. NORTHWEST WILL BE FULLY AND COMPLETELY COMPENSATED FOR ANY DAMAGES TO ITS FACILITIES RESULTING FROM THE ACTS OF THIRD PARTIES WHO ARE WORKING IN THE VICINITY OF NORTHWEST'S FACILITIES WITH OR WITHOUT NORTHWEST'S CONSENT.
7. TO PROTECT NORTHWEST'S GAS PIPELINE FROM EXTERNAL LOADING, NORTHWEST MUST PERFORM AND ENGINEERING EVALUATION TO DETERMINE THE EFFECTS OF ANY PROPOSED EQUIPMENT USE. MATS, TIMBER BRIDGES, OR OTHER PROTECTIVE MATERIALS DEEMED NECESSARY BY NORTHWEST WILL BE PLACED OVER NORTHWEST'S GAS FACILITIES FOR THE DURATION OF ANY LOADING. PROTECTIVE MATERIALS SHALL BE PURCHASED, PLACED, AND REMOVED AT NO COST TO NORTHWEST. THE GAS LINE EASEMENT OR RIGHT-OF-WAY MUST BE RESTORED TO ITS ORIGINAL CONDITION.
8. NORTHWEST MAY REQUIRE MARKINGS TO IDENTIFY SPECIFIC AREAS WHERE EQUIPMENT USE IS AUTHORIZED. VIBRATORY EQUIPMENT IS NOT PERMITTED ON THE GAS LINE EASEMENT.
9. NORTHWEST REPRESENTATIVES MUST BE PROVIDED SAFE ACCESS TO ALL OPEN EXCAVATIONS. EXCAVATIONS MUST BE PROPERLY SLOPED OR SHORED IN ACCORDANCE WITH OSHA REGULATIONS.
10. NO CUT OR FILL ON THE RIGHT-OF-WAY IS ALLOWED WITHOUT NORTHWEST'S APPROVAL.
11. STOCKPILING FILL, BRUSH, TRASH, OR OTHER DEBRIS ON THE RIGHT OF WAY IS PROHIBITED.
12. NORTHWEST MUST BE NOTIFIED AT THE EUGENE DISTRICT OFFICE (541) 342-4434 AT LEAST 72 HOURS BEFORE ANY WORK COMMENCES ON OR NEAR ITS RIGHT-OF-WAY. REFERENCE MILEPOST 24.53-24.55 ON THE 2479 LINE.



EXPIRES: 12/31/2024

GENERAL NOTES - WILLIAMS GAS PIPELINE
 REDLAND ROAD WATERLINE
 DATE: 03/20/2023
 PROJECT NO.: CL-300320344



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 CHECKED BY: KSR

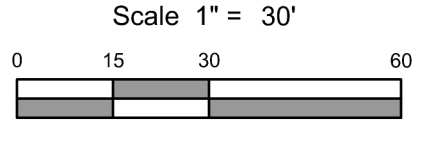
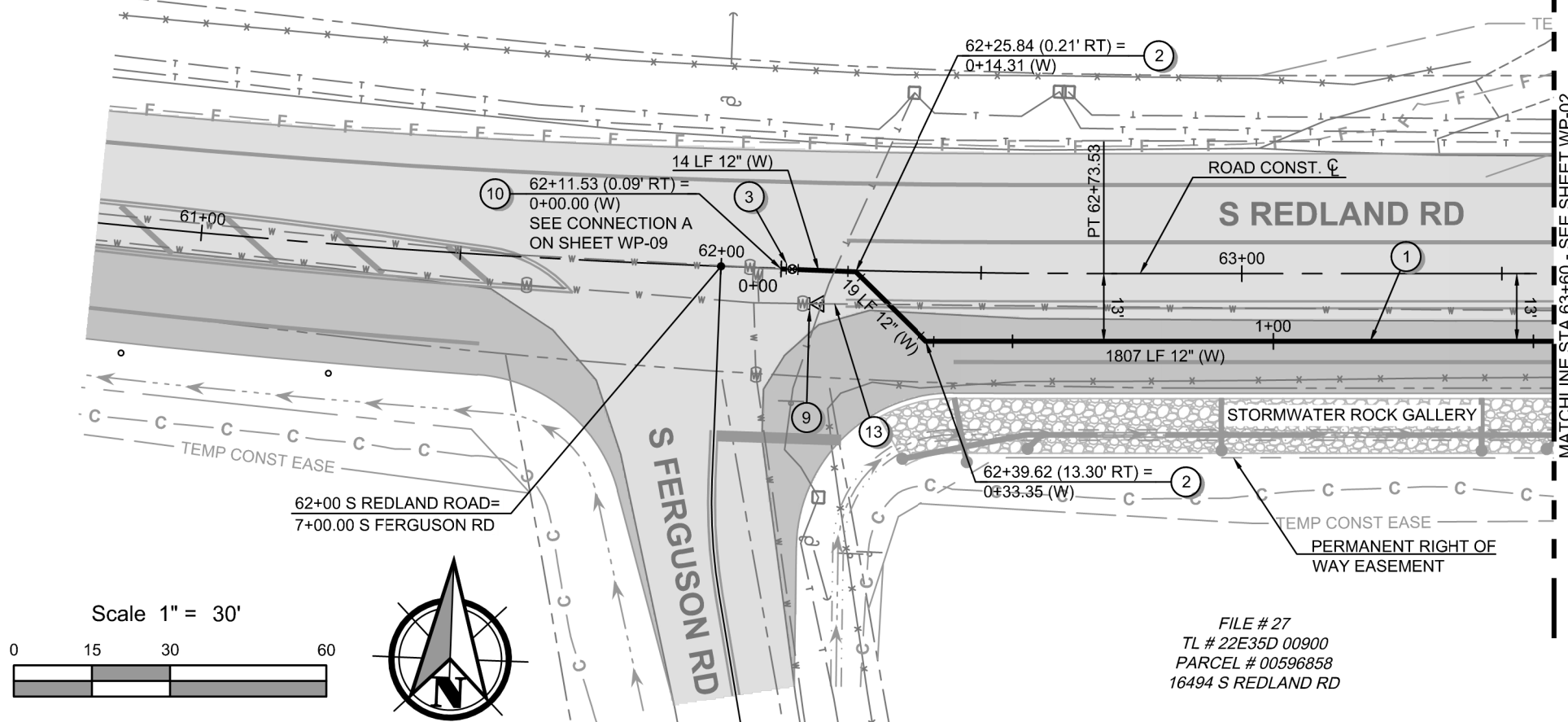
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Sheet No. C-03

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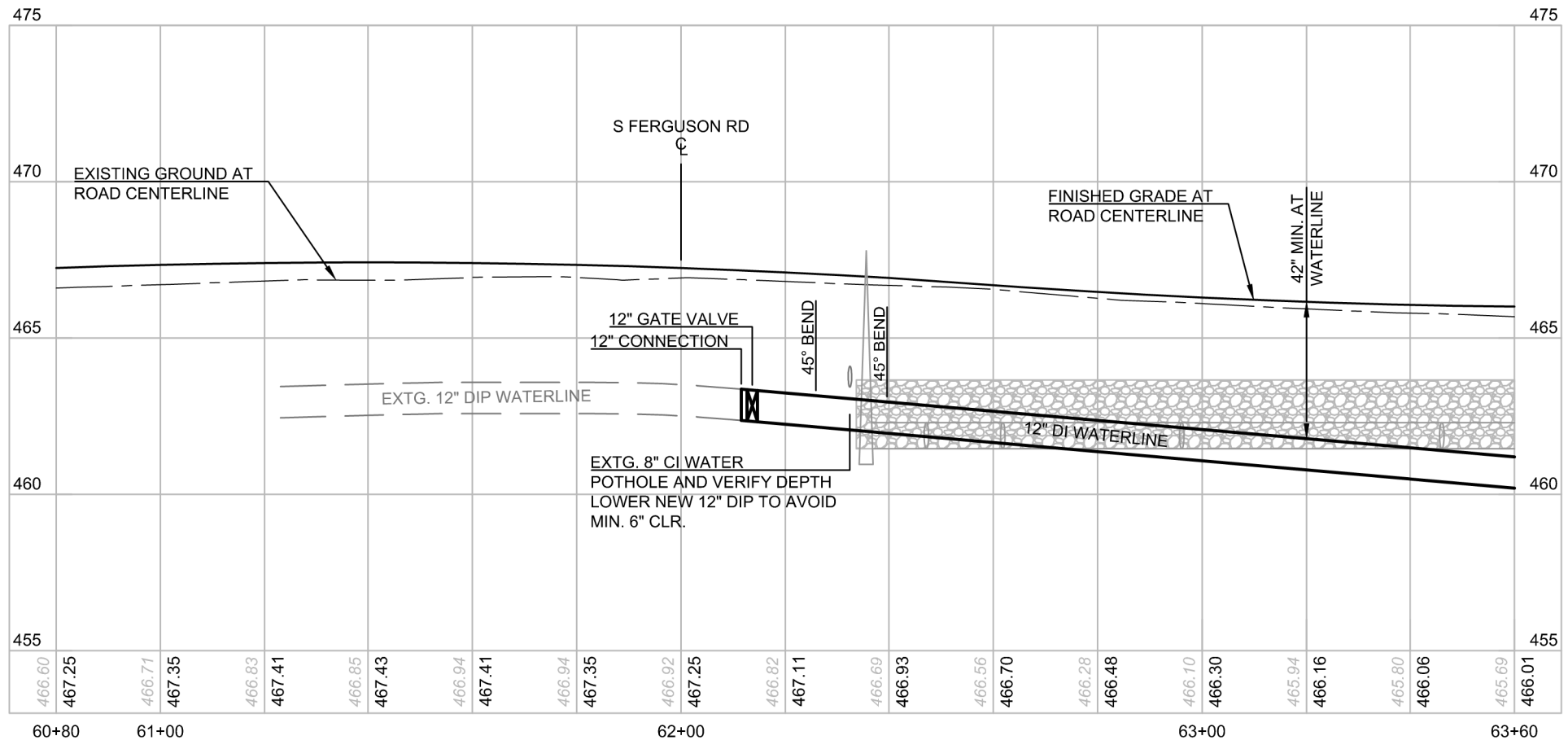
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 16494 S REDLAND RD

CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
- ② INSTALL 12" 45° MJ BEND - 2 FULLY RESTRAIN ALL PIPE JOINTS
- ③ INSTALL 12" MJ X MJ RSGV WITH BOX AND LID INSTALL 12" FOSTER ADAPTER FULLY RESTRAIN ALL PIPE JOINTS
- ⑨ INSTALL 8" PLUG AND THRUST BLOCK UPON ACCEPTANCE OF NEW WATERLINE
- ⑩ REMOVE PLUG AND CONNECT 12" DI WATERLINE FULLY RESTRAIN ALL PIPE JOINTS (FOR DETAILS, SEE SHT. WP-09)
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN. PLUG CUT END WITH CONCRETE

ADDITIONAL NOTES:

- 1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
- 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.

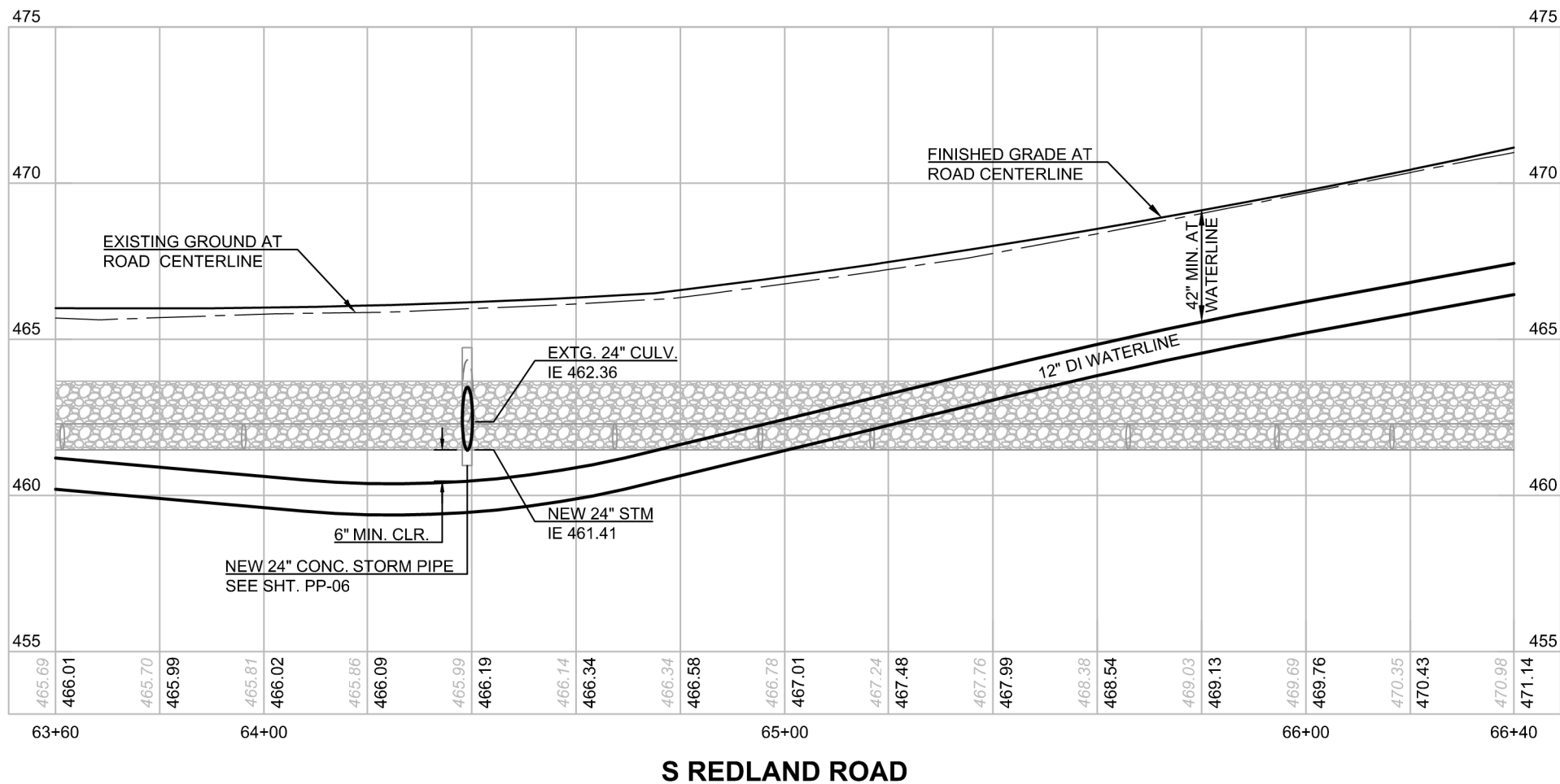
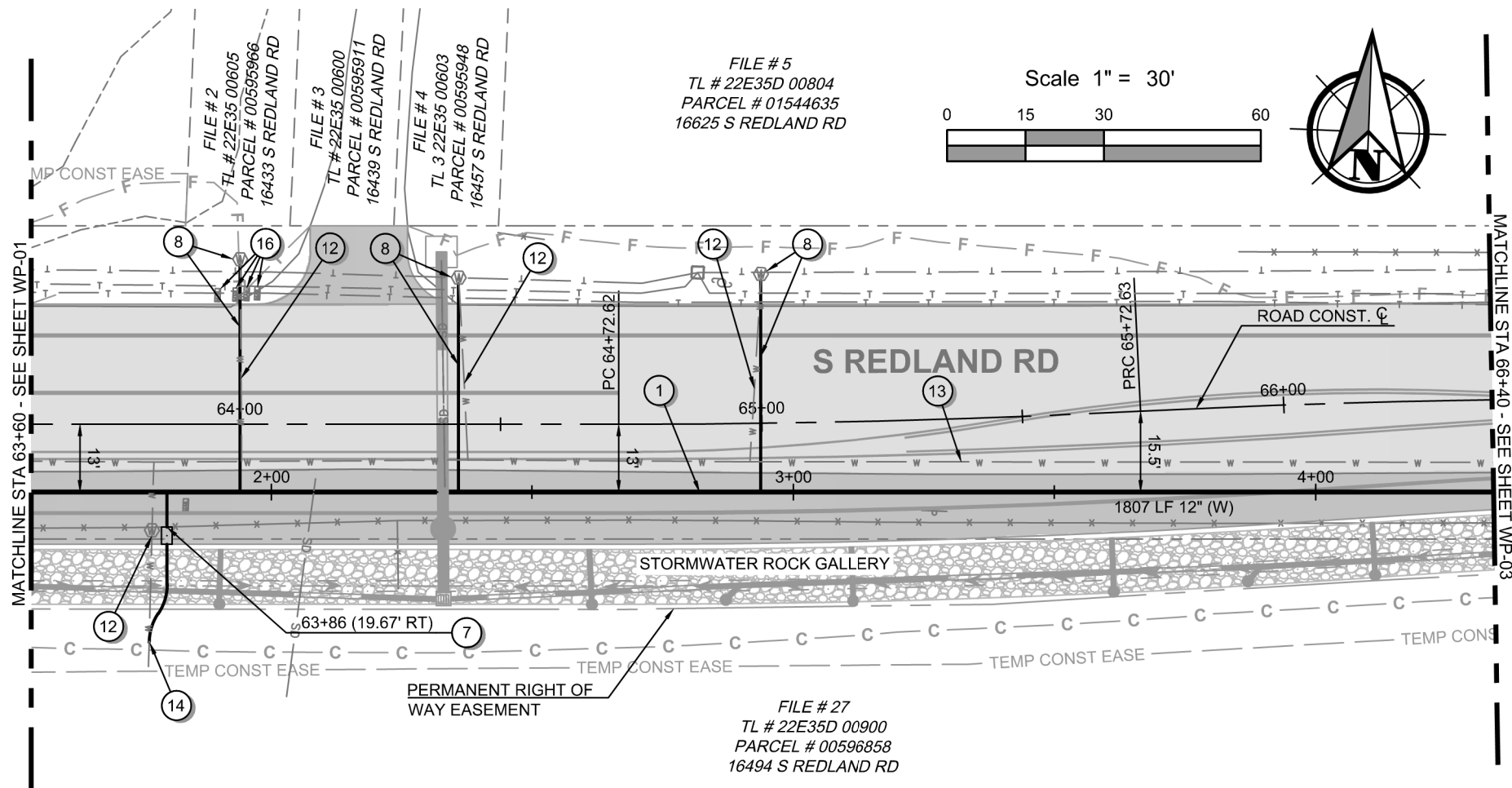


S REDLAND ROAD



WATERLINE PLAN & PROFILE
 REDLAND ROAD WATERLINE
 PROJECT NO.: CL-300320344
 DATE: 03/20/2023
 Clackamas River Water
 PBS Engineering and Environmental Inc.
 4412 S Corbett Avenue
 Portland, OR 97239
 503.248.1939
 pbsea.com
 DESIGNED BY: PPG
 DRAFTED BY: PPG
 CHECKED BY: KSR
 REVISIONS
 NO. DATE:

 Sheet No. WP-01
 EXPIRES: 12/31/2024



CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
- ⑦ CONSTRUCT SERVICE AND METER ASSEMBLY. INSTALL METER BOX FLUSH WITH PAVEMENT SURFACE (FOR DETAILS, SEE CRW STD. DTL. 108A)
- ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108B)
- ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.
- ⑭ INSTALL NEW SERVICE 18" MIN. BELOW STORMWATER ROCK GALLERY AND RECONNECT TO EXISTING SERVICE AFTER ACCEPTANCE OF NEW WATERLINE.
- ⑮ TEMPORARILY RELOCATE METER AND SERVICE CONNECTION UNDER ROCK GALLERY BEFORE EXCAVATION. REINSTALL EXISTING METER BETWEEN EXISTING EDGE OF PAVEMENT AND NEW ROCK GALLERY. RECONNECT SERVICE.
- ⑯ PRESERVE AND PROTECT MAILBOXES. TEMPORARILY REMOVE MAILBOX(ES) AND SUPPORTS AS REQUIRED FOR WATER SERVICE WORK. SEE ROADWAY SHEET PP-06, NOTE 17 FOR PERMANENT INSTALLATION.

ADDITIONAL NOTES:

- 1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
- 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.



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Sheet No. WP-02

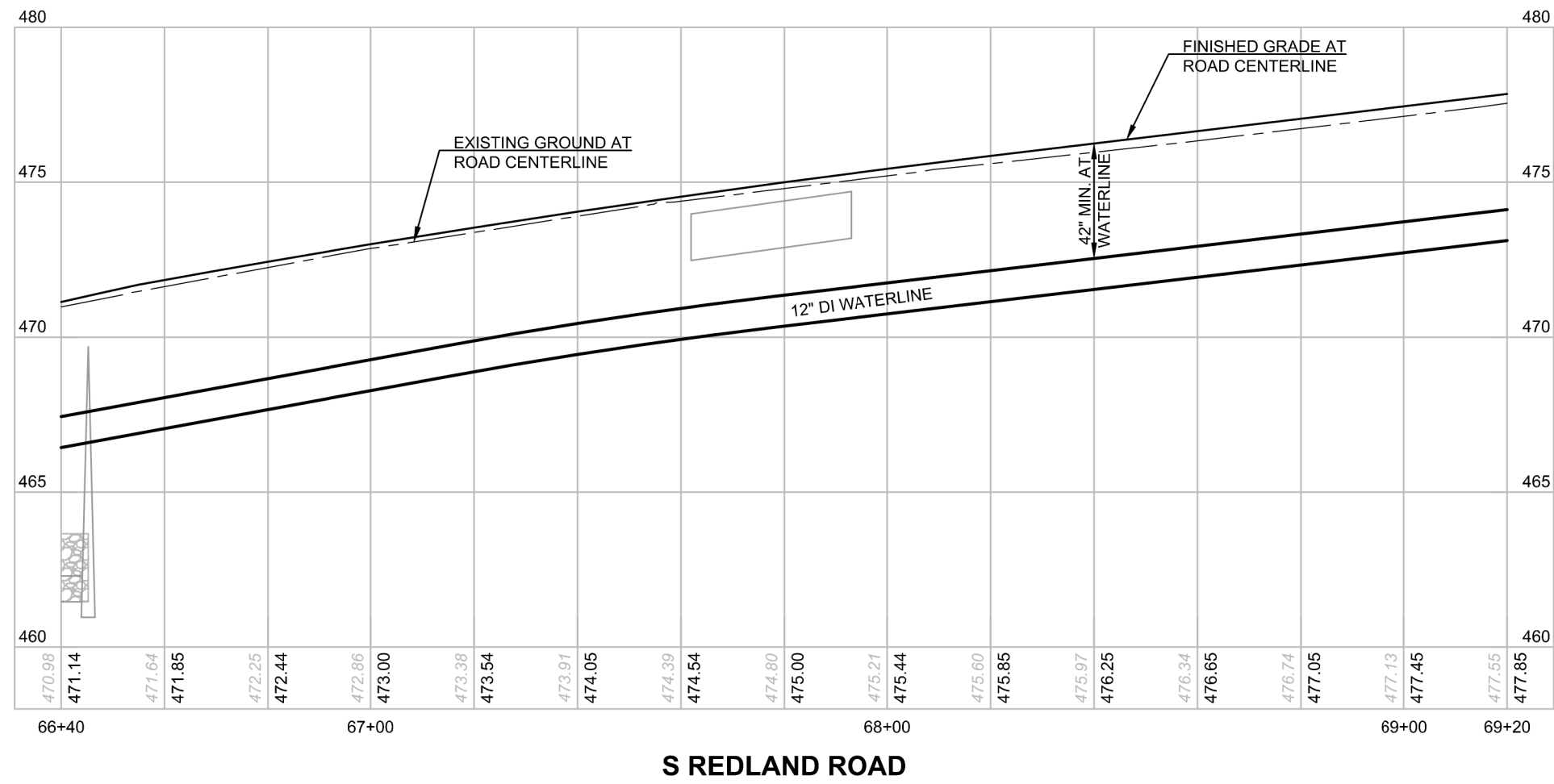
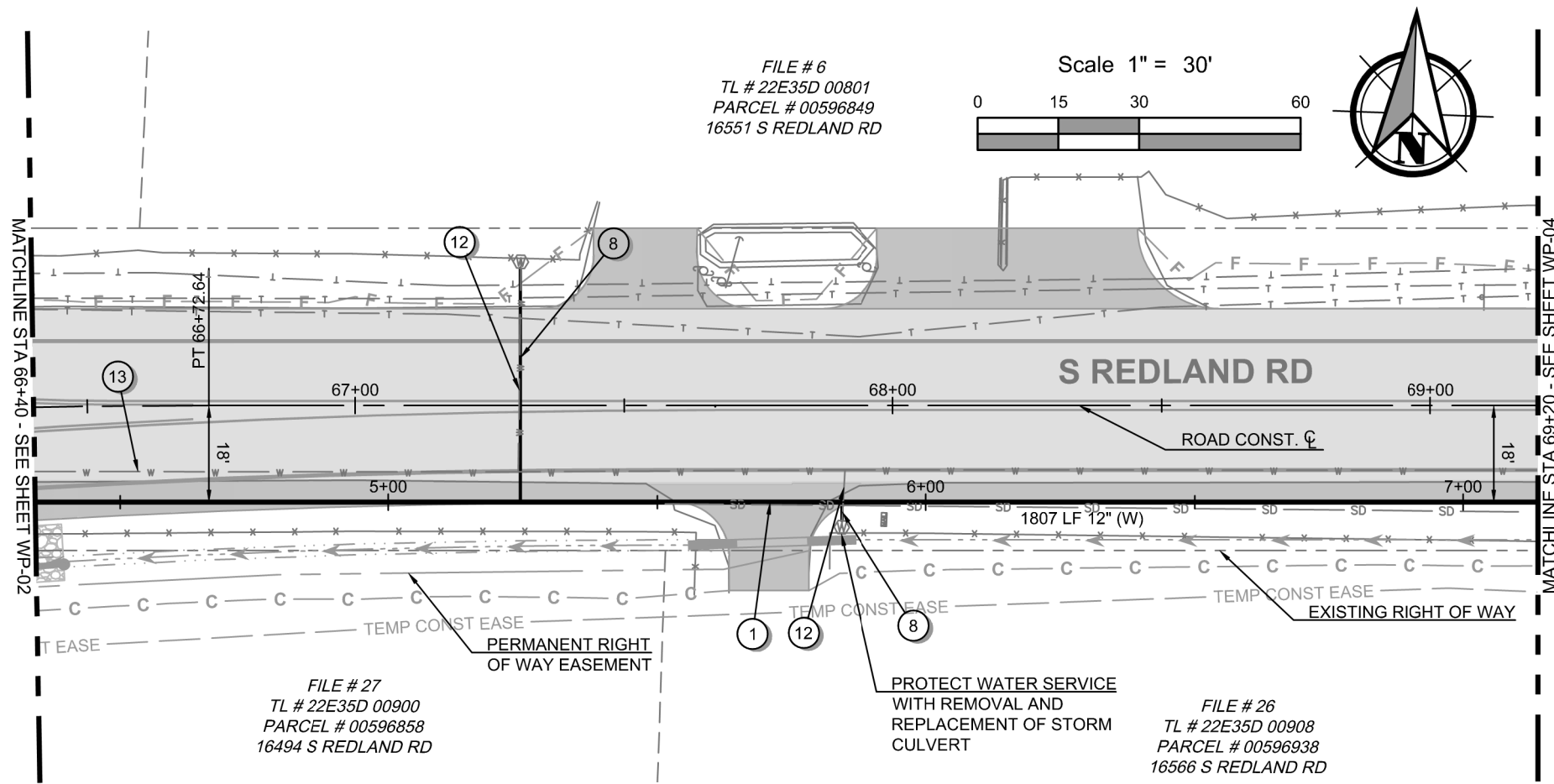
WATERLINE PLAN & PROFILE

REDLAND ROAD WATERLINE

Clackamas River Water

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503.248.1939
pbsusa.com

PROJECT NO.: CL-300320344
DATE: 03/20/2023



CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
- ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108B)
- ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.

ADDITIONAL NOTES:

- 1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
- 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.

WATERLINE PLAN & PROFILE
 REDLAND ROAD WATERLINE



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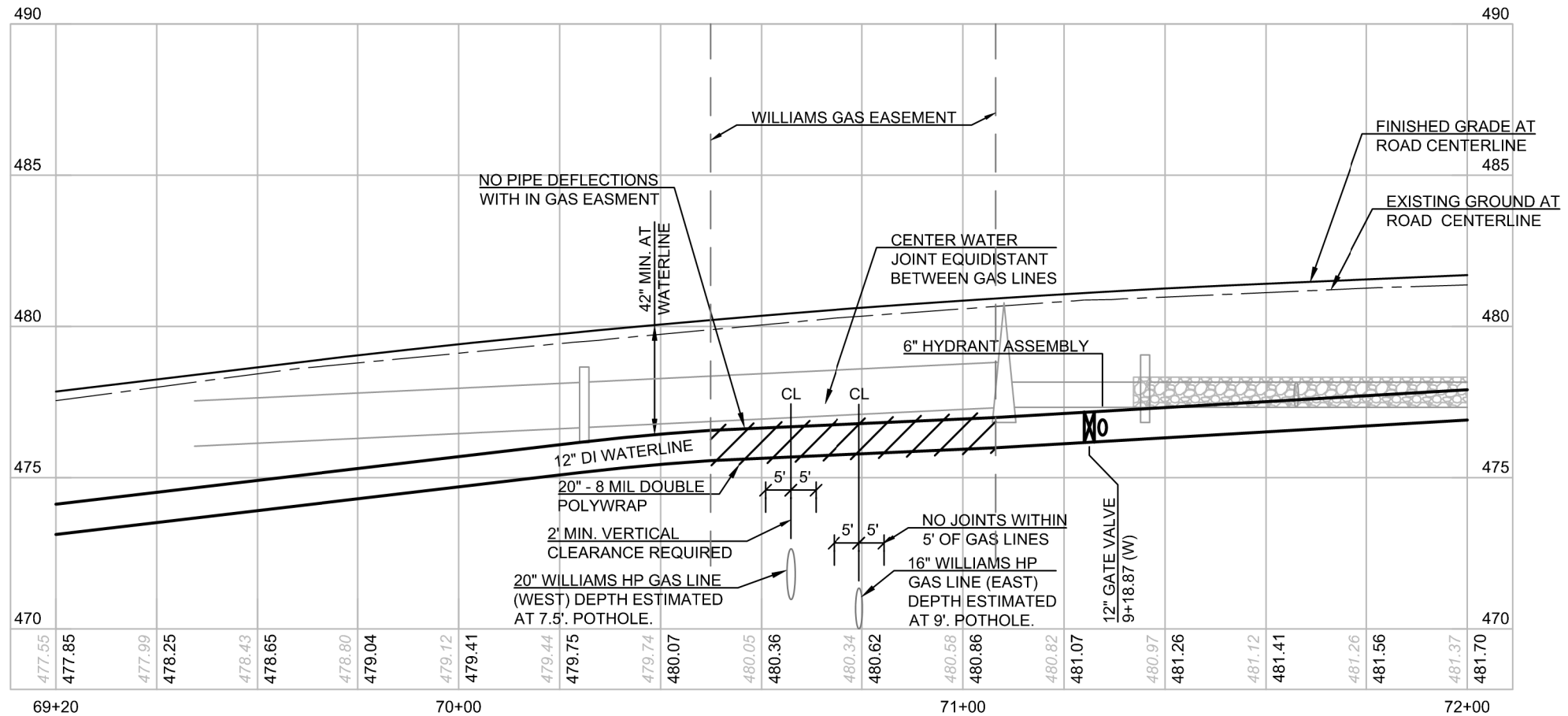
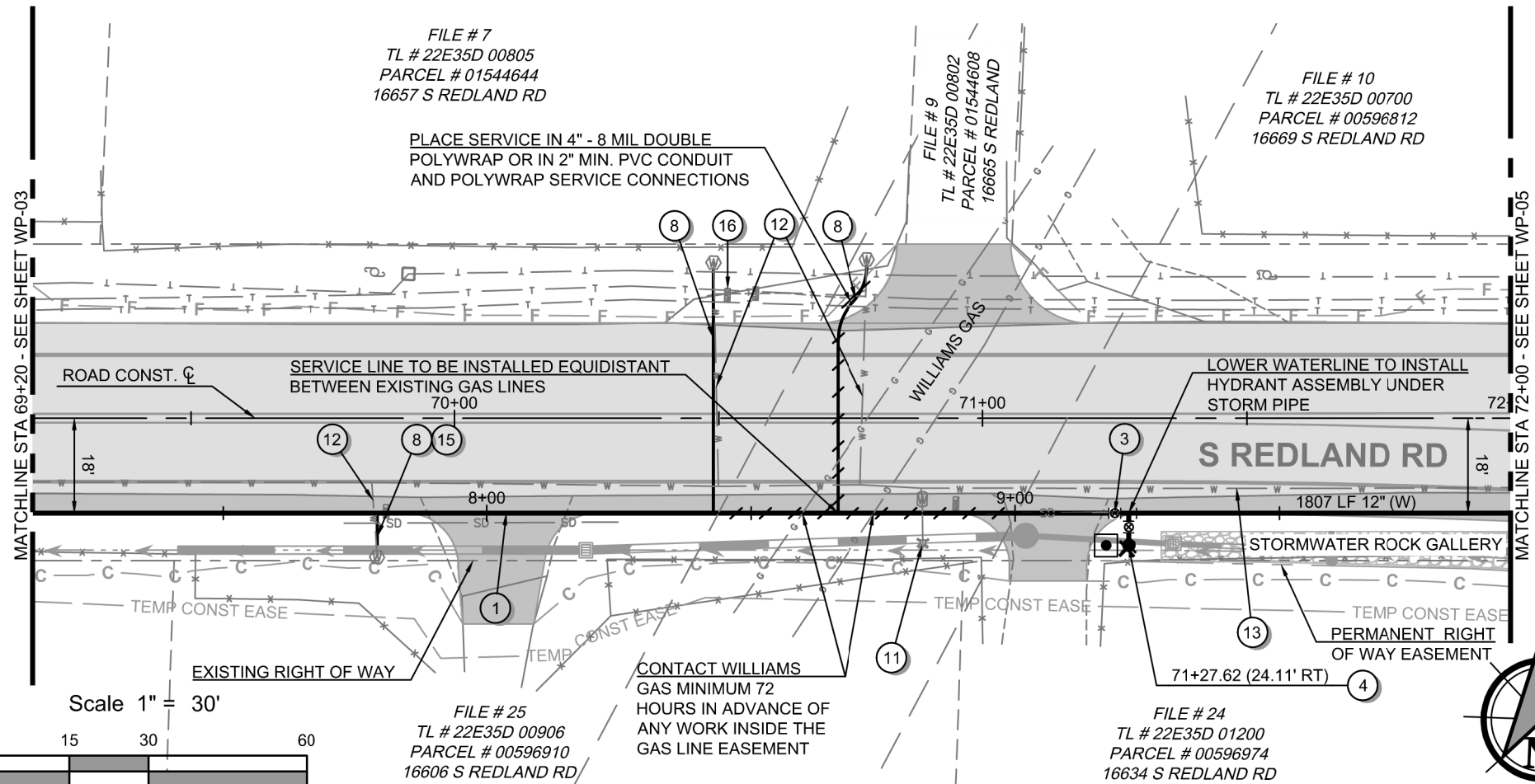


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EXPIRES: 12/31/2024



S REDLAND ROAD

CONSTRUCTION NOTES:

- 1 INSTALL RESTRAINED 12" DI WATERLINE
PLACE DI WATERLINE IN 8 MIL DOUBLE POLYWRAP THROUGH GAS EASEMENT
(FOR DETAILS, SEE CRW STD. DTL. 101A)
- 3 INSTALL 12" MJ X MJ RSGV WITH BOX AND LID
INSTALL 12" FOSTER ADAPTER
FULLY RESTRAIN ALL PIPE JOINTS
- 4 INSTALL HYDRANT ASSEMBLY, TYPE III
INSTALL 12" X 6" TEE, MJ X FLG
INSTALL 6" FLG X MJ RSGV WITH BOX AND LID
INSTALL TRACER WIRE STATION
FULLY RESTRAIN ALL JOINTS IN HYDRANT LINE
(FOR DETAILS, SEE CRW STD. DTL. 104A, 110B, 110C, AND 115)
- 8 CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE
(FOR DETAILS, SEE CRW STD. DTL. 108B)
- 11 REMOVE EXISTING HYDRANT AND RETURN TO CRW
- 12 ABANDON EXISTING SERVICE. COORDINATE WITH CRW
- 13 ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.
- 15 TREE AND STUMP REMOVAL WILL LIKELY DESTROY METER AND SERVICE. TEMPORARILY RELOCATE METER AND SERVICE CONNECTION BEFORE STUMP REMOVAL. REINSTALL EXISTING METER TO SLOPE OF FINISHED GRADE BETWEEN NEW STORM PIPE AND RIGHT OF WAY. RECONNECT SERVICE.
- 16 PROTECT MAILBOX

ADDITIONAL NOTES:

1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.
3. FOR WILLIAMS GAS PIPELINE GENERAL NOTES, SEE SHEET C-03



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Sheet No. WP-04

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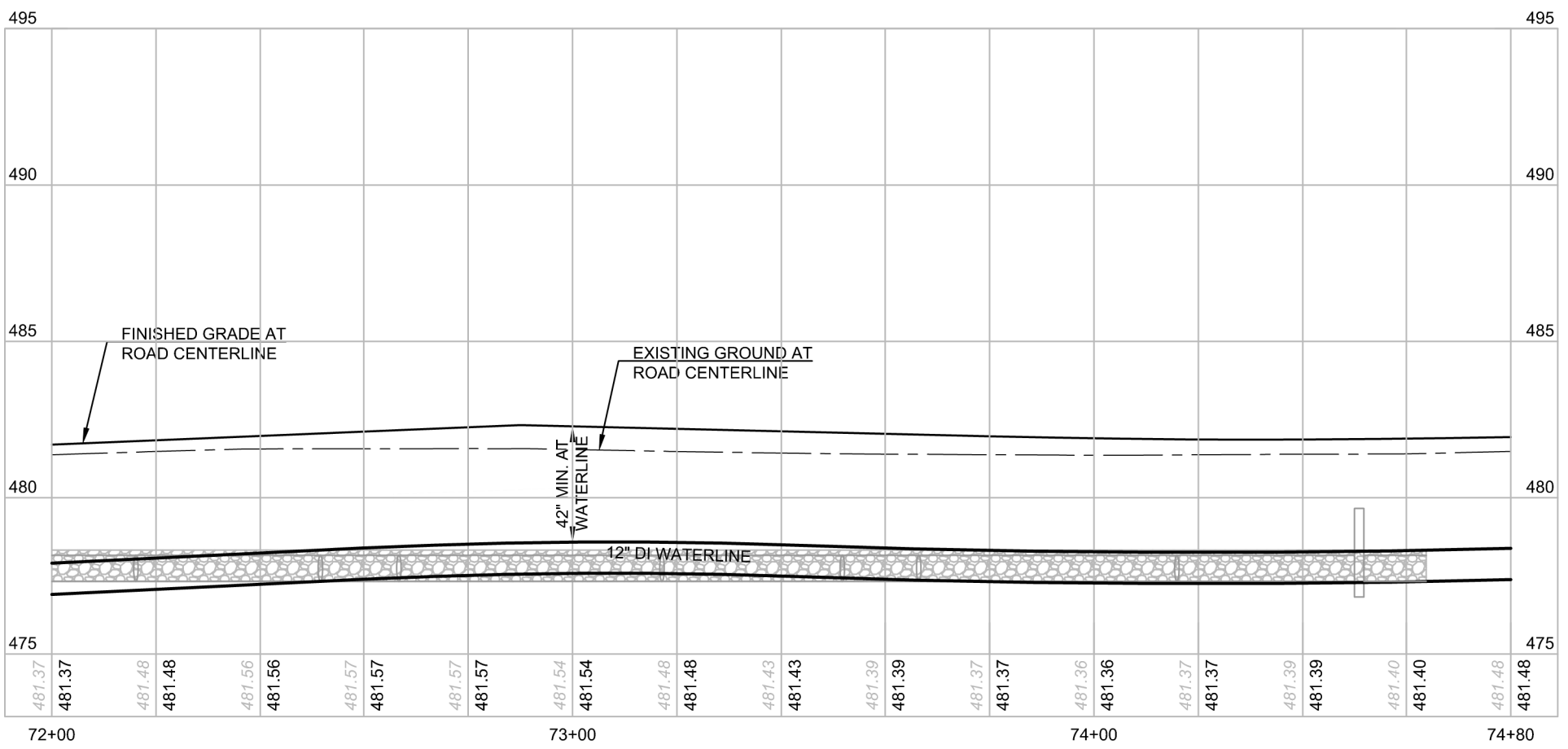
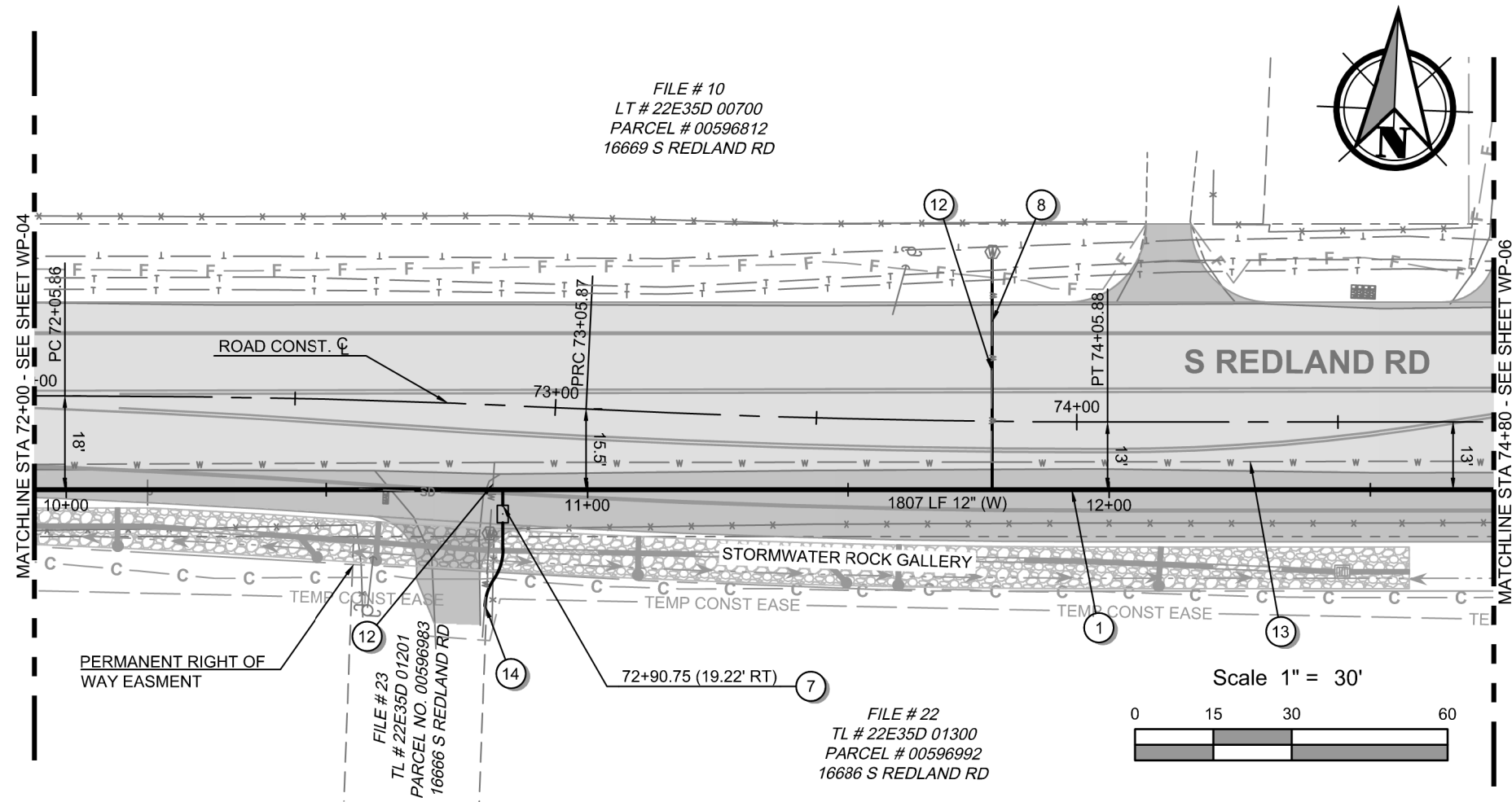
REDLAND ROAD WATERLINE

Clackamas River Water

PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

PROJECT NO.: CL-300320344
DATE: 03/20/2023

EXPIRES: 12/31/2024



S REDLAND ROAD

CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
- ⑦ CONSTRUCT SERVICE AND METER ASSEMBLY. INSTALL METER BOX FLUSH WITH PAVEMENT SURFACE (FOR DETAILS, SEE CRW STD. DTL. 108A)
- ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108B)
- ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW.
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.
- ⑭ INSTALL NEW METER ASSEMBLY AND SERVICE ABOVE STORMWATER ROCK GALLERY AND RECONNECT TO EXISTING SERVICE AFTER ACCEPTANCE OF NEW WATERLINE

ADDITIONAL NOTES:

- 1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
- 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.



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Sheet No. WP-05

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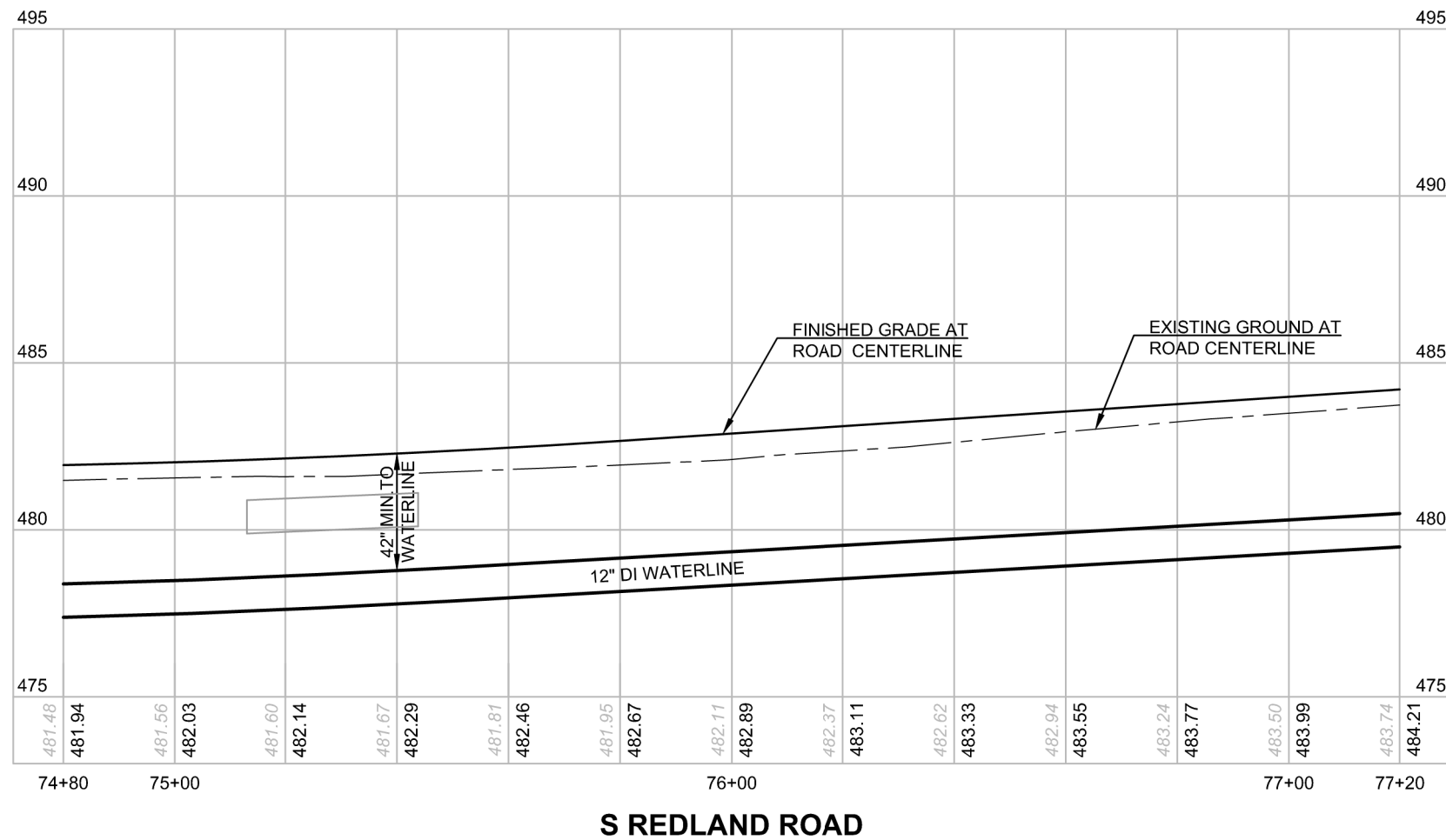
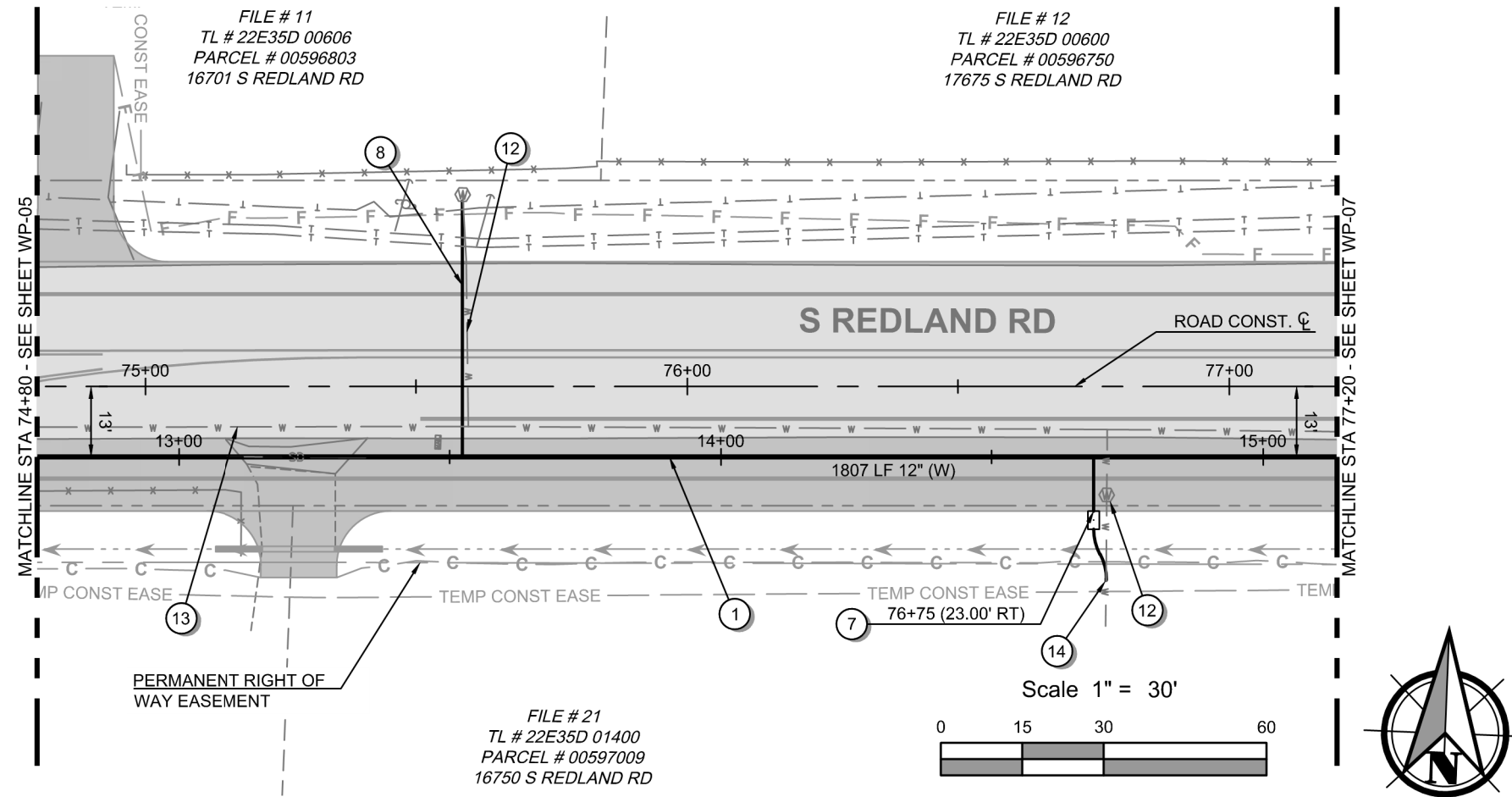
DATE: 03/20/2023 PROJECT NO.: CL-300320344

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CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
- ⑦ CONSTRUCT SERVICE AND METER ASSEMBLY. INSTALL METER BOX TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108A)
- ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108B)
- ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.
- ⑭ RECONNECT TO EXISTING SERVICE AFTER ACCEPTANCE OF NEW WATERLINE

ADDITIONAL NOTES:

- 1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
- 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.



EXPIRES: 12/31/2024

WATERLINE PLAN & PROFILE

REDLAND ROAD WATERLINE

PROJECT NO.: CL-300320344
DATE: 03/20/2023



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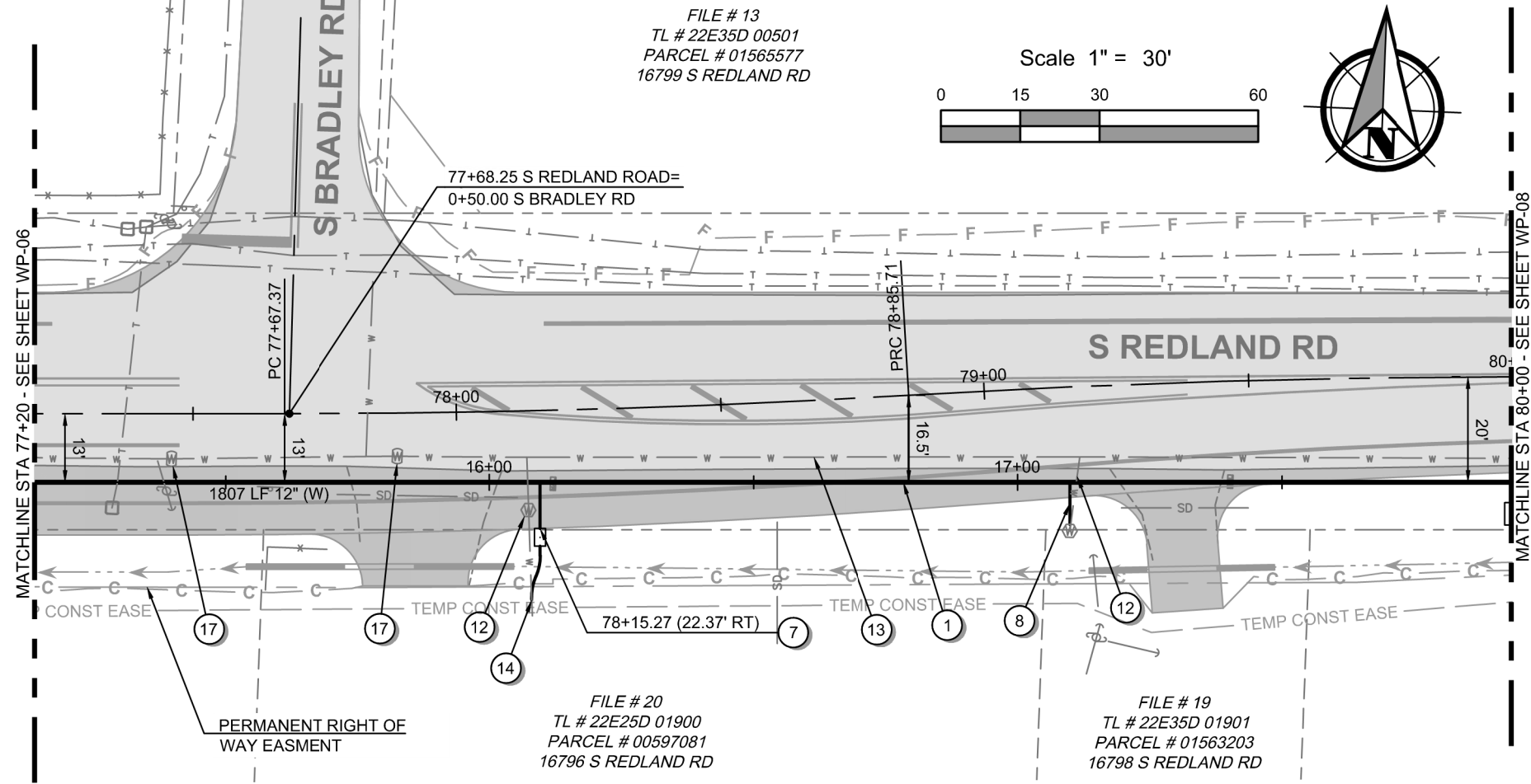
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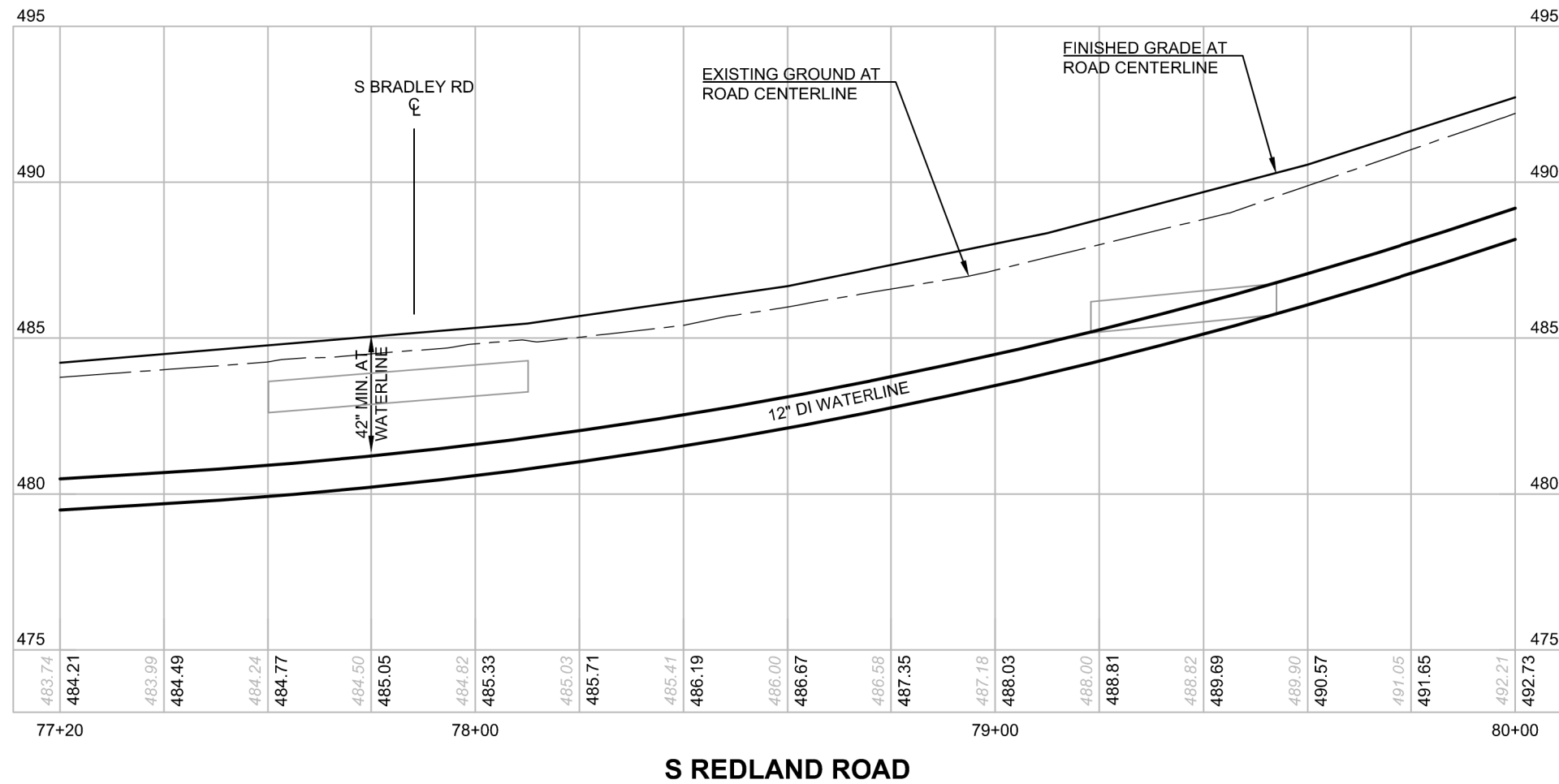
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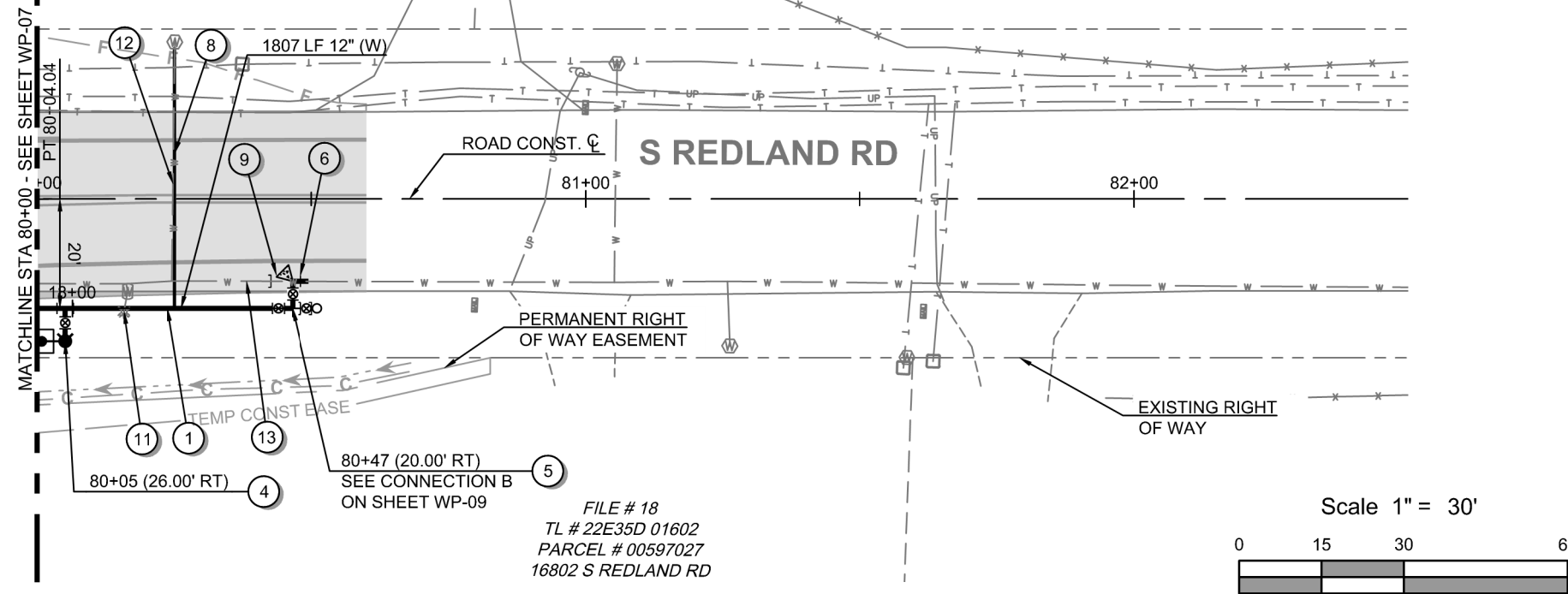
- CONSTRUCTION NOTES:**
- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
 - ⑦ CONSTRUCT SERVICE AND METER ASSEMBLY INSTALL METER BOX TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108A)
 - ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108B)
 - ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW
 - ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.
 - ⑭ RECONNECT TO EXISTING SERVICE AFTER ACCEPTANCE OF NEW WATERLINE
 - ⑰ REMOVE VALVE AND ABANDON LINE AFTER ACCEPTANCE OF NEW WATERLINE

- ADDITIONAL NOTES:**
1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.

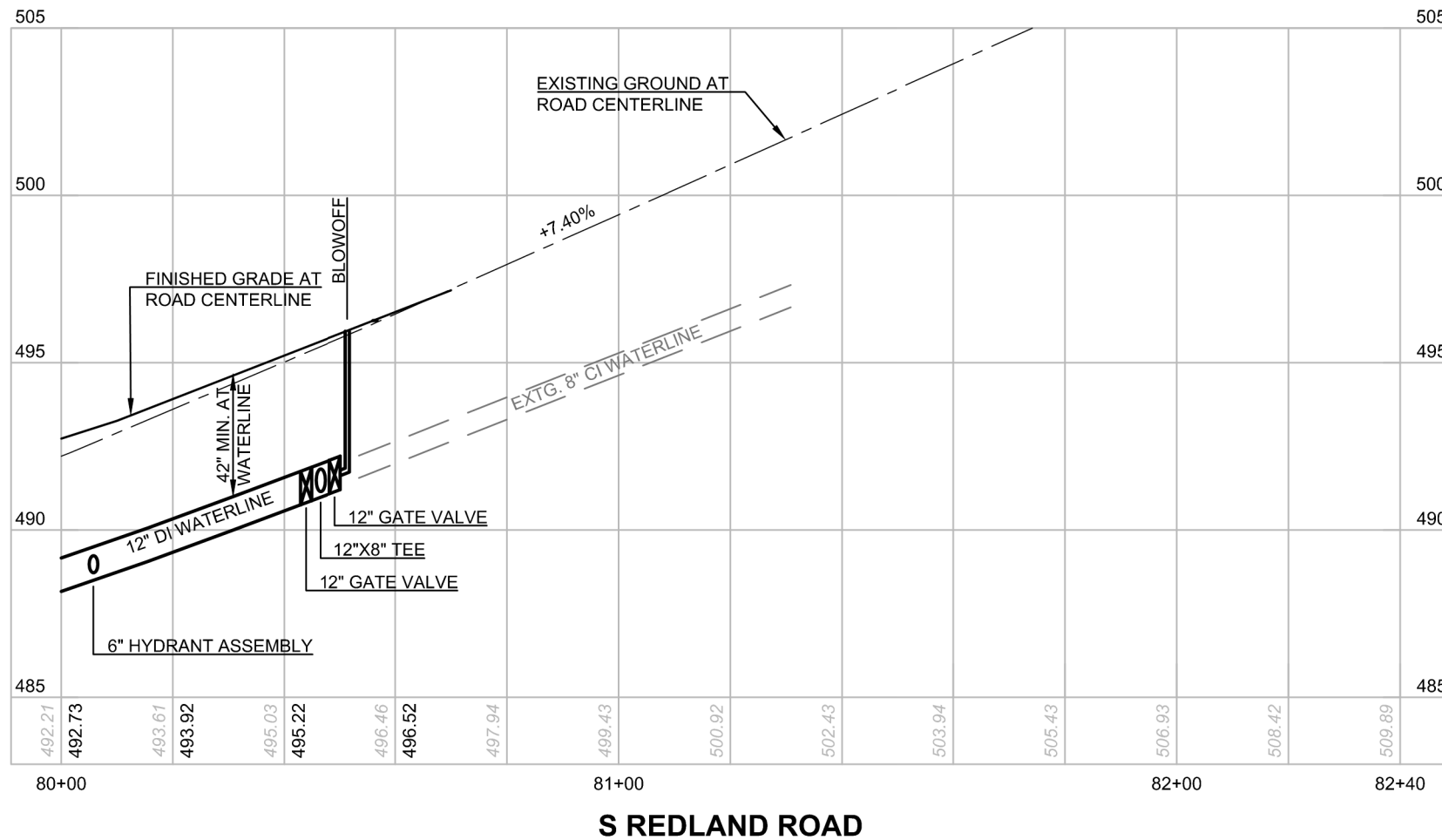


WATERLINE PLAN & PROFILE		REDLAND ROAD WATERLINE		PROJECT NO.: CL-300320344
				DATE: 03/20/2023
PBS Engineering and Environmental Inc. 4412 S Corbett Avenue Portland, OR 97239 503.248.1939 pbsusa.com		DESIGNED BY: PPG DRAFTED BY: PPG CHECKED BY: KSR		REVISIONS NO DATE:
Sheet No.		WP-07		

FILE # 13
 TL # 22E35D 00501
 PARCEL # 01565577
 16799 S REDLAND RD



FILE # 18
 TL # 22E35D 01602
 PARCEL # 00597027
 16802 S REDLAND RD



CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE (FOR DETAILS, SEE CRW STD. DTL. 101A)
- ④ INSTALL HYDRANT ASSEMBLY, TYPE III
 INSTALL 12" X 6" TEE, MJ X FLG
 INSTALL 6" FLG X MJ RSGV WITH BOX AND LID
 INSTALL BOX TO SLOPE OF FINISHED GRADE
 INSTALL TRACER WIRE STATION
 FULLY RESTRAIN ALL JOINTS IN HYDRANT LINE
 (FOR DETAILS, SEE CRW STD. DTL. 104A, 110B, 110C, AND 115)
- ⑤ INSTALL 12" X 8" TEE, FLG X FLG
 INSTALL 12" FLG X MJ RSGV WITH BOX AND LID - 2
 INSTALL 8" FLG X MJ RSGV WITH BOX AND LID
 INSTALL BOXES TO SLOPE OF FINISHED GRADE
 INSTALL TYPE II BLOW OFF ASSEMBLY
 FULLY RESTRAIN ALL PIPE JOINTS
 (FOR DETAILS, SEE CRW STD. DTL. 104A AND 106B)
 POT HOLE EXISTING WATERLINE TO SET GRADE
- ⑥ INSTALL 8" 90° MJ BEND
 INSTALL 8" LONG CAST SLEEVE TO CONNECT INTO EXISTING 8" WATERLINE AFTER ACCEPTANCE OF NEW WATERLINE
 FULLY RESTRAIN ALL PIPE JOINTS
- ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE (FOR DETAILS, SEE CRW STD. DTL. 108B)
- ⑨ PLUG EXISTING 8" CI WATERLINE WITH CONCRETE
- ⑪ REMOVE EXISTING HYDRANT AND RETURN TO CRW
- ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.

ADDITIONAL NOTES:

- 1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
- 2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.



WATERLINE PLAN & PROFILE

REDLAND ROAD WATERLINE

PROJECT NO.: CL-300320344
 DATE: 03/20/2023



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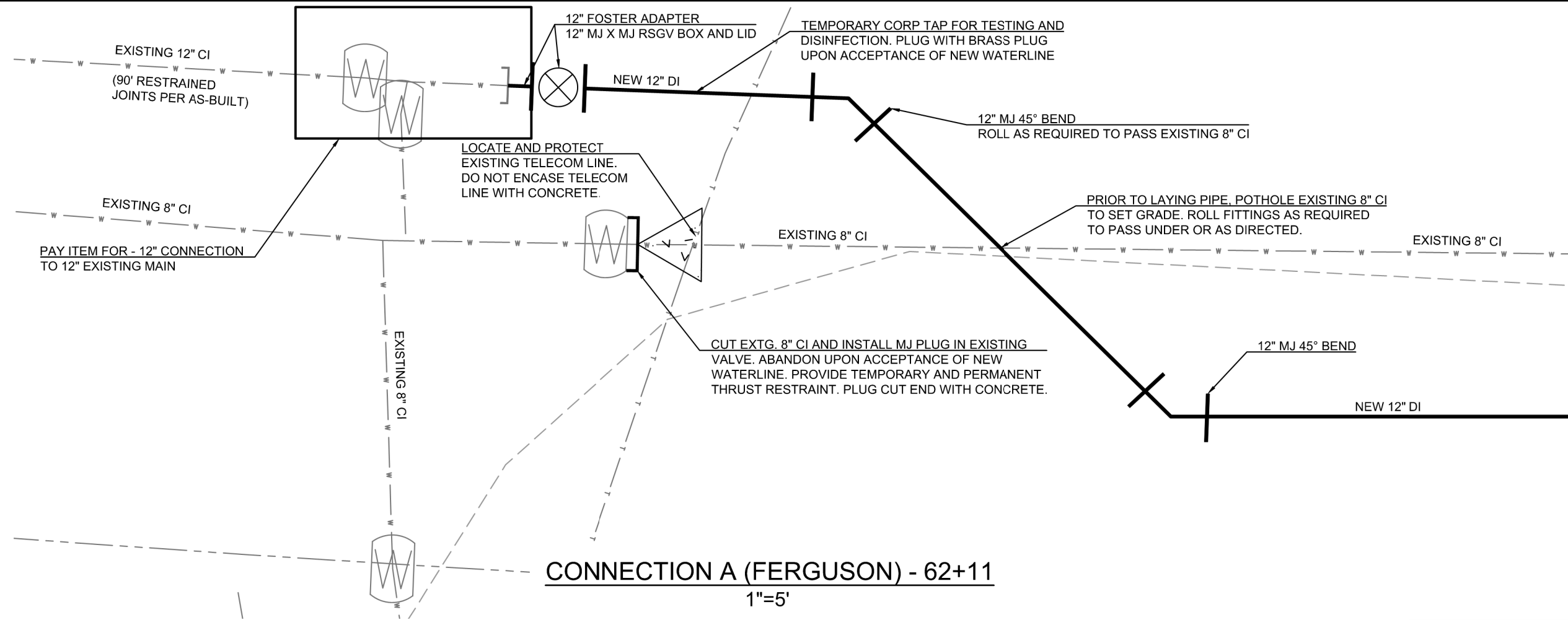
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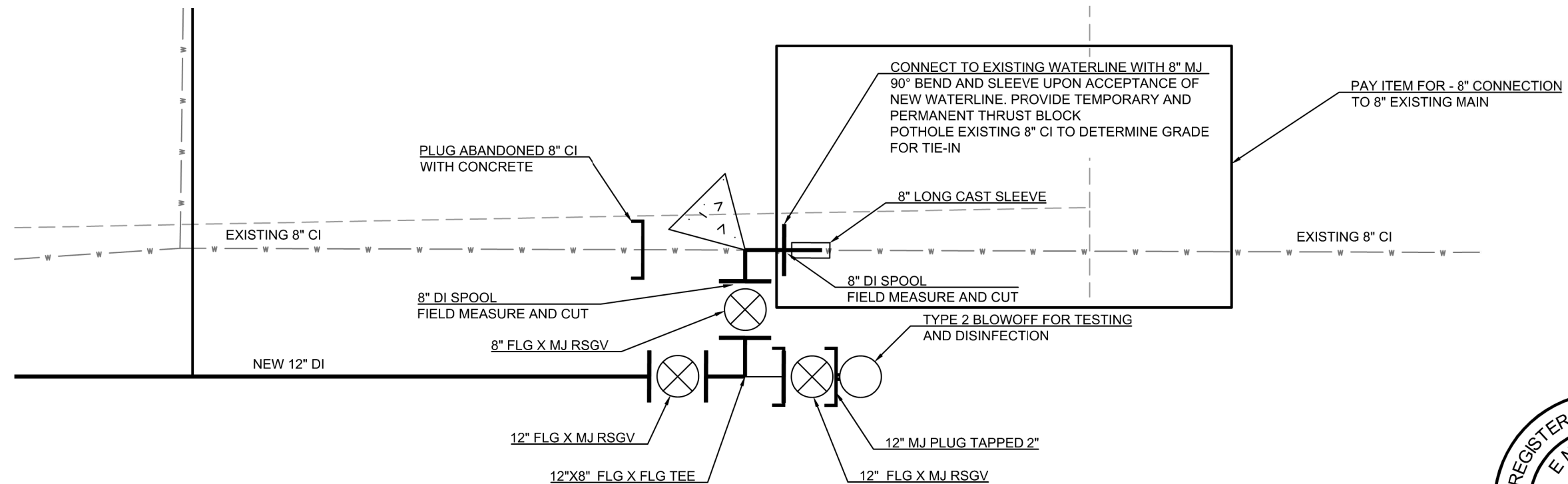
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EXPIRES: 12/31/2024

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CONNECTION A (FERGUSON) - 62+11
1"=5'



CONNECTION B (BRADLEY) - 80+46
1"=5'



EXPIRES: 12/31/2024

WATERLINE CONNECTION DETAILS	REDLAND ROAD WATERLINE	PROJECT NO.: CL-300320344
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Sheet No.	WP-09	

TYPICAL TRENCH DETAIL

ALTERNATE TRENCH DETAIL
(AS DIRECTED BY DISTRICT)

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 02225.
- ALL CRUSHED ROCK AND NATIVE BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM RELATIVE DENSITY, UNLESS OTHERWISE SPECIFIED.
- PROVIDE PROPER SHORING AS REQUIRED. COMPLY WITH OREGON OSHA REGULATIONS.

NO	REVISION	TYPICAL TRENCH
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL101A.dwg
		101A

BEARING AREA, 'A', OF THRUST BLOCKS IN SQUARE FEET *

FITTING SIZE	TEE, WYE, PLUG OR CAP		90° BEND, PLUGGED CROSS		TEE PLUGGED ON RUN		45° BEND		22½° BEND		11½° BEND	
	A	A1	A1	A2	A	A	A	A	A	A	A	A
4	1.4	1.9	2.7	1.9	1.0	-	-	-	-	-	-	-
6	2.8	4.0	5.6	4.0	2.1	1.1	-	-	-	-	-	-
8	4.8	6.8	9.6	6.8	3.7	1.9	0.9	-	-	-	-	-
10	7.3	10.3	14.5	10.3	5.6	2.8	1.4	-	-	-	-	-
12	10.3	14.5	20.4	14.5	7.9	4.0	2.0	-	-	-	-	-
14	13.8	19.5	27.5	19.5	10.6	5.4	2.7	-	-	-	-	-
16	17.8	25.2	35.5	25.2	13.6	7.0	3.5	-	-	-	-	-
18	22.4	31.7	44.7	31.7	17.1	8.7	4.4	-	-	-	-	-
20	27.5	38.9	54.8	38.9	21.0	10.7	5.4	-	-	-	-	-
24	39.2	55.5	78.3	55.5	30.0	15.3	7.7	-	-	-	-	-

* ABOVE BEARING AREAS BASED UPON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) X (2,000/SOIL BEARING STRESS) X (TABLE VALUE).

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15100. CONCRETE THRUST BLOCKS USED WITH APPROVAL ONLY.
- CONCRETE THRUST BLOCK SHALL BE POURED AGAINST UNDISTURBED EARTH.
- KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES. INSTALL 4 MIL VISQUEUM MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING BLOCKING.
- CONCRETE SHALL BE 3,000 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH.
- BEARING AREAS WHERE EXISTING PIPE WILL BE ABANDONED IN PLACE SHALL INCLUDE 1/2" STEEL PLATE AT THE BASE OF THE THRUST BLOCK. THE MINIMUM BEARING AREA OF THE STEEL PLATE END LINES SHALL HAVE THRUST RESTRAINT PROVIDED BY A COLLAR BLOCK PER STANDARD DETAIL OR BY INTERNAL OR EXTERNAL JOINT RESTRAINT SYSTEMS.
- ALLOW CONCRETE TO CURE 5 DAYS MINIMUM PRIOR TO FILLING/TESTING WATERLINE.

NO	REVISION	THRUST BLOCK
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL102.dwg
		102

TYPICAL VALVE AND ACCESSORIES

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15200.
- VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
- VALVE BOX TOP SHALL BE ADJUSTED TO FINISH GRADE.
- PVC LOWER SHALL BE A CONTINUOUS PIECE - NO BELLS OR COUPLERS.
- FOR VALVES 6-FEET OR DEEPER, PROVIDE STEEL EXTENSION STEM TO RAISE OPERATING NUT TO WITHIN 3'-4" BELOW GRADE.

NO	REVISION	TYPICAL VALVE AND ACCESSORIES
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL104A.dwg
		104A

BLOW-OFF ASSEMBLY TYPE II

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15100.
- BLOW-OFF SHALL NOT BE LOCATED IN GUTTER OR DITCH.
- 2" FITTINGS AND NIPPLES SHALL BE BRASS WITH I.P. THREAD FOR PERMANENT ASSEMBLY.

TEMPORARY BLOWOFF NOTES:

- VALVE BOXES NOT REQUIRED WITH OPEN TRENCH SITUATIONS.
- 2" PIPING MATERIAL MAY BE GALVANIZED PIPE.
- OPEN TRENCHES SHALL BE PROTECTED PER CONSTRUCTION PERMIT (COUNTY ROAD OPENING PERMIT OR OTHER AS APPLICABLE).
- REMOVE ALL BLOW-OFF RELATED MATERIALS FOR FINAL TIE-INS.

NO	REVISION	BLOW-OFF ASSEMBLY TYPE II
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL106B.dwg
		106B

3/4" OR 1" SERVICE ASSEMBLY

KEYNOTES:

- DIRECT TAP DUCTILE IRON ONLY. APPROVED SERVICE SADDLE REQUIRED ON CAST IRON/O.D. STEEL/PVC/TRANSITE PIPE.
- 1" CORPORATION STOP (CCXCOMP), FORD TYPE G OR EQUAL
- 1" COPPER TUBING TYPE "K", SOFT SEAMLESS
- FORD OR EQUAL 1" ANGLE METER STOP (COMP:METER SWIVEL NUT) WITH PADLOCK (LOCK INSTALLED BY CRW)
- METER SPACER - SUPPLIED BY CRW AND INSTALLED BY CONTRACTOR. CONTRACTOR TO SUPPLY AND INSTALL GASKETS.
- METER FURNISHED AND INSTALLED BY CRW
- FORD OR EQUAL 1" ANGLE METER STOP (COMP:METER SWIVEL NUT) WITHOUT PADLOCK
- METER BOX, ARMORCAST A6001946PCX12 OR EQUAL WITH CAST IRON READER LID. CENTER BOX OVER METER.
- 1" STRAIGHT JOINT COMP COUPLING (FIPXCU). PLUG WITH PVC IP PLUG. LEAK TEST ASSEMBLY AT SYSTEM PRESSURE.
- 2"x2" TEMPORARY MARKER STAKE, PAINTED BLUE
- CLASS B 3/4"-MINUS COMPACTED BACKFILL

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15100.
- ALL SERVICE MATERIALS SHALL COMPLY WITH "LEAD-FREE" REQUIREMENTS OF THE SPECIFICATIONS.
- INSTALL SERVICE BRANCHES AT RIGHT ANGLES TO THE MAIN, EXCEPT IN CUL-DE-SACS.
- 18" MINIMUM SEPARATION BETWEEN SERVICE TAPS.
- UPSTREAM ANGLE BALL VALVE TO REMAIN LOCKED UNTIL CRW REMOVES SPACER PIPE AND ACTIVATES SERVICE. (LOCK INSTALLED BY CRW)
- FINAL LOCATION OF SERVICE ASSEMBLY REQUIRES CRW APPROVAL.

NO	REVISION	3/4" OR 1" SERVICE ASSEMBLY
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL108A.dwg
		108A

3/4" OR 1" SERVICE ASSEMBLY RETROFIT

KEYNOTES:

- 1" CORPORATION STOP (CCXCOMP), FORD TYPE G OR EQUAL DIRECT TAP DUCTILE IRON.
- 1" COPPER TUBING TYPE "K", SOFT SEAMLESS
- 1" ANGLE METER STOP (COMP:METER SWIVEL NUT) WITH PADLOCK, FORD TYPE G OR EQUAL
- EXISTING METER TO REMAIN
- REMOVE EXISTING METER BOX AND INSTALL NEW METER BOX ARMORCAST BOX A6001946PCX12 (13"x24"x12") WITH EBAA IRON LID MC1324-4R
- 3/4"-MINUS COMPACTED BACKFILL
- FORD A-24, 3/4"x1" METER REDUCER

NOTES:

- SEE CLACKAMAS RIVER WATER STANDARD DETAIL 108A FOR ADDITIONAL INFORMATION.

NO	REVISION	3/4" OR 1" SERVICE ASSEMBLY RETROFIT
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL108B.dwg
		108B

STANDARD HYDRANT - TYPE 3

KEYNOTES:

- THREE WAY FIRE HYDRANT WITH (2) 2½" HOSE NOZZLES AND (1) 4½" PUMP NOZZLE.
- STANDARD CONCRETE PIER BLOCK, 8" THICK x 16" SQUARE BASE.
- SEE CRW DETAIL 104, "GATE VALVE AND ACCESSORIES"
- 6" FLOW MJ GATE VALVE.
- NEW M&J FLG TEE. USE 18" OF RESTRAINED PIPING EACH WAY.
- 6" D.I. RESTRAINED SPOOL.
- THRUST BLOCK REQUIRED AT HOT TAP. SEE CRW DETAIL 105, "WET TAP ASSEMBLY".
- 1½" MIN. CLEAN DRAIN ROCK 6" ABOVE WEEP HOLES. COVER WITH GEOFABRIC.
- FOR WET TAP OF EXISTING MAIN, USE APPROVED S.S. TAP SADDLE - SEE CRW DETAIL 105, "WET TAP ASSEMBLY"
- 6" RESTRAINED MJ BENDS AND SPOOL AS REQUIRED TO ADJUST GRADE
- TRACER WIRE

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15200.
- INSTALL MJ BENDS AS REQUIRED TO ADJUST GRADE TO COMPLY WITH MAXIMUM FIRE HYDRANT BURY REQUIREMENTS.

NO	REVISION	FIRE HYDRANT ASSEMBLY TYPE 3
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL110B.dwg
		110B

FIRE HYDRANT ASSEMBLY CLEAR ZONE

NOTES:

- REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15200.
- THE CLEAR ZONE PROHIBITS THE FOLLOWING:
 - VEHICLE PARKING
 - FENCES
 - TREES
 - LARGE BUSHES
 - RETAINING WALLS
 - ANYTHING ELSE THAT MAY INTERFERE WITH OPERATION OF THE FIRE HYDRANT
- THE CLEAR ZONE ALLOWS THE FOLLOWING:
 - LAWN GRASS
 - MULCH
 - BARK DUST
 - GROUND COVER
 - LOW PLANTINGS
 HOWEVER, THE PROPERTY OWNERS SHOULD BE AWARE THE GROUND COVER COULD BE DAMAGED WHEN THE HYDRANT IS USED OR MAINTAINED.

NO	REVISION	FIRE HYDRANT ASSEMBLY CLEAR ZONE
		SCALE: N.T.S. DATE: MAY 2021
		DRAWING: CRW.STD.DTL110C.dwg
		110C

WATER DETAILS

REDLAND ROAD WATERLINE

PROJECT NO.: CL-300320344
DATE: 03/20/2023



PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

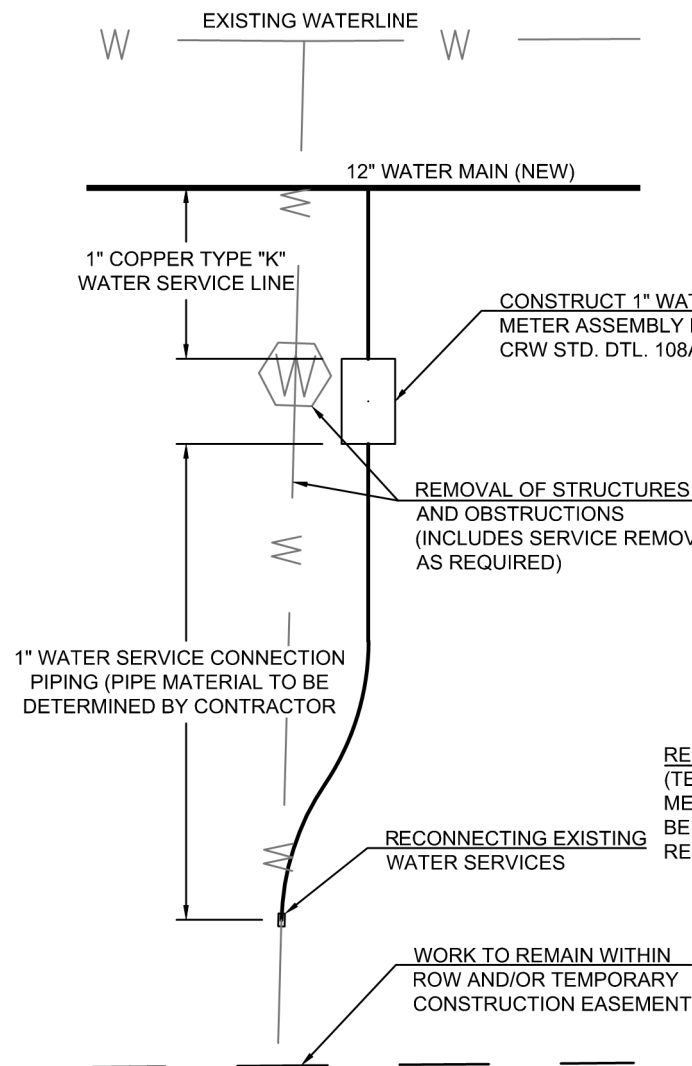
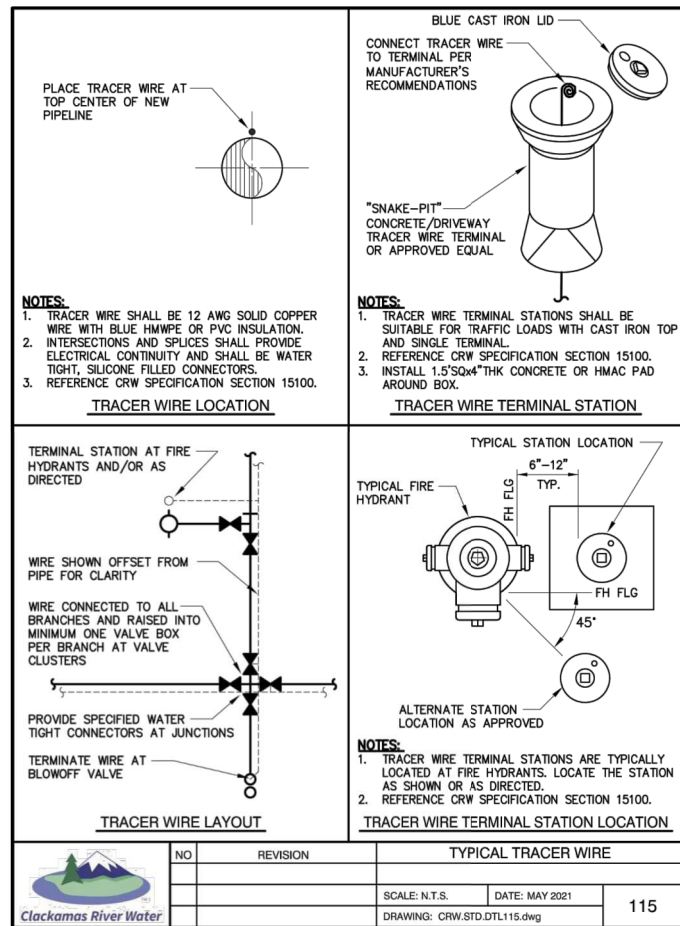


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DRAFTED BY: PPG
CHECKED BY: KSR

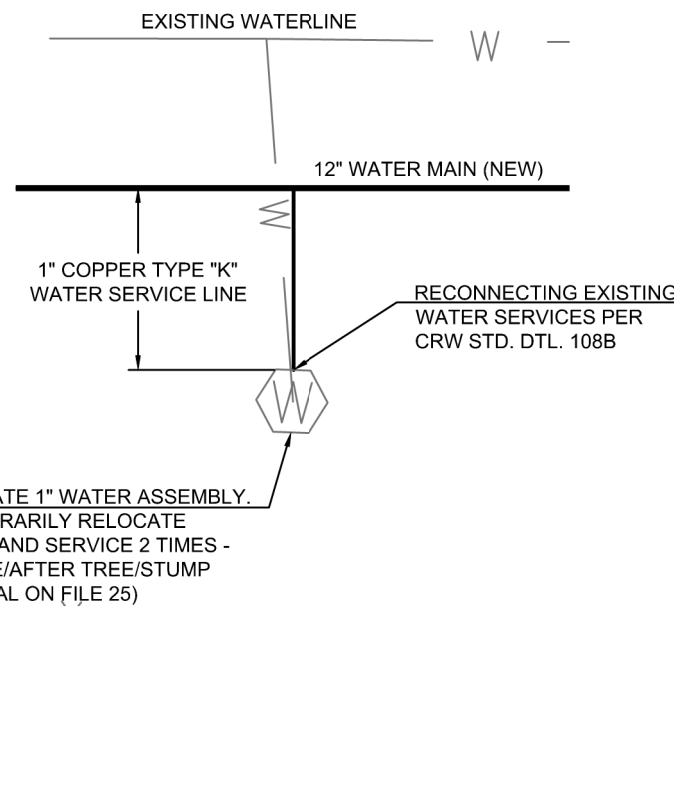
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NO	DATE	DESCRIPTION

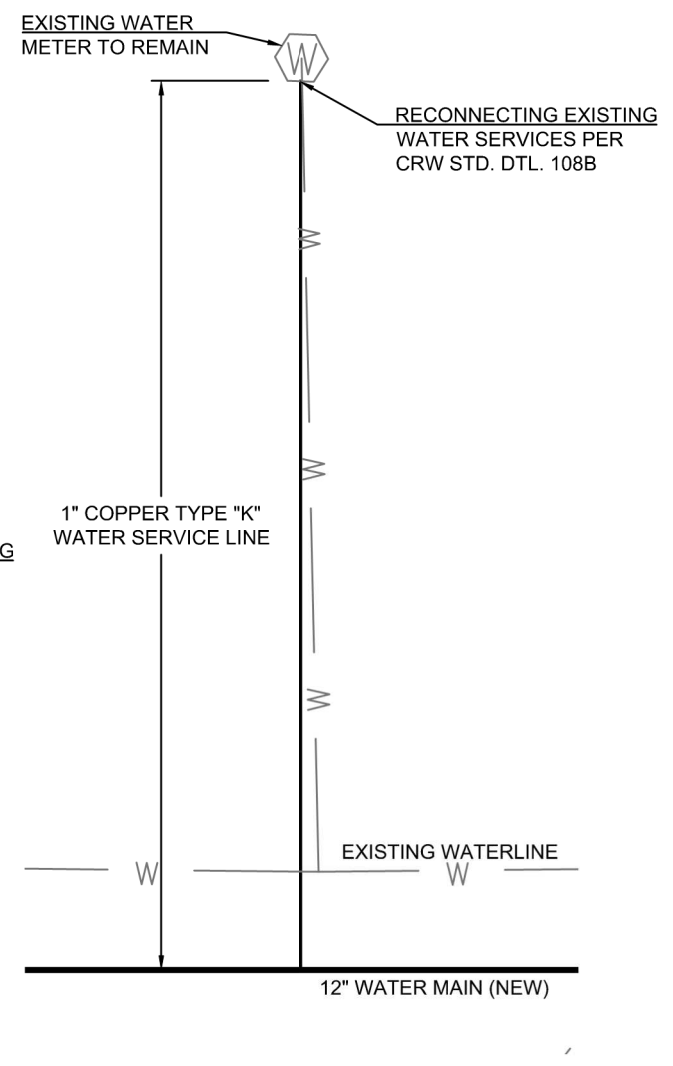
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Typical Water Service Connection
Detail - 1
NTS



Typical Water Service Connection
Detail - 2
NTS

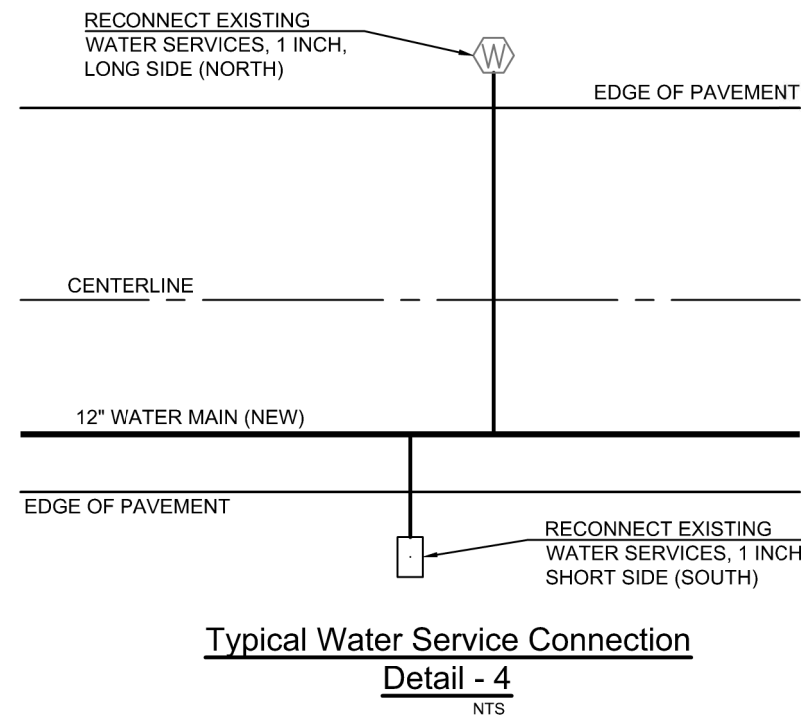


Typical Water Service Connection
Detail - 3
NTS

CRW Provided Materials List

Item No.	Description	Quantity	Unit
1	12" Class 52 Ductile Iron Pipe, AWWA C151	101 x 18'	Each
2	8" Class 52 Ductile Iron Pipe, AWWA C151	1 x 18'	Each
3	6" Class 52 Ductile Iron Pipe, AWWA C151	1 x 18'	Each
4	12" Gate Valve, MJxMJ, AWWA C515	2	Each
5	12" Gate Valve, FLGxMJ, AWWA C515	2	Each
6	8" Gate Valve, FLGxMJ, AWWA C515	1	Each
7	6" Gate Valve, FLGxMJ, AWWA C515	2	Each
8	12" 45 MJ Bend, AWWA C153	4	Each
9	12"x6" MJxFLG Tee, AWWA C153	2	Each
10	12"x8" FLGxFLG Tee, AWWA C153	1	Each
11	12" MJ Plug Tapped 2", AWWA C153	1	Each
12	8" MJ Plug, AWWA C153	1	Each
13	8" MJ 90 Bend, AWWA C153	1	Each

Item No.	Description	Quantity	Unit
14	8" MJ Long Cast Sleeve, AWWA C153	1	Each
15	Fire Hydrant, 5-foot barrel length	2	Each
16	12" Restraining Bell Gaskets, AWWA C111	103	Each
17	12" MJ Restraints	14	Each
18	8" MJ Restraints	3	Each
19	6" MJ Restraints	4	Each
20	12" Foster Adaptor	2	Each
21	8" Foster Adaptor	1	Each
22	1" Corporation Stop	16	Each
23	1" Angle Meter Stop	20	Each
24	1" Meter Box, 13"x24"	16	Each
25	1" Meter Box Lid	16	Each
26	1" Valve Box and Lid	7	Each



Typical Water Service Connection
Detail - 4
NTS



DESIGNED BY: PPG
DRAFTED BY: PPG
CHECKED BY: KSR

NO DATE: _____

REVISIONS

Sheet No. WP-11

WATER DETAILS

REDLAND ROAD WATERLINE

Clackamas River Water

PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

PROJECT NO.: CL-300320344
DATE: 03/20/2023



INVITATION TO BID #2023-33
 Redland Rd Turn Lanes at Ferguson and Bradley Project
 ADDENDUM NUMBER 1
 May 09, 2023

On April 18, 2023, Clackamas County (“County”) published an Invitation to Bid #2023-33 (“BID”). The County has found that it is in its interest to amend the BID through the issuance of this Addendum #1. Except as expressly amended below, all other terms and conditions of the original BID and subsequent Addenda shall remain unchanged.

The following changes are made to the Project Special Provisions:

1. Subsection 00150.50 Cooperation with Utilities – The following bullet is(are) added after to the paragraph that begins "(c) Contractor’s Responsibilities - The Contractor shall:”
 - Agree to the terms and sign the Williams- Northwest Pipeline LLC (“NORTHWEST”) Letter of No Objection with Exhibits.
2. Subsection 00150.50(f) Utility Information (No Anticipated Relocations) - This subsection is added after subsection 00150.50(e) Notification:

00150.50(f) Utility Information (No Anticipated Relocations) - Within the Project limits, there are no anticipated relocations with the Utilities listed in Table 00150-1. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Table 00150-1

Utility	Contact Person's Name, Address, Email, and Phone Number
Comcast Cable Corporation	Scott Anderson, Utility Construction Specialist – Engr. 7900 NE Killingsworth St Portland, OR 97218 Email: Scott_anderson3@cable.comcast.com PH: (503) 457-3768 Cell: (503) 351-9487
Lumen-Centurylink (adjacent contact is subject to change; check with Engineer)	Don Sheeran, Sr Network Implementation Program Manager 4501 NE Minnehaha St., Bldg 2, Vancouver, WA, 98661 Email: donal.sheeran@lumen.com PH: (564) 888-2020 Cell: (503) 422-0483

Williams Pipeline	Jean Brady, 801.201.9495 jean.brady@williams.com Fred Corona, 541.342.4434, 540.913.1804 fred.corona@williams.com 89861 N Game Farm Rd., Eugene, OR 97408
-------------------	--

3. Subsection 00150.50(g) Utility Information (Anticipated Relocations): - Table 00150-2 of this subsection is replaced with the following updated Table 00150-2:

Table 00150-2

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
00150.50(g)(2)	Portland General Electric (PGE)	Timothy Anderson – Pole relocations, 503.736.5504 timothy.anderson2@pgn.com Rico Torres Solis – Illumination, 503.304.9084 Rodrigo.Solis@pgn.com	During Construction
00150.50(g)(3)	Clear Creek TV, Ph, PC	Brian Bellikka, 503.631.2101 bbellikka@clearcreek.coop 18238 South Fischers Mill Rd, Oregon City, OR 97045	During Construction
00150.50(g)(4)	Clackamas River Water (CRW)	Joe Eskew – Engineering Manager, 503.723.2565, 503.747.4394 jeskew@crwater.com Adam Bjornstedt – Chief Engineer, 503.722.9246, 503.729.1600 abjornstedt@crwater.com 16770 SE 82 nd Dr, Clackamas, OR 97015	During Construction

4. Subsection 00150.50(g) Utility Information (Anticipated Relocations): - The subsection that begins with the words "(1) (Williams Pipeline) - "Gas Utility":" is deleted.

These changes will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.

Attachments: Williams- Northwest Pipeline LLC (“NORTHWEST”) Letter of No Objection
with Exhibits

End of Addendum #1



WE MAKE CLEAN ENERGY HAPPEN®

May 4, 2023

Bob Knorr
Clackamas County Department of Transportation and Development
150 Beaver Creek Road
Oregon City, OR 97045

RE: Letter of No Objection - Redland Road Turn Lanes at Ferguson & Bradley

Dear Mr. Knorr,

This letter is in response to your request for permission of a pending and future County contractor ("Company"), acting on behalf of Clackamas County Department of Transportation and Development, ("Company") to "construct or conduct" the proposed Redland Road Turn Lanes at Ferguson & Bradley Project ("Encroachment Project"), subject to the standards and specifications of the 2020 Williams Developers Handbook, attached to this letter as Exhibit B, "over or under" the existing 2436 Camas/Eugene 16" pipeline and the 2479 Camas/Eugene 20" Loop Line pipeline, including all appurtenant equipment and facilities associated therewith (together, the "Williams Facility") owned by Northwest Pipeline LLC ("Williams") in Clackamas County, Oregon. Please be advised that Williams hereby acknowledges and agrees to the project design set forth in Exhibit A and associated with the Encroachment Project proposed by the County and grants to Company permission to "construct or conduct" said Encroachment Project, subject to the standards and specifications of the 2020 Williams Developers Handbook, attached to this letter as Exhibit B, "over or under" the Williams Facility in consideration of Company acknowledgement and compliance with the following:

1. Company must provide notice to Williams in compliance with State One call laws (excluding weekends and holidays) prior to commencing the Encroachment Project construction or operations near the Williams Facility, Company shall notify and/or be responsible for its contractors, agents and subcontractors notifying the State One-Call System (dial 811) of the construction so that a Williams representative(s) or other designated person(s) can be present during the construction or operations.
2. If applicable, whenever the construction contract plans are updated, Company will provide Williams with an additional copy of the County's updated proposed design and crossing plan for the Encroachment Project "over or under" the Williams Facility and agrees to provide Williams five business days advance notice in writing before materially deviating from such proposed design and crossing plan.
3. Williams reserves the right to have a representative stationed along Williams rights-of-way during the subject construction or other operations near Williams pipeline, facilities, and/or other equipment.
4. If applicable, wherever Company should encroach upon Williams' rights-of-way with heavy steel tracked equipment, Company shall place matting or other suitable material over the Williams Facility as determined by Williams representative.
5. The proposed encroachment will "cross, or be on" Williams Facility right of way as represented by Company in the proposed design and crossing plan or as depicted in the vicinity map and/or site plans attached to this letter as Exhibit A. Company shall be solely responsible for obtaining any required permission or grants from the Landowners and any governmental permits or authorizations necessary for Company to begin or engage in activities related to the Encroachment Project near the Williams Facility.
6. Should it become necessary for Williams to perform future maintenance, repairs, or replacement of Williams Facility that may result in damage or removal of the Encroachment Project or portion thereof "over or under" Williams Facility, Company agrees that any costs associated or related to

the removal, repair, or reconstruction of the Encroachment Project will be at the sole expense of Company and Company waives any claim it may have against Williams for such cost.

7. Company does hereby agree to release, protect, defend, indemnify and hold harmless Williams, its associated and affiliated companies and partners and their agents, representatives, employees, officers, directors, insurers, successors and assigns from and against all claims, charges, fees, causes of action, demands, suits and actions or payment for damages to, or loss of property or injury to or death of, any legal entity, person or persons (including the Landowner(s), Company, third parties, and Williams) that may be caused by, arise out of or result from Company's construction of the Encroachment Project and related equipment and facilities, except for such damage or injury resulting from the sole negligence or willful misconduct of Williams. The rights granted under this Section are in addition to any and all other remedies available under law or equity.
8. Company will maintain during the Encroachment Project, and cause any of its agents, contractors, or other representatives working on the Encroachment Project, to maintain insurance that meets the following requirements:
 - a. Company warrants compliance with the following insurance requirements:
 - i. Statutory Workers' Compensation insurance and Employer's Liability of \$500,000 each accident, \$500,000 disease each employee, and \$500,000 disease policy limit.
 - b. Company will agree to waive and require its insurers to waive all rights of recovery, subrogation or otherwise, against Williams.
 - c. Company policies shall respond as primary and non-contributory to any other insurance or self-insurance made available to Williams.
 - d. The insurance requirements as outlined in Section 00170.70(a) Insurance Coverages and Section 00170.70(d) Additional Insured of the Special Provisions of its contract with Clackamas County:

00170.70(a) Insurance Coverages:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	\$2,000,000	\$4,000,000
Commercial Automobile Liability	\$2,000,000	(aggregate limit not required)

00170.70(d) Additional Insured:

- Clackamas County and its officers, agents, and employees
 - Clackamas County Board of Commissioners
 - Clackamas River Water
 - Williams (Northwest Pipeline LLC)
9. Williams has the right to stop the Company and its agents, contractors, or other representatives from continuing Encroachment Project work if Williams personnel determine, in their reasonable discretion, that there is a safety issue or risk to the integrity to the Williams Facility. This right to stop work is not an obligation to inspect or supervise the Encroachment Project installation activities and does not waive or release any claims Williams may have related to the Encroachment Project.

- 10. Company will perform potholing prior to work to verify pipeline depth assumptions of submitted plans. If verified potholed pipeline depths are different than the assumed depths Williams must review and approve the crossings to verify compliance with crossing separation requirements prior to installation.
- 11. Company will comply with Williams Gas Pipeline General Notes included in plans for project.

Please indicate Company's acceptance of the above by having one of the originals of this letter signed and dated by a Company representative, then return to:

Williams
8907 NE 219th Street
Battle Ground, WA 98604
Attention: Jean Brady

Should you have any questions regarding Williams operating procedures, please call me at (801) 209-0495.

Sincerely,

Jean Brady
Land Representative

ACCEPTED AND AGREED TO BY THE PROJECT CONTRACTOR FOR CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT; PROJECT: #2023-33 Redland Rd Turn Lanes at Ferguson and Bradley Project.

ON THIS _____ day of _____, 20__.

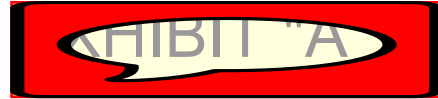
Firm Name: _____

Bidder Signature: _____

Bidder Print Name: _____

Address: _____

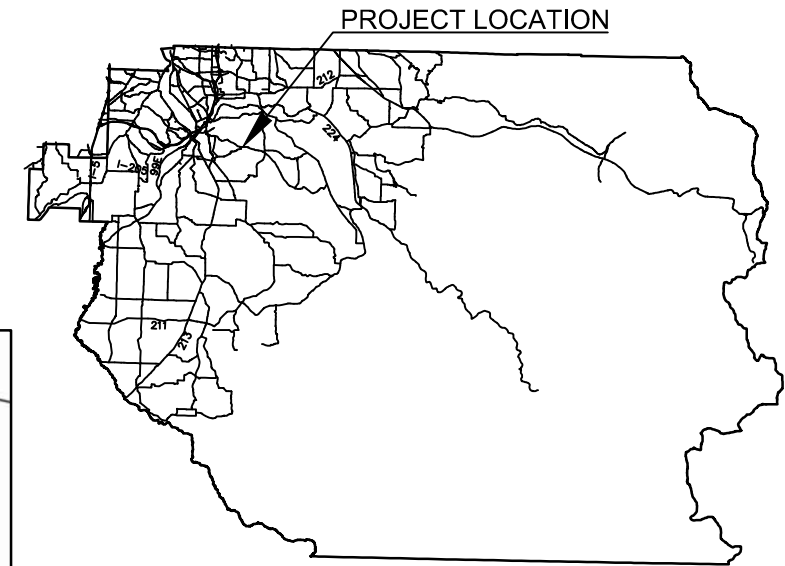
Phone #: _____



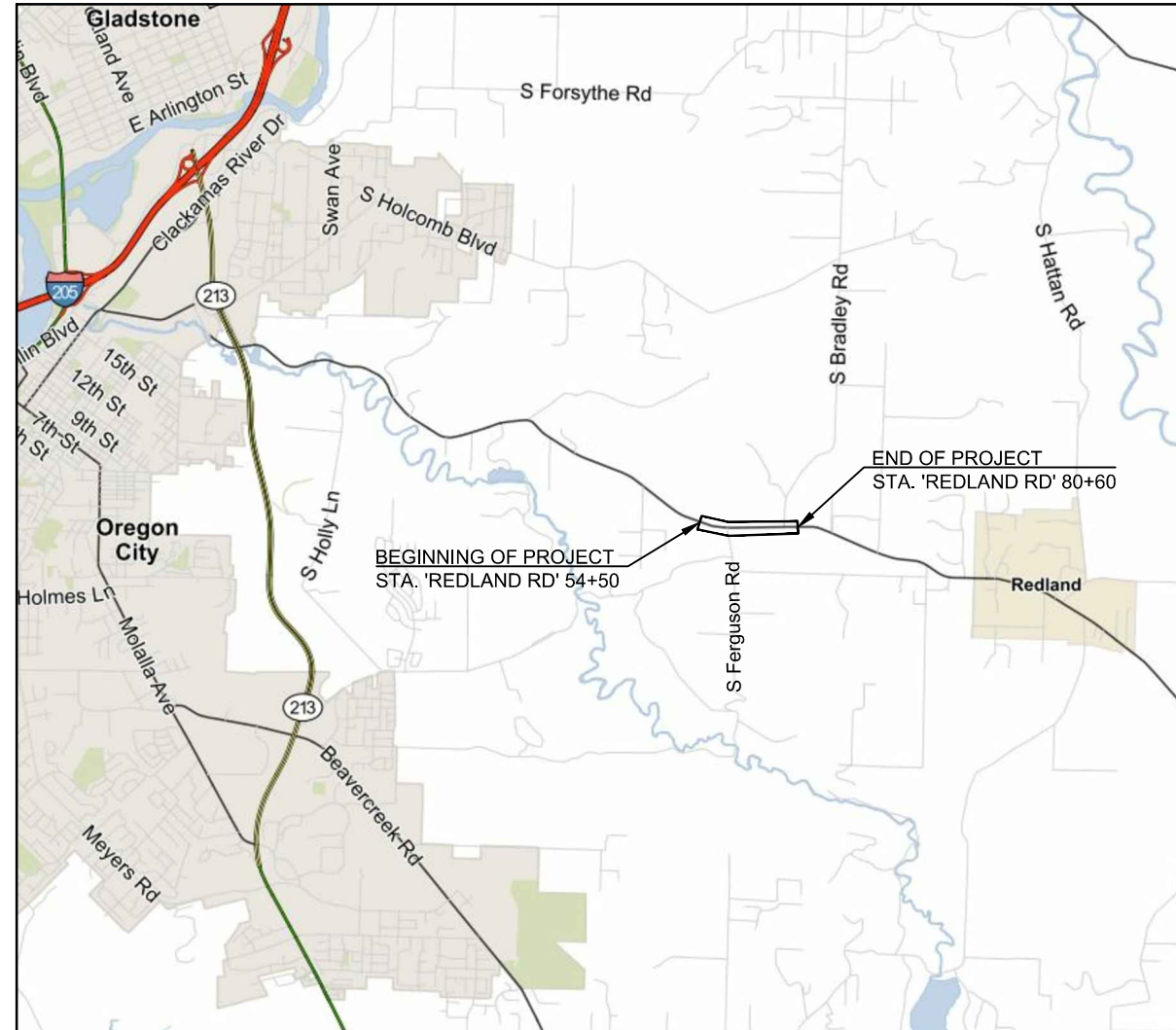
CLACKAMAS COUNTY
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
ROADWORK, PAVING, DRAINAGE, WATER, AND SIGNING & STRIPING

REDLAND RD
TURN LANES AT FERGUSON AND BRADLEY
CLACKAMAS COUNTY, OREGON

APRIL 2023



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
G-01	ROADWAY COVER SHEET
G-02	GENERAL NOTES - COUNTY
G-03	GENERAL NOTES - WILLIAMS GAS PIPELINE
G-04	LEGEND, ABBREVIATIONS & STD. DRAWINGS
TS-01	TYPICAL SECTIONS
TS-02	PAVING PLAN
TS-03	SUPERELEVATION CHART
EC-01	EROSION & SEDIMENT CONTROL NOTES
EC-02	EROSION & SEDIMENT CONTROL PLAN
PP-01 - PP-13	ROADWAY PLAN & PROFILE
SW-01	STORMWATER SECTION DETAILS
SW-02	STORMWATER FLOW CONTROL DETAILS
TC-01 - TC-05	TRAFFIC CONTROL & STAGING PLAN
SS-01 - SS-02	SIGNING & STRIPING PLAN
SS-03	SIGNING & STRIPING DETAILS
LL-01 - LL-02	ILLUMINATION PLAN
LL-03	ILLUMINATION DETAILS
C-01	WATERLINE COVER SHEET
C-02	WATER GENERAL NOTES - CLACKAMAS RIVER WATER
C-03	WATER GENERAL NOTES - WILLIAMS GAS PIPELINE
WP-01 - WP-08	WATERLINE PLAN & PROFILE
WP-09	WATERLINE CONNECTION DETAILS
WP-10 - WP-11	WATERLINE DETAILS



VICINITY MAP
NOT TO SCALE



CONTACT INFORMATION:

Clackamas County Department of Transportation
150 Beaver Creek Rd
Oregon City, OR 97045
503-742-4400
www.clackamas.us
Bob Knorr, Project Manager
rknorr@clackamas.us

Civil Engineer:
PBS Engineering & Environmental
4412 S Corbett Avenue
Portland, OR 97239
Ken Rehms, PE
Ken.Rehms@pbsusa.com
(503) 417-7720
(503) 729-8880, mobile

Surveyor:
Clackamas County Department of Transportation
150 Beaver Creek Rd
Oregon City, OR 97045
Brian Paull
BPaull@clackamas.us
(503) 742-4650

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.

BASIS OF BEARINGS
OREGON COORDINATE REFERENCE SYSTEM (OCRS) DERIVED BEARING OF N 87°46'04" E.
GEODETIC DATUM - NORTH AMERICAN DATUM OF 1983 (2011) EPOCH 2010.00
COORDINATE SYSTEM - OCRS (PORTLAND ZONE)
PROJECTION - LAMBERT CONFORMAL CONIC PROJECTION
LATITUDE OF GRID ORIGIN - 122°45'00" W
FALSE NORTHING - 50,000.00 m
FALSE EASTING - 100,000.00 m (328083.99 INTERNATIONAL FEET)
SCALE FACTOR 1.000002 (EXACT)



CLACKAMAS COUNTY CONCURRENCE	
CAPITAL PROJECTS SUPERVISOR	DATE



PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com



ROADWAY COVER SHEET
REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY
PROJECT NO.: CL-300320344
DATE: 03/20/2023

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

DESIGNED BY: MDB	DRAFTED BY: PPG	CHECKED BY: KSR
REVISIONS	NO DATE:	

Sheet No. G-01

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WILLIAMS GAS PIPELINE GENERAL NOTES

1. WILLIAMS- NORTHWEST PIPELINE LLC ("NORTHWEST") WILL REQUIRE THE EXECUTION OF AN ENCROACHMENT AGREEMENT AND ISSUE A WILLIAMS GAS PIPELINE ENCROACHMENT/FOREIGN LINE CROSSING PERMIT FOR EACH CONTRACTOR AND ACTIVITY WITHIN THE PIPELINE EASEMENT. THE AGREEMENT MUST BE EXECUTED BEFORE WORK BEGINS ON THE RIGHT OF WAY.
2. NORTHWEST WILL REQUIRE SUBMITTAL OF PLAN AND PROFILE DRAWINGS FOR PRIOR REVIEW AND APPROVAL BY NORTHWEST. ALL DRAWINGS MUST SHOW IN DETAIL, ALL OF NORTHWEST'S FACILITIES AND OTHER FEATURES THAT WILL ALLOW NORTHWEST TO DETERMINE THE EFFECTS OF THE PROPOSED CONSTRUCTION OR MAINTENANCE ACTIVITY ON ITS FACILITIES.
3. AN AUTHORIZED NORTHWEST REPRESENTATIVE MUST BE ON SITE PRIOR TO AND DURING ANY SURFACE-DISTURBING WORK OR EQUIPMENT CROSSINGS PERFORMED WITHIN THE PIPELINE RIGHT OF WAY EASEMENT. NORTHWEST REPRESENTATIVE WILL ASSIST IN DETERMINING THE LOCATION OF THE PIPELINE, THE RIGHT-OF-WAY WIDTH AND EXISTING DEPTH OF THE PIPELINE. NORTHWEST'S REPRESENTATIVE WILL SUPERVISE ALL WORK WITHIN NORTHWEST'S RIGHT-OF-WAY AND SHALL HAVE STOP WORK AUTHORITY AT ALL TIMES.
4. NORTHWEST'S REPRESENTATIVE WILL CONDUCT A SAFETY/INFORMATIONAL DISCUSSION WITH CONTRACTORS PRIOR TO CONSTRUCTION.
5. EVERY PERSON WORKING WITHIN THE NORTHWEST GAS PIPELINE RIGHT OF WAY EASEMENT MUST FOLLOW ALL REQUIREMENTS IN THE WILLIAMS DEVELOPERS' HANDBOOK AND ENCROACHMENT/FOREIGN LINE CROSSING PERMIT UNLESS IT IS WAIVED BY A NORTHWEST REPRESENTATIVE AND WRITTEN ON THE PERMIT. IN THE EVENT WORK COMMENCES ABSENT SUCH AN AGREEMENT, NORTHWEST MAY TAKE STEPS TO PREVENT FURTHER ACTIVITY.
6. ANY CROSSINGS MADE WITHOUT A NORTHWEST REPRESENTATIVE ON SITE WILL BE EXCAVATED AT THE EXCAVATOR'S EXPENSE TO PROVIDE NORTHWEST AN OPPORTUNITY TO INSPECT ALL AFFECTED PIPELINE FACILITIES. NORTHWEST WILL BE FULLY AND COMPLETELY COMPENSATED FOR ANY DAMAGES TO ITS FACILITIES RESULTING FROM THE ACTS OF THIRD PARTIES WHO ARE WORKING IN THE VICINITY OF NORTHWEST'S FACILITIES WITH OR WITHOUT NORTHWEST'S CONSENT.
7. TO PROTECT NORTHWEST'S GAS PIPELINE FROM EXTERNAL LOADING, NORTHWEST MUST PERFORM AN ENGINEERING EVALUATION TO DETERMINE THE EFFECTS OF ANY PROPOSED EQUIPMENT USE. MATS, TIMBER BRIDGES, OR OTHER PROTECTIVE MATERIALS DEEMED NECESSARY BY NORTHWEST WILL BE PLACED OVER NORTHWEST'S GAS FACILITIES FOR THE DURATION OF ANY LOADING. PROTECTIVE MATERIALS SHALL BE PURCHASED, PLACED, AND REMOVED AT NO COST TO NORTHWEST. THE GAS LINE EASEMENT OR RIGHT-OF-WAY MUST BE RESTORED TO ITS ORIGINAL CONDITION.
8. NORTHWEST MAY REQUIRE MARKINGS TO IDENTIFY SPECIFIC AREAS WHERE EQUIPMENT USE IS AUTHORIZED. VIBRATORY EQUIPMENT IS NOT PERMITTED ON THE GAS LINE EASEMENT.
9. NORTHWEST REPRESENTATIVES MUST BE PROVIDED SAFE ACCESS TO ALL OPEN EXCAVATIONS. EXCAVATIONS MUST BE PROPERLY SLOPED OR SHORED IN ACCORDANCE WITH OSHA REGULATIONS.
10. NO CUT OR FILL ON THE RIGHT-OF-WAY IS ALLOWED WITHOUT NORTHWEST'S APPROVAL.
11. STOCKPILING FILL, BRUSH, TRASH, OR OTHER DEBRIS ON THE RIGHT OF WAY IS PROHIBITED.
12. NORTHWEST MUST BE NOTIFIED AT THE EUGENE DISTRICT OFFICE (541) 342-4434 AT LEAST 72 HOURS BEFORE ANY WORK COMMENCES ON OR NEAR ITS RIGHT-OF-WAY. REFERENCE MILEPOST 24.53-24.55 ON THE 2479 LINE.

GENERAL NOTES - WILLIAMS GAS PIPELINE
REDLAND ROAD TURN LANES AT
FERGUSON & BRADLEY
DATE: 03/20/2023 PROJECT NO.: CL-300320344

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

DESIGNED BY: MDB	DRAFTED BY: PPG	CHECKED BY: KSR
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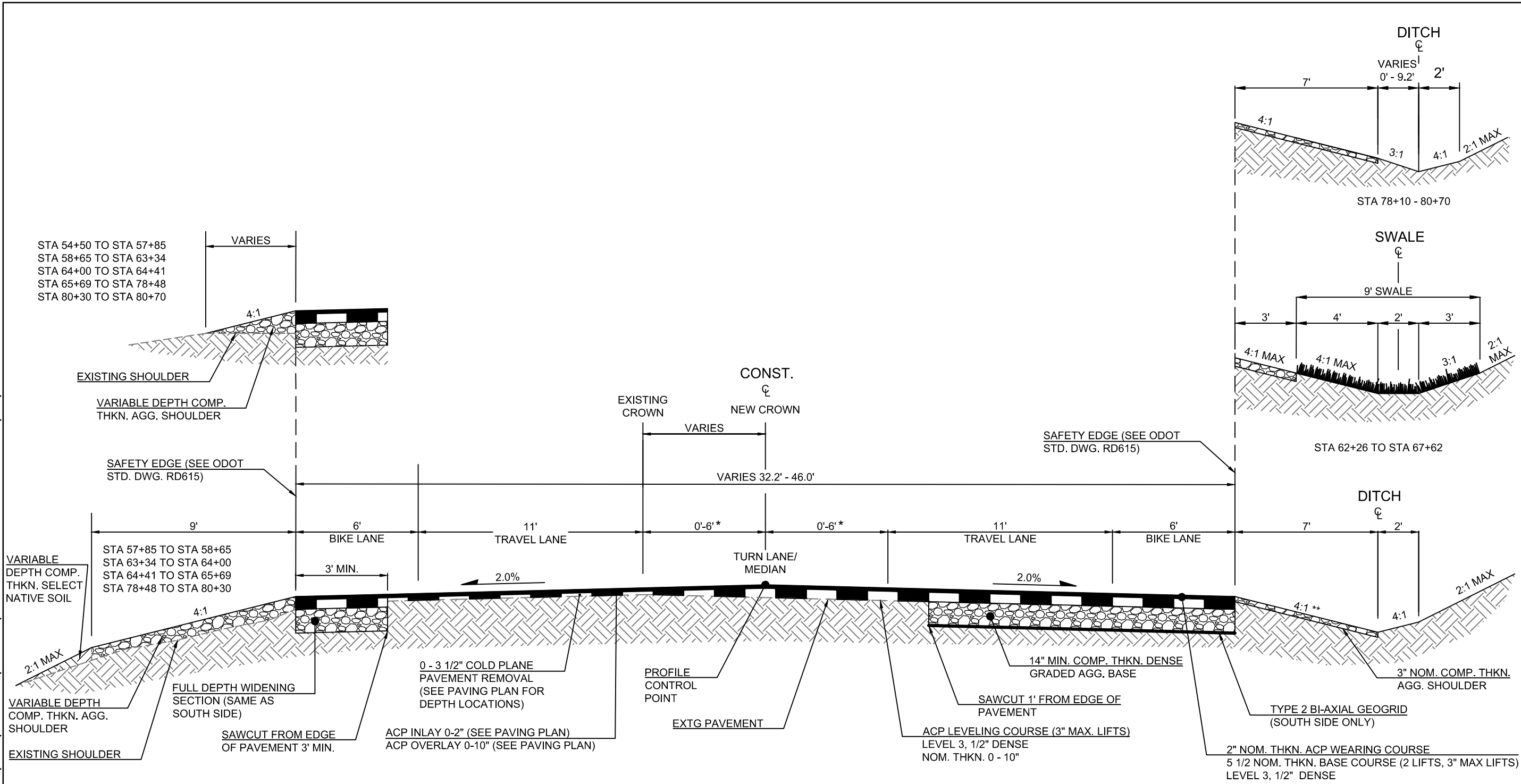


PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com



EXPIRES: 12/31/2024

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REDLAND ROAD

NTS
STA 54+50 TO STA 80+70

NOTE:

1. ALL MEDIANS AND TURN LANES ARE STRIPED PER THE SIGNING & STRIPING PLAN ON SHEETS SS-01 - SS-02.
2. FOR ACP LEVELING DEPTHS, SEE PAVING PLAN SHEET TS-02.
3. EXISTING RIGHT OF WAY AND NEW PERMANENT AND TEMPORARY EASEMENTS ARE SHOWN IN ROADWAY PLAN SHEETS.
4. FOR ADDITIONAL SWALE AND DITCH SECTION WITH STORMWATER ROCK GALLERY, SEE SHT. SW-01.
5. CONTACT WILLIAMS GAS MINIMUM 72 HOURS IN ADVANCE OF ANY WORK INSIDE THE GAS LINE EASEMENT. SEE NOTES ON SHEET G-03.

* STA 56+47 TO STA 62+24 - TAPERS FROM 2' MEDIAN TO 12' WIDTH AT S FERGUSON ST
 STA 64+73 TO STA 67+67 - TAPERS FROM 12' WIDTH TO 2' MEDIAN SECTION
 STA 71+23 TO STA 74+06 - TAPERS FROM 2' MEDIAN TO 12' WIDTH AT S BRADLEY ST
 STA 77+46 TO STA 80+20 - TAPERS FROM 12' WIDTH TO 2' MEDIAN SECTION

** STA 69+27 TO STA 71+22 - SLOPE VARIES - 4:1 MAX

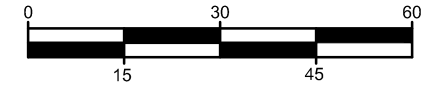
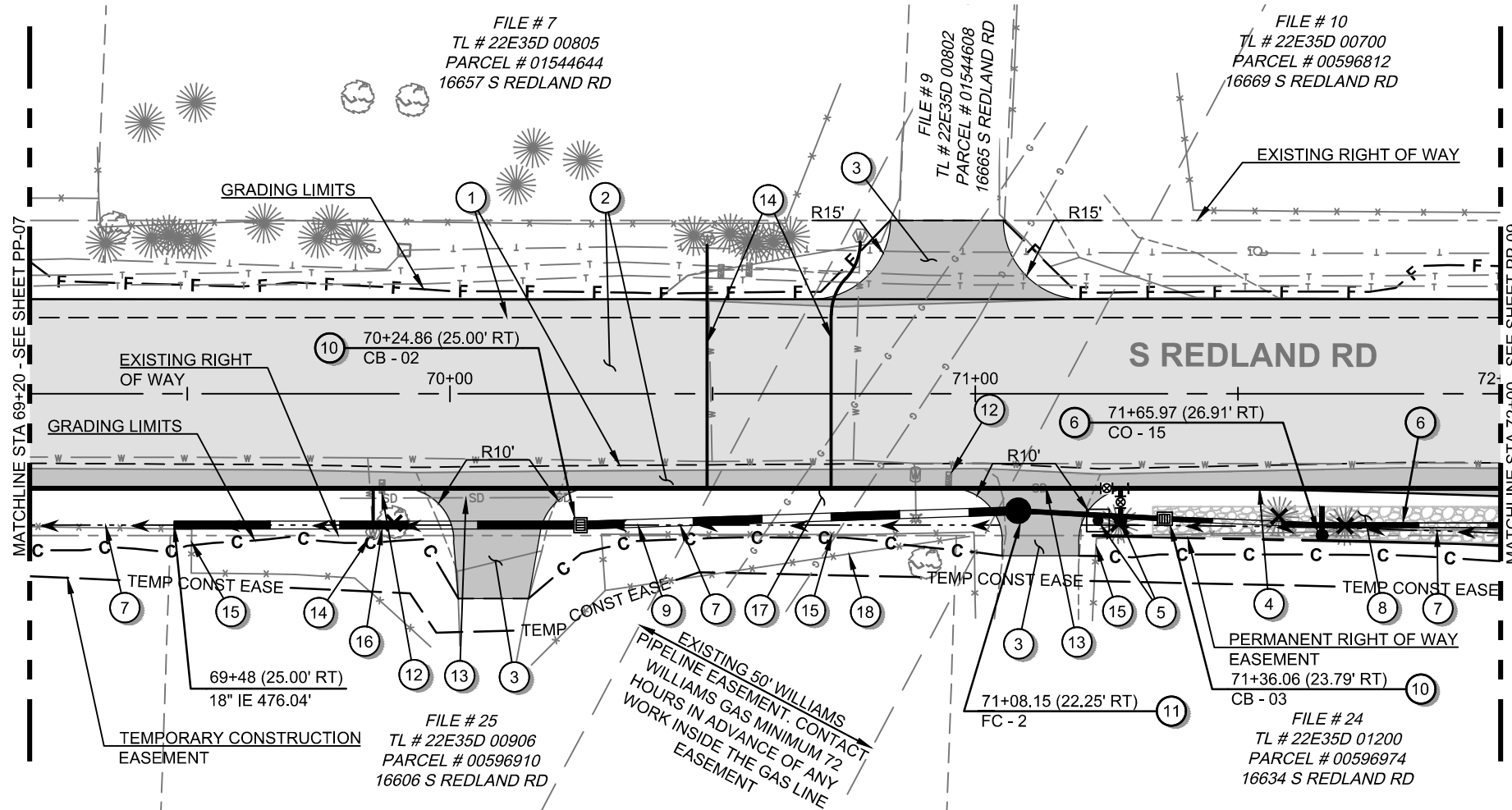


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 Portland, OR 97239
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TYPICAL SECTIONS REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY		PROJECT NO.: CL-300320344 DATE: 03/20/2023
CLACKAMAS COUNTY DEPT. OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045		DIRECTOR DAN JOHNSON
DESIGNED BY:	MDB	REVISIONS NO. DATE:
DRAFTED BY:	PPG	
CHECKED BY:	KSR	
Sheet No.		TS-01

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SCALE: 1"=30'

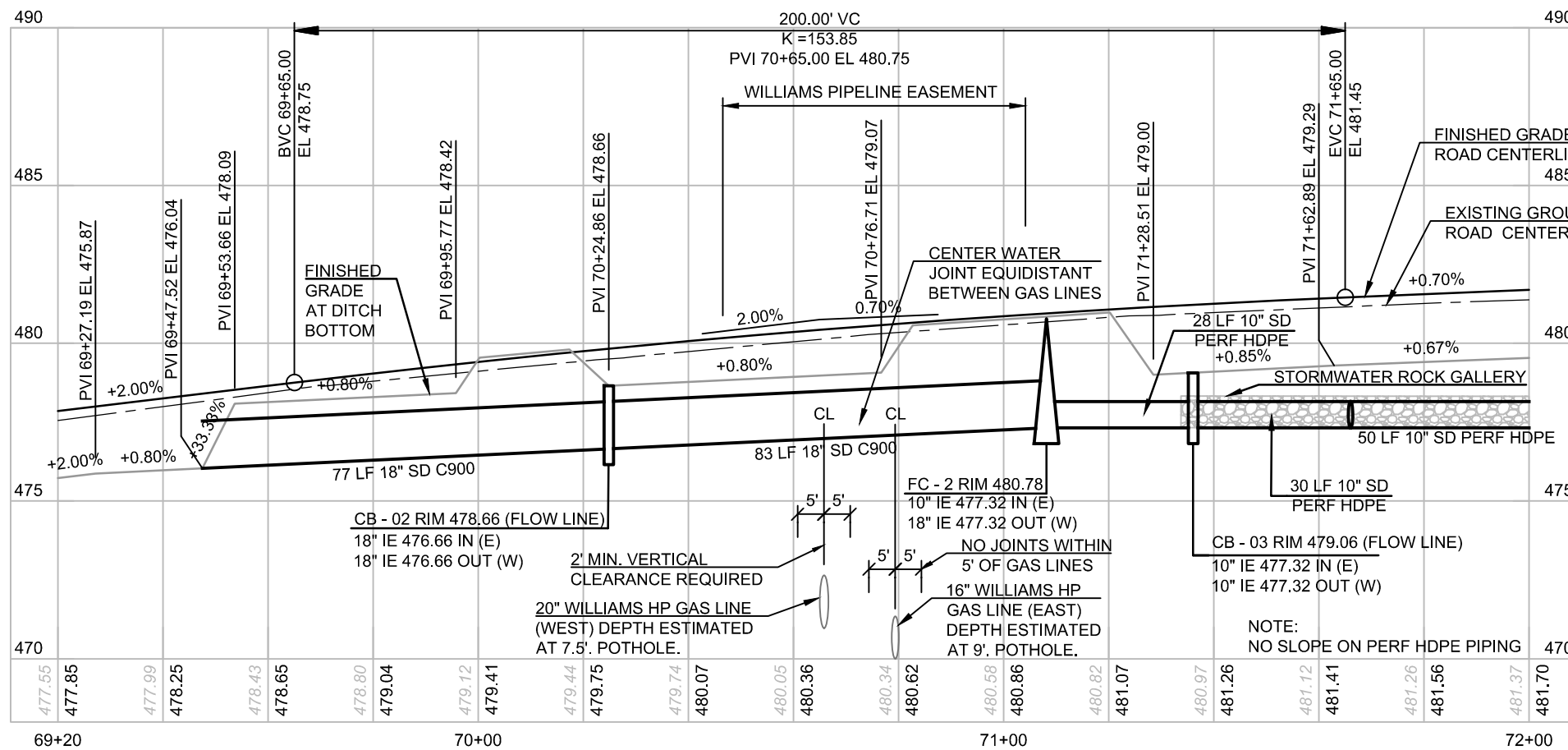
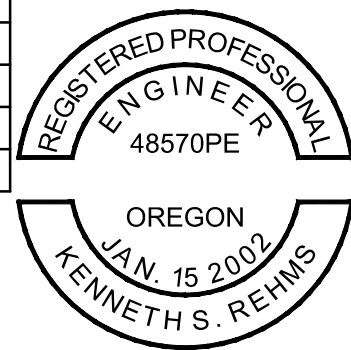
CONSTRUCTION NOTES:

- 1 SAWCUT AND MATCH EXISTING PAVEMENT (FOR DETAILS, SEE CCDTD STD. DWG. U275)
- 2 CONSTRUCT ROADWAY PAVEMENT AND WIDENING (FOR DETAILS, SEE SHT. TS-01)
- 3 CONSTRUCT DRIVEWAY APPROACH - 3 (FOR DETAILS, SEE CCDTD STD. DWG. D500)
- 4 CONSTRUCT 12" WATERLINE (SEE WATERLINE PLANS)
- 5 CONSTRUCT HYDRANT ASSEMBLY (SEE WATERLINE PLANS)
- 6 INSTALL 10" PERFORATED PIPE ON MAINLINE AND LATERALS. INSTALL CLEANOUT AND CONCRETE COLLAR TO FINISHED GRADE SLOPE (FOR DETAILS, SEE WES STD. DWG. ST-4.0)
- 7 CONSTRUCT STORMWATER V-DITCH (SEE SHTS. TS-01 & SW-01)
- 8 CONSTRUCT STORMWATER ROCK GALLERY (FOR DETAILS, SEE SHT. SW-01)
- 9 CONSTRUCT 18" STORM PIPE
- 10 CONSTRUCT DITCH INLET - 2 (FOR DETAILS, SEE WES STD. DWG. CB-3.0) ROTATE INLET (71+36) AS SHOWN. TOP INLET SECTION TO MATCH SLOPE OF ROAD SHOULDER. INSTALL PIPE OUT IN WEST SIDE OF INLET IN THE BACK CORNER TO ALLOW FOR HYDRANT CLEARANCE.
- 11 CONSTRUCT FLOW CONTROL MANHOLE. OFFSET PIPE INTO MANHOLE AS SHOWN IN DETAIL. (FOR DETAILS, SEE SHT. SW-02)
- 12 RELOCATE MAILBOX AND REINSTALL ON NEW SINGLE SUPPORT - 2 (FOR DETAILS, SEE ODOT STD. DWG. RD101)
- 13 REMOVE CULVERT - 2
- 14 SEE WATERLINE PLANS FOR WATER METERS AND SERVICES
- 15 REMOVE FENCE AS REQUIRED
- 16 RELOCATE TELEPHONE RISER (BY OTHERS)
- 17 RELOCATE WILLIAMS GAS PIPELINE BOLLARDS AND CP POST (BY OTHERS)
- 18 PROTECT BLACK VINYL COATED FENCE

TREE REMOVAL

LOCATION	TYPE	SIZE (in)
69+89 (25' R)	E	36
71+27 (25' R)	E	36
71+58 (23' R)	E	18
71+70 (25' R)	E	12

E = EVERGREEN TOTAL = 4 TREES
D = DECIDUOUS



S REDLAND ROAD

ROADWAY PLAN & PROFILE

REDLAND ROAD TURN LANES AT FERGUSON & BRADLEY

PROJECT NO.: CL-300320344
DATE: 03/20/2023

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

DIRECTOR
DAN JOHNSON

DESIGNED BY: MDB
DRAFTED BY: PPG
CHECKED BY: KSR

NO DATE: _____

Sheet No. **PP-08**



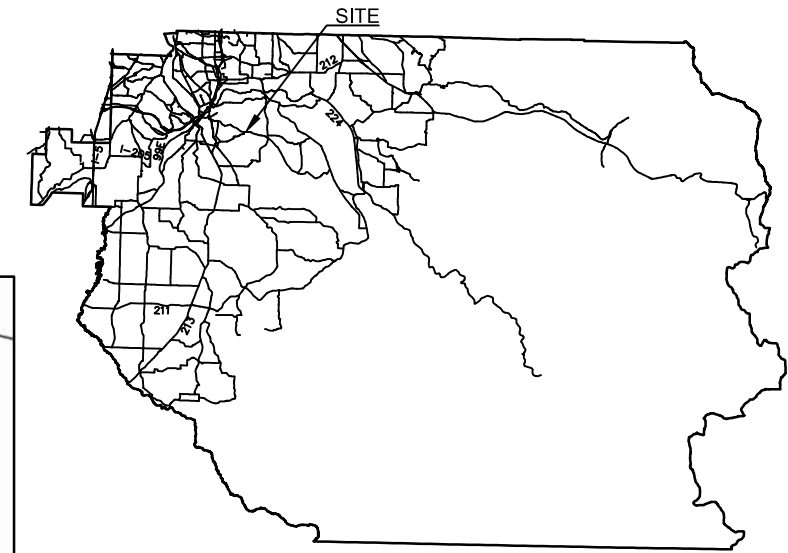
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EXPIRES: 12/31/2024

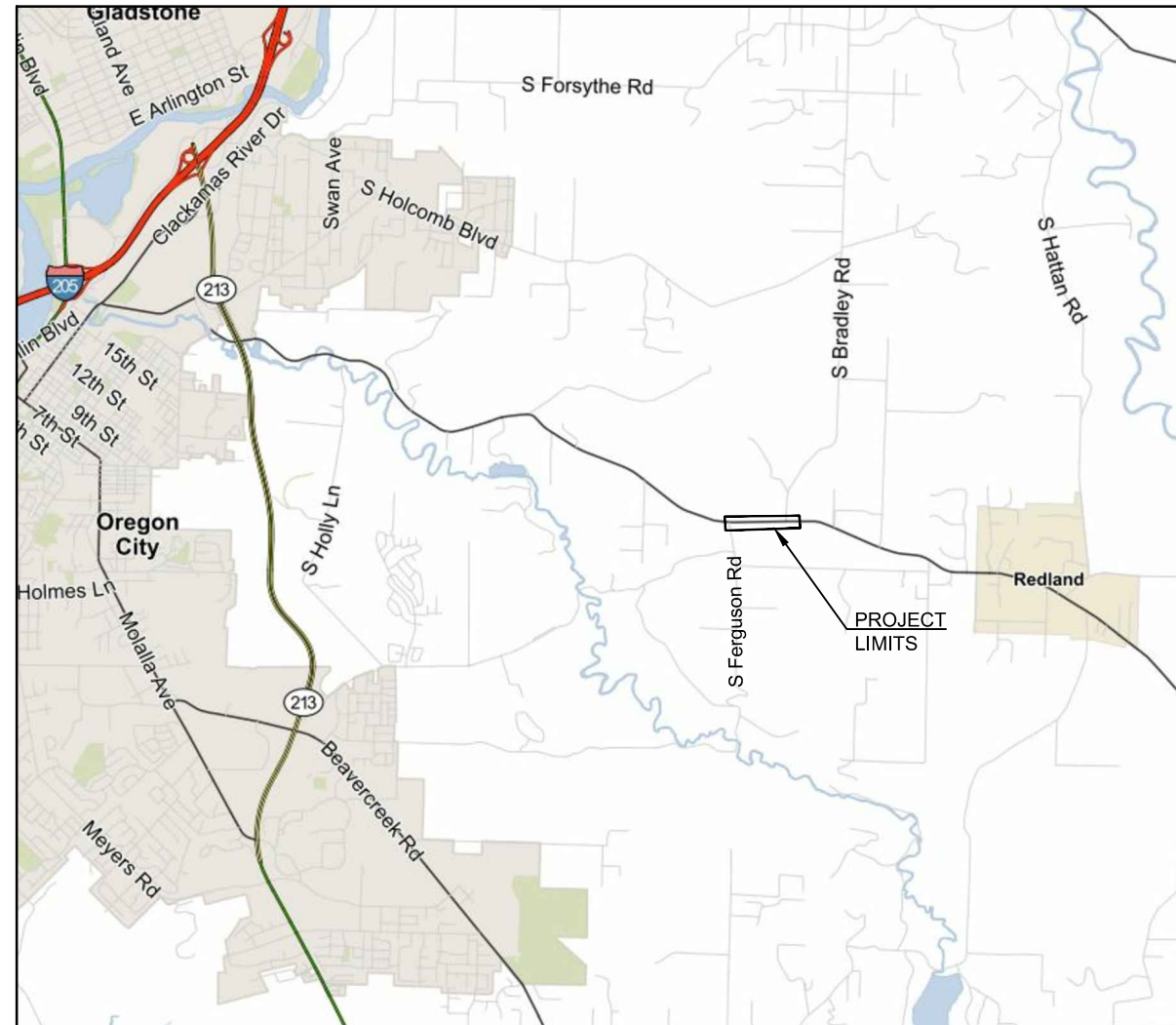
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CLACKAMAS RIVER WATER (CRW) REDLAND ROAD WATERLINE

CLACKAMAS COUNTY, OREGON
APRIL 2023



Sheet List Table	
Sheet ID	Sheet Title
C-01	WATERLINE COVER SHEET
C-02	GENERAL NOTES - CLACKAMAS RIVER WATER
C-03	GENERAL NOTES - WILLIAMS GAS PIPELINE
WP-01	WATERLINE PLAN & PROFILE
WP-02	WATERLINE PLAN & PROFILE
WP-03	WATERLINE PLAN & PROFILE
WP-04	WATERLINE PLAN & PROFILE
WP-05	WATERLINE PLAN & PROFILE
WP-06	WATERLINE PLAN & PROFILE
WP-07	WATERLINE PLAN & PROFILE
WP-08	WATERLINE PLAN & PROFILE
WP-09	WATERLINE CONNECTION DETAILS
WP-10	WATER DETAILS
WP-11	WATER DETAILS



VICINITY MAP
NOT TO SCALE



BIDDING NOTICE TO CONTRACTORS

DUE TO THE ONGOING DELAYS IN MANUFACTURING AND DELIVERY OF MATERIALS, CRW PRE-ORDERED PIPING, FITTINGS, AND OTHER MATERIALS TO CONSTRUCT THE WATERLINE IMPROVEMENTS. CONTRACTOR SHALL ARRANGE WITH CRW AND PICKUP MATERIALS FROM THEIR FACILITY LOCATED AT 9100 SE MANGAN DR. CLACKAMAS, OR 97015. CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL ALL MISCELLANEOUS MATERIALS NOT PROVIDED BY CRW AS REQUIRED FOR A COMPLETE PROJECT ASSEMBLY. THE LIST OF CRW FURNISHED MATERIALS IS PROVIDED ON SHEET WP-11.

CONTACT INFORMATION:

Clackamas River Water
16770 SE 82nd Dr
Clackamas, OR 97015
503-722-9220
www.crvwater.com
Joseph D. Eskew, PE
jeskew@crwater.com
(503) 723-2565
(503) 747-8520, mobile

Civil Engineer:
PBS Engineering & Environmental
4412 S Corbett Avenue
Portland, OR 97239
Ken Rehms, PE
Ken.Rehms@pbsusa.com
(503) 417-7720
(503) 729-8880, mobile

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)



EXPIRES: 12/31/2024

WATERLINE COVER SHEET
REDLAND ROAD WATERLINE
DATE: 03/20/2023
PROJECT NO.: CL-300320344



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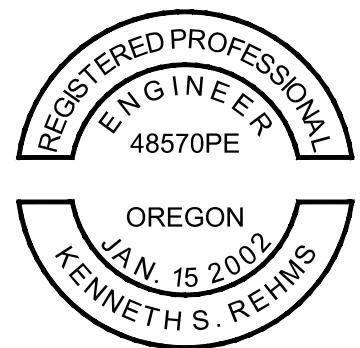
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NO	DATE	REVISIONS

Sheet No. C-01

WILLIAMS GAS PIPELINE GENERAL NOTES

1. WILLIAMS- NORTHWEST PIPELINE LLC ("NORTHWEST") WILL REQUIRE THE EXECUTION OF AN ENCROACHMENT AGREEMENT AND ISSUE A WILLIAMS GAS PIPELINE ENCROACHMENT/FOREIGN LINE CROSSING PERMIT FOR EACH CONTRACTOR AND ACTIVITY WITHIN THE PIPELINE EASEMENT. THE AGREEMENT MUST BE EXECUTED BEFORE WORK BEGINS ON THE RIGHT OF WAY.
2. NORTHWEST WILL REQUIRE SUBMITTAL OF PLAN AND PROFILE DRAWINGS FOR PRIOR REVIEW AND APPROVAL BY NORTHWEST. ALL DRAWINGS MUST SHOW IN DETAIL, ALL OF NORTHWEST'S FACILITIES AND OTHER FEATURES THAT WILL ALLOW NORTHWEST TO DETERMINE THE EFFECTS OF THE PROPOSED CONSTRUCTION OR MAINTENANCE ACTIVITY ON ITS FACILITIES.
3. AN AUTHORIZED NORTHWEST REPRESENTATIVE MUST BE ON SITE PRIOR TO AND DURING ANY SURFACE-DISTURBING WORK OR EQUIPMENT CROSSINGS PERFORMED WITHIN THE PIPELINE RIGHT OF WAY EASEMENT. NORTHWEST REPRESENTATIVE WILL ASSIST IN DETERMINING THE LOCATION OF THE PIPELINE, THE RIGHT-OF-WAY WIDTH AND EXISTING DEPTH OF THE PIPELINE. NORTHWEST'S REPRESENTATIVE WILL SUPERVISE ALL WORK WITHIN NORTHWEST'S RIGHT-OF-WAY AND SHALL HAVE STOP WORK AUTHORITY AT ALL TIMES.
4. NORTHWEST'S REPRESENTATIVE WILL CONDUCT A SAFETY/INFORMATIONAL DISCUSSION WITH CONTRACTORS PRIOR TO CONSTRUCTION.
5. EVERY PERSON WORKING WITHIN THE NORTHWEST GAS PIPELINE RIGHT OF WAY EASEMENT MUST FOLLOW ALL REQUIREMENTS IN THE WILLIAMS DEVELOPERS' HANDBOOK AND ENCROACHMENT/FOREIGN LINE CROSSING PERMIT UNLESS IT IS WAIVED BY A NORTHWEST REPRESENTATIVE AND WRITTEN ON THE PERMIT. IN THE EVENT WORK COMMENCES ABSENT SUCH AN AGREEMENT, NORTHWEST MAY TAKE STEPS TO PREVENT FURTHER ACTIVITY.
6. ANY CROSSINGS MADE WITHOUT A NORTHWEST REPRESENTATIVE ON SITE WILL BE EXCAVATED AT THE EXCAVATOR'S EXPENSE TO PROVIDE NORTHWEST AN OPPORTUNITY TO INSPECT ALL AFFECTED PIPELINE FACILITIES. NORTHWEST WILL BE FULLY AND COMPLETELY COMPENSATED FOR ANY DAMAGES TO ITS FACILITIES RESULTING FROM THE ACTS OF THIRD PARTIES WHO ARE WORKING IN THE VICINITY OF NORTHWEST'S FACILITIES WITH OR WITHOUT NORTHWEST'S CONSENT.
7. TO PROTECT NORTHWEST'S GAS PIPELINE FROM EXTERNAL LOADING, NORTHWEST MUST PERFORM AN ENGINEERING EVALUATION TO DETERMINE THE EFFECTS OF ANY PROPOSED EQUIPMENT USE. MATS, TIMBER BRIDGES, OR OTHER PROTECTIVE MATERIALS DEEMED NECESSARY BY NORTHWEST WILL BE PLACED OVER NORTHWEST'S GAS FACILITIES FOR THE DURATION OF ANY LOADING. PROTECTIVE MATERIALS SHALL BE PURCHASED, PLACED, AND REMOVED AT NO COST TO NORTHWEST. THE GAS LINE EASEMENT OR RIGHT-OF-WAY MUST BE RESTORED TO ITS ORIGINAL CONDITION.
8. NORTHWEST MAY REQUIRE MARKINGS TO IDENTIFY SPECIFIC AREAS WHERE EQUIPMENT USE IS AUTHORIZED. VIBRATORY EQUIPMENT IS NOT PERMITTED ON THE GAS LINE EASEMENT.
9. NORTHWEST REPRESENTATIVES MUST BE PROVIDED SAFE ACCESS TO ALL OPEN EXCAVATIONS. EXCAVATIONS MUST BE PROPERLY SLOPED OR SHORED IN ACCORDANCE WITH OSHA REGULATIONS.
10. NO CUT OR FILL ON THE RIGHT-OF-WAY IS ALLOWED WITHOUT NORTHWEST'S APPROVAL.
11. STOCKPILING FILL, BRUSH, TRASH, OR OTHER DEBRIS ON THE RIGHT OF WAY IS PROHIBITED.
12. NORTHWEST MUST BE NOTIFIED AT THE EUGENE DISTRICT OFFICE (541) 342-4434 AT LEAST 72 HOURS BEFORE ANY WORK COMMENCES ON OR NEAR ITS RIGHT-OF-WAY. REFERENCE MILEPOST 24.53-24.55 ON THE 2479 LINE.



EXPIRES: 12/31/2024

GENERAL NOTES - WILLIAMS GAS PIPELINE

REDLAND ROAD WATERLINE

DATE: 03/20/2023 PROJECT NO.: CL-300320344



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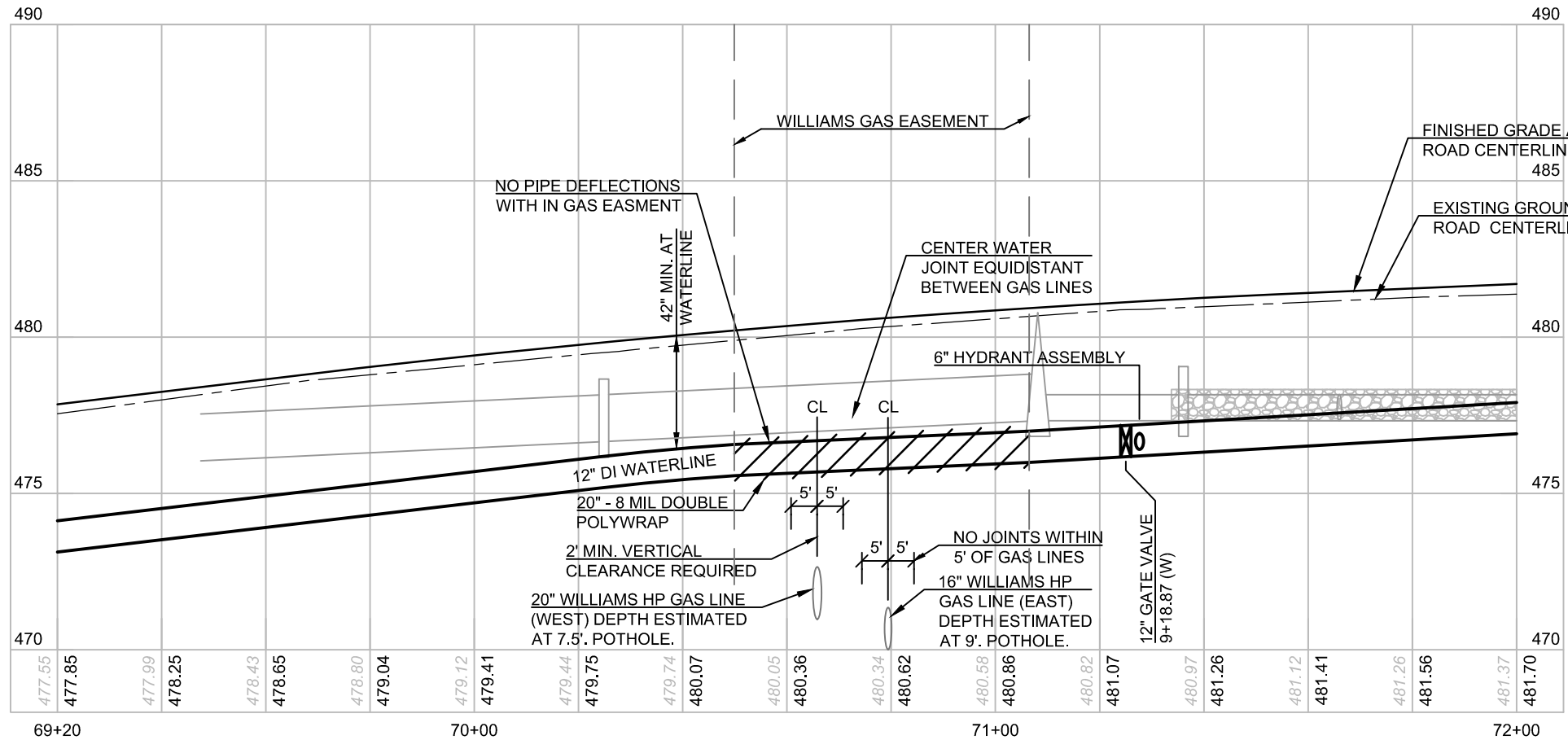
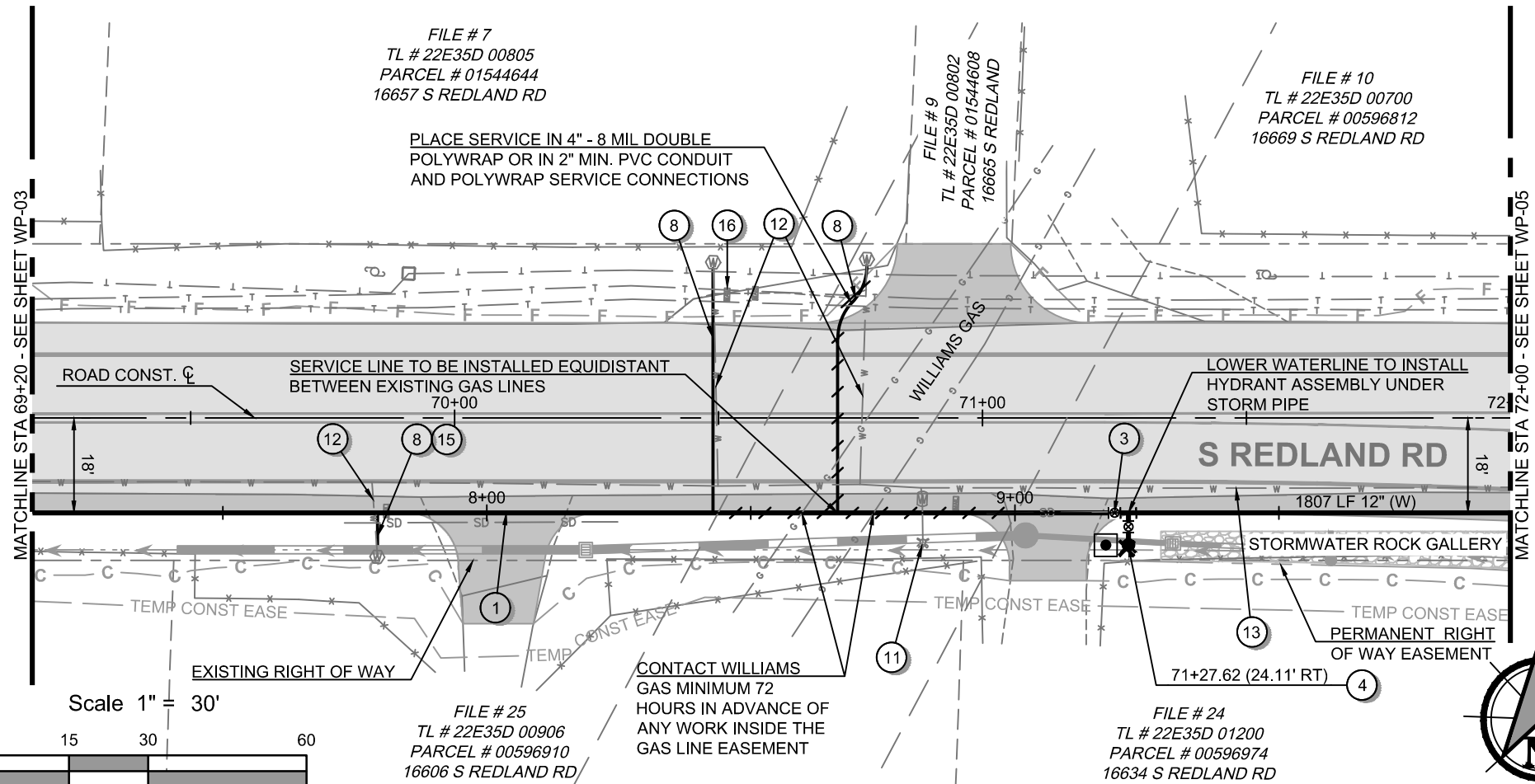


DESIGNED BY: PPG
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REVISIONS

NO. DATE:			

Sheet No. C-03



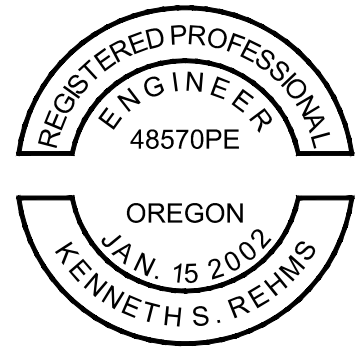
S REDLAND ROAD

CONSTRUCTION NOTES:

- ① INSTALL RESTRAINED 12" DI WATERLINE
PLACE DI WATERLINE IN 8 MIL DOUBLE POLYWRAP THROUGH GAS EASEMENT
(FOR DETAILS, SEE CRW STD. DTL. 101A)
- ③ INSTALL 12" MJ X MJ RSGV WITH BOX AND LID
INSTALL 12" FOSTER ADAPTER
FULLY RESTRAIN ALL PIPE JOINTS
- ④ INSTALL HYDRANT ASSEMBLY, TYPE III
INSTALL 12" X 6" TEE, MJ X FLG
INSTALL 6" FLG X MJ RSGV WITH BOX AND LID
INSTALL TRACER WIRE STATION
FULLY RESTRAIN ALL JOINTS IN HYDRANT LINE
(FOR DETAILS, SEE CRW STD. DTL. 104A, 110B, 110C, AND 115)
- ⑧ CONSTRUCT SERVICE AND CONNECT TO EXISTING METER ASSEMBLY. ADJUST METER TO SLOPE OF FINISHED GRADE
(FOR DETAILS, SEE CRW STD. DTL. 108B)
- ⑪ REMOVE EXISTING HYDRANT AND RETURN TO CRW
- ⑫ ABANDON EXISTING SERVICE. COORDINATE WITH CRW
- ⑬ ABANDON EXISTING 8" CI WATERLINE AFTER ACCEPTANCE OF NEW 12" MAIN.
- ⑮ TREE AND STUMP REMOVAL WILL LIKELY DESTROY METER AND SERVICE. TEMPORARILY RELOCATE METER AND SERVICE CONNECTION BEFORE STUMP REMOVAL. REINSTALL EXISTING METER TO SLOPE OF FINISHED GRADE BETWEEN NEW STORM PIPE AND RIGHT OF WAY. RECONNECT SERVICE.
- ⑯ PROTECT MAILBOX

ADDITIONAL NOTES:

1. FOR WATER SERVICE CONNECTIONS, SEE DETAILS ON SHEET WP-11.
2. FOR CRW PROVIDED MATERIALS LIST, SEE SHEET WP-11.
3. FOR WILLIAMS GAS PIPELINE GENERAL NOTES, SEE SHEET C-03



DESIGNED BY: PPG
DRAFTED BY: PPG
CHECKED BY: KSR

NO DATE:

REVISIONS

Sheet No. WP-04

WATERLINE PLAN & PROFILE

REDLAND ROAD WATERLINE

Clackamas River Water

PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

PROJECT NO.: CL-300320344
DATE: 03/20/2023



WILLIAMS

Developers' Handbook



I. Introduction

This handbook outlines the requirements for construction or maintenance activities to be followed when planning land use development on or near Williams rights of way. The handbook is intended for use by city and county/parish planners, engineers, developers, land surveyors, and anyone involved in the initial stages of land development. If Williams is included in the initial planning stages, project delays can be avoided and safe development practices in the vicinity of pipelines can be attained.

The handbook is designed to make you aware of the most common standards and procedures Williams typically requires to protect its facilities in areas of changing land use. Each proposed development or activity, however, requires a case specific evaluation by a qualified Williams representative. It should be understood that the Williams review of the proposed activity may require more stringent protective measures than outlined in this handbook. Please become familiar with the contents of this handbook. If you have further questions or need assistance, contact our encroachment hotline at 1-855-245-2300.



II. Safety and Reliability

Safety

Williams is committed to ensuring the safe operation of its natural gas and natural gas liquids (NGLs) pipeline systems. According to the federal Department of Transportation, the transmission of natural gas and NGLs through interstate pipelines is the safest means of transportation in the United States. The industry enjoys an excellent safety and reliability record. Williams has a thorough damage prevention policy to prevent pipeline failures. Damage by outside forces from a third party is the leading cause of pipeline failures, which can lead to serious injury or death.

It is critical that excavators follow appropriate guidelines to protect their safety and the integrity of the pipeline system.

Reliability

Williams is committed to reliable delivery of gas and liquid transportation services. Communities, factories, hospitals, power plants, businesses, and residences depend on our product and services for energy to generate heat and electricity.

Williams must and will use every available resource to ensure the safety and reliability of its facilities. Williams does not encourage or support any development or encroachment that interferes with the operation or maintenance of its pipelines. In those cases where development or encroachment cannot be avoided, we seek your help to ensure the safety and reliability of our facilities through proper planning and coordination with a Williams representative. As a responsible developer, contractor, or other party engaged in any ground disturbing activity near Williams pipeline facilities, we urge you to read and understand the guidelines presented in this publication.

III. Pipeline Facilities Overview

Williams' transmission operation includes high-pressure steel pipelines ranging in diameter from 2" to 48", storage facilities, compressor stations, meter stations, cathodic protection equipment, valve

settings, and other facilities. In accordance with federal regulations, Williams identifies the location of its pipeline facilities by installing permanent pipeline markers, like the ones shown on the following page, near road, rail, fences and where necessary to reduce the possibility of damage or interference by the actions of other persons on the pipeline right of way. Pipeline markers may also be strategically placed in extensive areas of open ground to identify the location of the pipeline.

The maintenance of pipeline markers and an open, clear right of way at all times is critical to public safety. Construction or development near transmission pipelines increases the probability of excavation damage. It is the responsibility of Williams, individual landowners, and contractors to ensure that all temporary and permanent pipeline markers installed by Williams are protected and maintained at all times, especially during construction. Removing or defacing a pipeline marker is a federal criminal offense. You can find information about other pipelines operating in your community by accessing the National Pipeline Mapping System (NPMS) on the Internet at www.npms.phmsa.dot.gov. NPMS provides emergency officials access to pipeline maps, along with product and operator contact information.

IV. Williams Right of Way Agreements

A. Description

Most of Williams' existing pipeline easements and rights were acquired through recorded agreements granting Williams, or its pipeline companies, the right to construct, operate, maintain, repair, modify, alter, protect, change the size of, remove, replace and access a pipeline or pipelines within its easement. The easement and rights are conveyed with the land in successive purchases and generally allow the current landowner the right to use and enjoy the surface of the easement, as long as that use does not interfere or conflict with Williams' existing rights.

B. Width

When the original pipeline routes were selected, agricultural, forested or rural environments were deliberately chosen whenever possible. In some cases, the original right of way agreement did not specify a defined right of way width or location on the lands covered by the agreement, and therefore included large sections of land. Where defined, Williams' rights of way vary in width from 10' to 200', depending on the number and diameter of the pipeline(s), terrain, and terms of the right of way agreement.

C. Amendments or Modifications

As the rural environment is altered and land developments are proposed, Williams, at the request of the landowner, may elect to amend or modify the right of way agreement to reflect the changing land use. Williams can work with developers to incorporate the right of way into the project design, including consent to use the right of way as a "greenway" or open space area, so long as that use does not interfere with Williams' ability to construct, operate and maintain its facilities.

V. Legislation

A. Federal

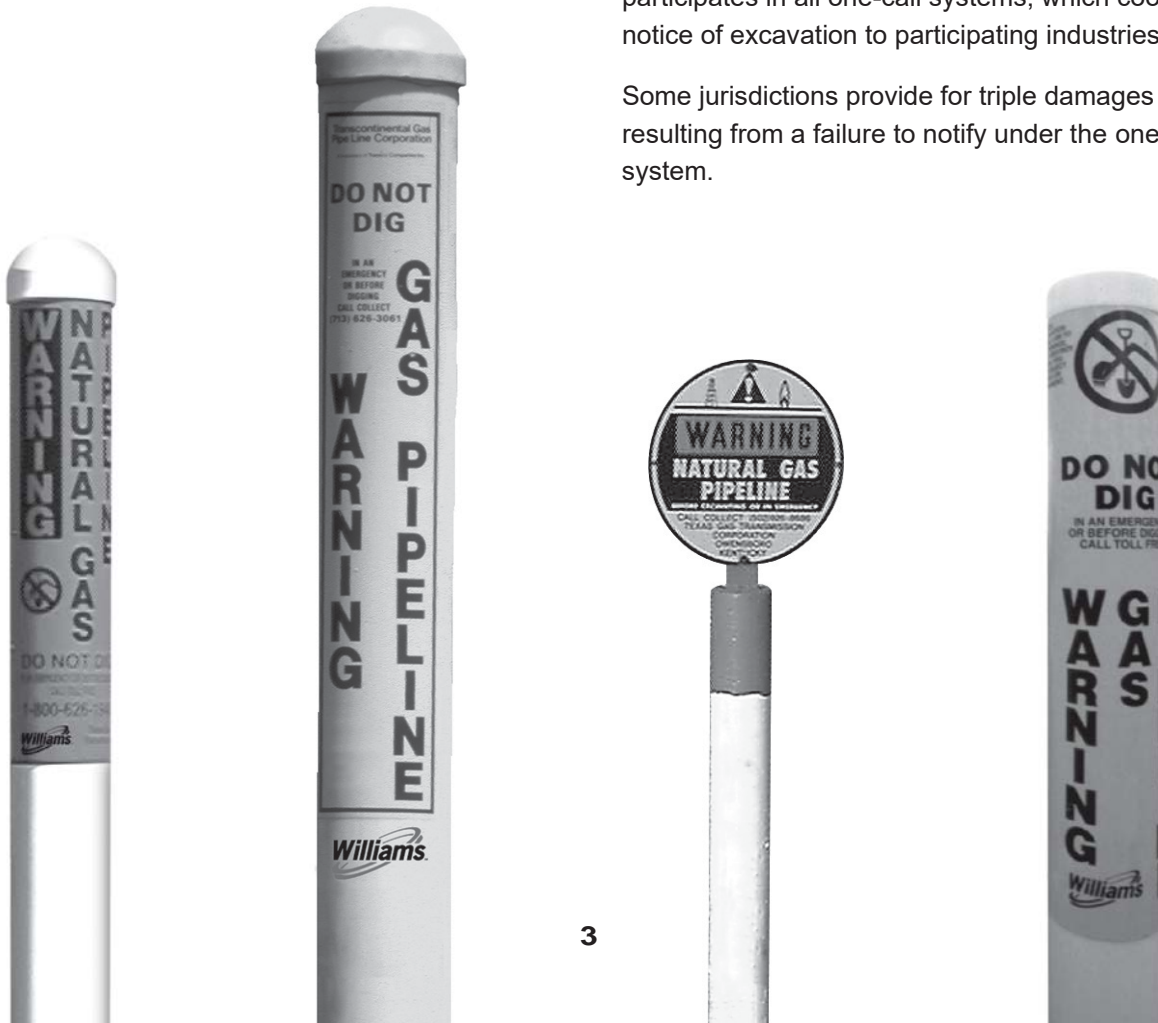
Williams is regulated by the Department of Transportation, Pipeline & Hazardous Material Safety Administration (PHMSA). The pipeline safety regulations are administered through Title 49, Code of Federal Regulations, Part 192 and Part 195.

Parts 192 and 195 prescribe minimum standards for the safe operation of pipelines. The denser the population, the more stringent the standards for pipeline design, maximum allowable operating pressure, frequency and type of patrols, and leak surveys. In addition, Williams supports PHMSA's Common Ground Alliance Best Practices.

B. State

All of the states in which Williams operates have damage prevention laws for the protection of pipelines and other underground utilities. Most states require excavators to notify their local one-call system of their excavation plans. Williams participates in all one-call systems, which coordinate notice of excavation to participating industries.

Some jurisdictions provide for triple damages resulting from a failure to notify under the one-call system.



C. City & County/Parish

Local governments often play a major role in regulating land use by means of comprehensive planning and zoning. Some counties/parishes currently offer developer incentives to encourage easement use for parks and open space purposes. In most cases, Williams supports this initiative for the joint use of the easement area.

Some counties/parishes require an additional building setback from the pipeline easement. Please check local codes before submitting lot layout plans.

VI. Encroachments

It is Williams' philosophy to minimize encroachment and excavation activity within the limits of our pipeline right of way. Encroaching parties will design projects such that proposed improvements remain outside the pipeline right of way. Improvements that will encroach into the right of way will be designed and constructed such that the safe operation and maintenance of the pipeline(s) is not diminished. Many of Williams' right of way agreements prohibit encroachments. Williams will enforce provisions in its right of way agreements where it believes the continued safe operation and maintenance of the pipeline facilities could be threatened.

Where Williams determines that an activity can be undertaken without jeopardy to the pipeline system, Williams will require the execution of an encroachment agreement or issue a letter of no objection, depending upon the type and scope of activity proposed.

The encroachment agreement will contain all pertinent terms and conditions to be followed by the encroaching party for the planned activity and may also provide for cost reimbursement to Williams. Typically, Williams will seek reimbursement for projects that require significant design review, engineering investigation, field inspections, legal consultation or facility modification.

A. Encroachment Agreement

An encroachment agreement is specific to the project and is required when:

- Construction/maintenance activities cross under or over the pipeline.
- Construction/maintenance activities extend into the right of way.

Examples of such construction/maintenance activities may include, but are not limited to:

- Street and road crossings
- Ornamental fencing
- Blasting or use of explosives in the vicinity of Williams facilities
- Heavy equipment crossings
- Large diameter utility crossings

Other activities subject to an encroachment agreement are determined on a case-by-case basis.

In addition, third party construction/maintenance activities that necessitate Williams facility modifications (such as, but not limited to, pipeline casing extensions, pipeline relocations or replacements, and pipeline cathodic protection facility modifications) are addressed in the encroachment agreement. Reimbursement provisions may also be referenced in the encroachment agreement.

A Williams representative generally initiates the encroachment agreement. The agreement must be executed before work begins on the right of way.

In the event work commences absent such an agreement, Williams may take steps to prevent further activity.

B. Reimbursement Agreement

When is a reimbursement agreement required?

A reimbursement agreement is typically required for construction/maintenance activities proposed on the right of way, which require extensive preliminary engineering and/or field inspection services by Williams personnel.

In addition, Williams will seek a reimbursement agreement for any third-party construction/maintenance activities that require modification to Williams facilities.

Who initiates the reimbursement agreement?

The agreement is typically initiated by a representative of Williams and must be executed before any work, preliminary engineering, or field inspection services are performed by Williams.

Encroachment/Foreign Line Crossing

When is a “Williams Encroachment / Foreign Line Crossing” required?

A Williams Encroachment/Foreign Line Crossing may be required when:

- Construction/maintenance activities cross under or over the natural gas pipeline
- Construction/maintenance activities extend into the right of way

Examples of such construction/maintenance activities may include:

- Residential water lines
- Residential television cable
- Small diameter drainage or sewer lines
- Residential electrical lines
- Fences (livestock or typical residential)
- Residential sprinkler systems, etc.

Who initiates the “Williams Encroachment / Foreign Line Crossing”?

The agreement is initiated by a local representative of Williams and must be executed before work begins on the right of way.

VII. Notification and Construction Safety Requirements

A. Notification

In order to prevent unnecessary delays, Williams encourages close communication with our representatives beginning in the preliminary survey and design phase as well as throughout your entire project. We will be happy to attend pre-construction meetings and provide a safety/informational presentation to any interested parties, including contractors, local government maintenance crews, and developers.

All of the states in which Williams operates have “one-call” laws, which require the excavators to provide 48 to 72 hours notice, depending on local requirements, before any excavating commences. One easy phone call to 811 starts the process to get your underground utility lines marked for free. Your local one-call system will notify all participating utilities in the area of your planned excavation activities and is a simple, yet very effective, means of reducing buried utility damage.

A Williams representative must be onsite, following 48 to 72 hours prior notice, for all surface and sub-surface activities within the pipeline right of way. Any crossings made without a Williams representative on site will be excavated at the excavator’s expense to provide Williams an opportunity to inspect all affected pipeline facilities.

Protect yourself, utility companies, and the public. Call before you dig.

Federal regulations (OSHA 29CFR Ch. XVII-1926.651) also require excavators to notify

underground utilities prior to the start of actual excavation. Your state regulations may be more specific, but in any case, failure to notify underground utility operators of excavation activities could lead to a citation.

Williams often operates its pipelines at high pressures. To ensure the safety and reliability of our facilities and the public, we require a Williams representative to be on site while you work around our facilities. Please contact your local Williams office before work commences on, or in close proximity to a Williams right of way. A Williams representative will be on site to inspect the work and monitor the site until construction is completed.

B. Safety Requirements

Excavations must be barricaded to protect pedestrians and vehicles. Proper access into the trench must be provided. Excavations must be properly sloped or shored, as required to comply with state and Federal OSHA requirements.

Stockpiling brush, trash, or other debris on the right of way is prohibited, as it may conceal pipeline markers and hinder pipeline inspections or routine maintenance. Contact your local Williams office concerning burning restrictions.

VIII. Plan Design and Review Requirements

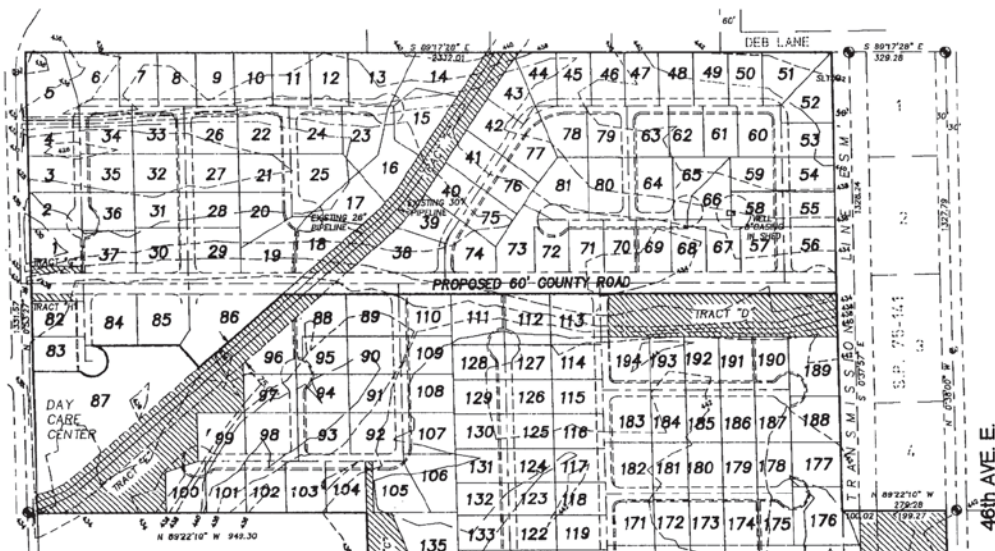
A. Ideal Subdivision Layout

In an ideal subdivision layout:

- The entire right of way width is preserved as open space.
- The right of way is clear and easily marked.
- Crews can undertake emergency repairs quickly.
- The right of way crosses as few landowners as possible to minimize accidental “dig-ins”.
- Routine maintenance and inspections are not hindered.
- Lot lines, parallel to the pipeline(s) within the right of way are strongly discouraged and accordingly fences will not be allowed within the right of way, parallel to the pipelines.

When the proposed development plans call for the dedication of a street/road right of way to the city, county/parish, or state, it is important to note that Williams’ existing easement is superior to this action and its rights are not diminished. The agency involved may require you to obtain an amended easement.

Pipeline easement in residential subdivision



B. Subdivision Plans

- Williams requires a minimum of 30 business days to review preliminary plans for impacts to the easement and to insure that all proposed improvements are designed in accordance with Williams Requirements for Landowner and Third Party Construction (Section IX).
- An open space trail, free of fences, trees and other deep-rooted plants, is the ideal right of way use. This reduces the public exposure by minimizing the opportunity for accidental “dig-ins.” When this is not possible, lot division on either boundary of the right of way is preferable to splitting the right of way between lots. No lot lines, parallel to the pipelines are allowed within the right of way and accordingly fences will not be allowed within the right of way, parallel to the pipelines. Construction, maintenance and routine inspections can be disruptive to the landowner when the easement is split between lots.
- An encroachment agreement (formal recorded agreement) is usually executed between Williams and the developer/landowner to address the terms and conditions associated with the new land use.
- Williams representatives will work with your surveyor(s) and will stake the location of its pipeline facilities. This information should then be included in the plan and profile drawings submitted to Williams.

C. Street and Road Crossing Plans

- Williams requires a minimum of 30 business days

to review proposed road-crossing plans. Additional review time will be necessary for proposed divided highways, interstate highways and other road construction projects which require pipeline modifications.

- Provide a scope of work, description, and plan and profile drawings with your plans. Profiles are required to show depth of cover over each Williams pipeline (existing and finished grade) and the clearance between each Williams pipeline and any proposed utilities.
- Please include a location map showing the project site area, including sufficient geographical references such as legal property lines, roads, and appropriate deed information to the properties impacted.
- When new rights of way are acquired or dedicated, the costs for pipeline modifications will generally be borne by the developer, state, county/parish, or city highway department.
- Williams must be given the opportunity to make a pipeline inspection prior to the start of road construction.

IX. Williams Requirements for Landowner and Third Party Construction

See the following page.

Aerial view of ideal easement in developed area





Williams Requirements for Landowner & Third Party Construction

Rev. July 22, 2020

The following Williams specifications are minimum requirements to be followed when planning land use development on or near Williams right of way. Each proposed development or activity requires a site specific evaluation by a qualified Williams representative. It should be understood that the Williams review of the proposed activity may require more stringent protective measures than outlined below.

PIPELINE FACILITIES AND LEGISLATION

Williams' transmission operation includes high- pressure steel pipelines ranging in diameter from 2" to 48". Williams pipeline facilities include compressor stations, meter stations, storage facilities, cathodic protection equipment, valve settings and other facilities located within the limits of its rights-of-way, leased, and fee properties.

Williams is regulated by the Department of Transportation, Pipeline & Hazardous Material Safety Administration (PHMSA). The pipeline safety regulations are set forth in Title 49, Code of Federal Regulations, Part 192 "Transportation of Natural and Other Gas by Pipeline – Minimum Federal Standards" and Part 195 "Transportation of Hazardous Liquids by Pipeline – Minimum Federal Standards."

Williams will require that all Federal, State, and local ordinances and applicable utility set backs are complied with to the full extent.

ENCROACHMENTS

It is Williams philosophy to minimize encroachments and excavation activity within the limits of our pipeline right of way. Encroaching parties will design projects such that proposed improvements remain outside the pipeline right of way. Improvements that will encroach into the right of way will be designed and constructed such that the safe operation and maintenance of the pipelines is not diminished. Many of Williams right of way agreements prohibit encroachments. Williams will enforce applicable provisions in its right of way agreements where it believes the continued safe operation and maintenance of the pipeline facilities could be threatened.

NOTIFICATION AND CONSTRUCTION SAFETY REQUIREMENTS

1. In order to prevent unnecessary delays, Williams encourages close communication with our representative throughout your entire project. A Williams representative should participate in all pre-construction meetings. In addition, Williams can conduct a safety/informational presentation to any interested parties, including contractors, local governmental maintenance crews, and developers.
2. "One Call" systems require 48 to 72 hours' notice prior to any excavation activities or equipment use on or in close proximity to Williams pipeline facilities. Dial 811 to be connected to your State One Call system. No equipment use or excavation will occur in the vicinity of Williams facilities until notification to "One Call" has been made. A Williams representative will be on site prior to and during any equipment use or excavation activities. Any crossings made without a Williams representative on site will be excavated at the excavator's expense to provide Williams an opportunity to inspect all affected pipeline facilities.
3. Excavations must be barricaded to protect Williams pipelines from exposure to vehicular traffic and to ensure public safety. Williams representatives must be provided safe access to all open excavations. Excavations must be properly sloped or shored in accordance with OSHA regulations.

PLAN DESIGN AND REVIEW REQUIREMENTS

1. Residential and/or commercial developments will be laid out such that the right of way is designated as "open" or "common" space. Maintaining an open right of way reduces public exposure and minimizes disruptions during pipeline maintenance and construction. Lot divisions will be established on either side of the right of way resulting in the actual right of way being "open" or "common" areas.
2. In most cases, Williams will require the submittal of two or more full size plan and profile drawings to the appropriate Williams office for prior review and written approval by Williams. All drawings must show, in detail, all of Williams facilities and other features that will allow Williams to determine the impact of the proposed construction or maintenance activity on its facilities. Encroachment plans will include a scope of work, description, and a location map depicting the project site area. Sufficient geographical references such as legal property lines, roads, and appropriate deed information for the properties involved will be provided.
3. In order to ensure that all proposed improvements are designed in accordance with Williams encroachment specifications, Williams requires a

minimum of thirty business days lead-time to review proposed encroachments. Encroachments involving road crossings will require additional review time. Any proposed road which requires pipeline modifications or a dedicated right of way will require significant lead-time.

4. If there are any changes to approved plans, additional review by Williams and subsequent written authorization will be required.
5. In some cases, there is a significant delay between the review and approval of submitted plans and actual construction. In such cases, proposed encroachment related activities will be subject to Williams requirements in effect at the time the work actually takes place.

WILLIAMS EASEMENT, PERMITS AND AGREEMENTS

1. A Williams Encroachment/Foreign Line Crossing Permit Form or a letter of no objection may be required for any proposed construction within Williams right of way. This document prepared by Williams, will outline the responsibilities, conditions, and liabilities of each party. If required, this document must be executed by the encroaching party and in Williams possession prior to any work being performed on the right of way.
2. Williams will determine if a recorded encroachment agreement will be required for any proposed construction within Williams right of way. This agreement, prepared by Williams, will outline the responsibilities, conditions, and liabilities of each party. This agreement will be fully executed and in Williams possession prior to any work being performed on the right of way.
3. Williams will determine if a reimbursement agreement will be required for any construction within Williams right of way. This agreement, prepared by Williams, will outline the reimbursement procedure for necessary and appropriate preliminary engineering and actual field inspection work. This fully executed agreement, including a check made payable to the applicable Williams pipeline company for the estimated cost of Williams services, will be in Williams possession prior to any work being performed on the right of way.

GENERAL REQUIREMENTS

1. No above ground structures or appurtenances are to be located within the Williams right of way. The structures and appurtenances include, but are not limited to: utility poles, towers, foundations, guy wires, structures supporting aerial lines, satellite dishes, manholes, catch basins, utility pedestals, transformers, fire hydrants, utility sheds, decks, swimming pools with associated improvements, etc.
2. An authorized Williams representative must be on site prior to and during any surface-disturbing work or equipment crossings performed within the right of way. Williams representative will assist in determining the location of the pipeline, the right of way width, and existing cover over the pipeline and will remain on site to monitor all activities within the right of way.
3. No cut or fill on the Williams right of way is permitted without Williams written approval.
4. Williams, at its discretion, may request evidence of comprehensive general liability insurance coverage (up to \$5,000,000 coverage) and other appropriate and usual insurance prior to any activity, maintenance, and/or construction on or near Williams right of way and facilities. In the event of significant excavation under or over Williams pipelines, Williams will require that the applicable Williams pipeline company be named as additional insured on the Certificate of Liability Insurance. The insurance limits, terms, and conditions that may be required will be dependent on the specific facilities potentially impacted and what would be usually and prudently obtained in similar industry situations.
5. All foreign lines will cross Williams right of way at an angle as near to 90 degrees as possible. In situations where there are multiple parallel Williams pipelines, the proposed foreign lines will either cross over or under all of Williams pipelines in the right of way. No horizontal or vertical bends are permitted within Williams right of way. Parallel occupancy of Williams right of way will not be permitted.
6. All foreign lines crossing Williams pipeline or related facilities will be installed with a minimum of 24" of clearance between the existing Williams facilities and the proposed foreign line. The foreign line will be installed at a uniform depth across the full width of the Williams right of way. Williams may require that all foreign lines be installed under its existing pipelines and related facilities.
7. Williams facilities are electrically protected against corrosion. Each metallic foreign line that enters or crosses Williams right of way must have a test lead installed. In addition, the utility contractor installing the metallic foreign line must excavate and expose one or more of Williams existing pipelines to provide for the installation of test leads by Williams employees. All necessary measures (coatings, electrical bonds, etc.) will be taken to ensure that the proposed pipe or utility is adequately protected from potential interference effects. Requests for cooperative testing will be directed to Williams Division Office, "Attn.: Supervisor, Asset Integrity."
8. Williams may require that foreign lines be identified with permanent aboveground markers where the lines enter and exit the Williams right of way. It is the line owner's responsibility to obtain any rights to install the markers, and to maintain the markers. A direct burial warning tape should be placed 12" to 18" above the foreign line and extend across the entire width of Williams right of way.
9. Foreign lines crossing Williams facilities will be installed in accordance with all applicable codes and requirements governing such installations.
10. Stockpiling brush, trash, or other debris on the right of way is prohibited, as it may conceal pipeline markers and hinder pipeline inspections or routine maintenance.

EXCAVATION AND BLASTING

1. Plans for excavation on the right of way require prior approval by Williams. **No machine excavation will be performed within 24" of Williams pipelines or related facilities.** Williams onsite representative may require hand digging at a distance greater than 24".
2. When a backhoe is used for excavation, the bucket teeth should be curled under each time the bucket is brought back into the ditch to reduce the chance of the teeth contacting the pipeline. Side cutters must be removed from all buckets. At the discretion of Williams onsite representative, a bar may have to be welded across the bucket teeth.
3. No mechanical excavation may be performed by reaching over any Williams facilities.
4. Prior to any plowing or ripping of soil on the right of way, particularly in association with agricultural activities, plans should be reviewed with your local Williams representative to ensure proper cover exists. No vibratory plows are permitted to be used on the Williams right of way.
5. A detailed blasting plan must be submitted for review and written authorization prior to any proposed blasting within 300' (Consult with Williams for surface mining requirements) of Williams pipeline facilities and a Williams representative must be on site during all blasting. In order to provide for necessary and appropriate analysis by Williams, each licensed blasting contractor must also complete and submit a Williams Blasting Data Sheet. The blasting plan and data sheets must be submitted a minimum of ten business days prior to the proposed blasting. Specific requirements applicable to proposed blasting will be provided to the licensed blasting contractor.

DISTURBANCE, MAINTENANCE AND VEGETATION

1. No trees are permitted on Williams right of way. Additionally, the canopy of any trees planted adjacent to the right of way must not extend into the right of way at maturity. Any branches extending into the right of way will be side cut by Williams at its discretion.
2. With prior approval from Williams, some types of low growing, shallow-rooted shrubs may be permitted on the right of way provided their maximum mature height will not exceed 5' and are not within 5' of the edge of the pipeline. Williams requires that the mature plantings will not prevent Williams representatives from seeing down the right of way during routine patrols or walking down the right of way directly over the pipelines as they perform required inspections. Under no circumstances will mechanical equipment be used in the planting of shrubs.
3. Williams reserves the right to cut and/or remove plantings as required in the operation, inspection, and maintenance of its pipeline facilities; further, Williams assumes no responsibility for any cost involved in the replacement of said cut and/or removed landscape plantings.
4. All sprinkler or irrigation systems will require review by a Williams representative. Sprinkler heads will not be permitted within 10' of any pipeline or related facility. All crossings of the Williams pipelines or related facilities with feeder lines will be hand dug.

EQUIPMENT CROSSING

1. To protect Williams pipelines from external loading, Williams must perform an engineering evaluation to determine the effects of any proposed equipment use. Mats, timber bridges, or other protective materials deemed necessary by Williams will be placed over Williams facilities for the duration of any loading. Protective materials will be purchased, placed, and removed at no cost to Williams. The right of way must be returned to its original condition.
2. Williams may require temporary markings to identify areas where equipment use is authorized.
3. No vibratory equipment is permitted within the limits of, or in close proximity to, the Williams right of way.

FENCES

1. A site specific inspection is required to determine whether the proposed fence posts must be kept a minimum of 4' or 5' from the edge of any Williams pipeline or related pipeline facility. A Williams representative must be on site to determine the location of the fence posts within the right of way and for the duration of the digging of the posts. Posts installed within the right of way must be hand dug. All proposed fence crossings over Williams pipelines will cross at an angle of 90°, or as near as reasonably practicable.
2. Williams will have the free right of ingress and egress. Williams may require that new fences have a 12' wide gate installed within the right of way at a location approved by Williams. The gate will be installed as to minimize vehicular and equipment travel over the existing Williams facilities.

LOGGING AND TIMBER OPERATIONS

1. Before any logging or timber operations can begin on Company ROW, obtain written approval from the company.
2. Additional requirements may include, but are not limited to, the installation of land ramps, plates, or temporary erosion controls.

3. Refer to Insurance requirement in #4 of the General Requirements above.
4. An authorized Company representative must be on site prior to and during any surface disturbing work or equipment crossing performed within the ROW.
5. The encroaching entity must meet with a Company representative at least three days prior to the completion of the project to discuss site restoration.

NON-OCCUPANCY STRUCTURE

This section details encroachment details on sheds, barns, car ports, retaining walls, storage drums, garages, large debris, old cars, trailers, scrap metal, boulders, satellite dishes, manholes, fire hydrants, etc. Buildings or structures, whether occupied or not, may not be constructed within a Company easement. No above ground structures or appurtenances are to be located within the Company ROW. The structures and appurtenances include, but are not limited to: towers, satellite dishes, manholes, catch basins, utility pedestals, transformers, fire hydrants, utility sheds, playhouses, garages, patios, slabs/foundations, decks, swimming pools with associated improvements, or similar structures. Large debris such as old cars, trailers, scrap metal, boulders, etc., will not be permitted on the ROW. The ROW must be kept clear for maintenance and inspection.

OCCUPANCY STRUCTURE

This section includes buildings, houses, occupancy trailers/mobile homes, patios, decks, play grounds, play houses, swimming pools, workshops, or similar structures. Occupied aboveground structures are prohibited within Company ROW, in order to provide for adequate maintenance and operation of Company facilities.

OVERHEAD CROSSING UTILITY

1. Overhead line crossings will be installed with a minimum of 30' of vertical clearance above the Williams right of way to provide adequate equipment clearance. No poles or appurtenances will be located on the Williams right of way.
2. Overhead line crossings will not be installed within 50' (measured horizontally) of any gas vent (e.g. relief valve, blow down vent).
3. Overhead lines will cross Williams facilities at an angle as near to 90 degrees as possible.
4. In addition to these Williams minimum clearances, all local utility minimum clearances must be adhered to.

PARALLEL UTILITY

Parallel occupancy on an existing ROW is not allowed unless approved by the Manager, Operations. This includes trenched, trenchless (bored), and above ground installation of pipelines, cables, conduits, overhead utilities, or fences.

ROAD, RAIL, PAVED AND UNPAVED TRANSPORTATION

1. Williams must complete a preliminary engineering evaluation for all roads, streets, driveways, etc., proposed on Williams right of way. Any pipe casing, concrete slabs, or other protection required by Williams will be installed at no expense to Williams. Williams may require a pipeline inspection prior to construction.
2. The recommended minimum total cover over Williams existing pipelines is 66" at all driveways, highways, roads, streets, etc. The recommended minimum total cover over Williams existing pipelines in adjacent drainage ditches is 48".
3. Vibratory equipment is prohibited within the limits of the Williams right of way. Vibratory equipment is not permitted to be used for achieving applicable compaction requirements.
4. Driveways, highways, roads, streets, etc. crossing over Williams pipeline facilities will cross at an angle as near to 90 degrees as possible. All crossings must be over straight pipe and at locations free of any crossovers. Parallel occupancy of the right of way will not be permitted.
5. Williams will retain the right to cut all present and proposed driveways, highways, roads, streets, etc. and will have no responsibility for restoration, loss of use or access, or any other costs.
6. Access to the earth above each pipeline for leak detection (flame ionization) and cathodic protection surveys must be maintained.

SUBSURFACE CROSSING UTILITY

1. Utilities crossing Williams facilities are required to be cased to protect the integrity of the utility and the safety of Williams and third-party excavators in the future.

2. All buried communications (other than single residential telephone and TV) crossing Williams facilities will be installed with encased, rigid, non-metallic conduit the full width of Williams right of way. Per on site personnel, conditions may warrant (spanning issues, shoring) steel conduit across the width of the ROW when pipelines are exposed.
3. All buried electric cables (other than 24-volt DC power lines), including single residential service drops, crossing Williams facilities will be installed in encased, rigid, non-metallic conduit the full width of Williams right of way. Per on site personnel, conditions may warrant steel conduit across the width of the ROW when pipelines are exposed.
4. All buried single residential telephone, cable TV, and 24volt DC power will be encased in schedule 40 PVC casing for the full width of Williams right of way.
5. All fiber optic cable, including single drops, will be installed encased, rigid, non-metallic conduit the full width of Williams right of way. Per on site personnel, conditions may warrant steel conduit across the width of the ROW when pipelines are exposed.
6. All sanitary sewer and pressurized water lines will be installed with encased, rigid, non-metallic conduit the full width of Williams right of way. Per on site personnel, conditions may warrant (spanning issues, shoring) steel conduit across the width of the ROW when pipelines are exposed. Gravitational flow systems will be either: (1) ductile iron or steel pipe (adequately protected from Williams cathodic protection system), (2) plastic pipe installed in steel casing, or (3) concrete pipe for the full width of Williams right of way. No piping connections will be allowed within 5' of any Williams pipeline. All ductile iron utility crossings will include restrained joints for the full width of Williams right of way.
7. No septic tanks, liquid disposal systems, or hazardous waste disposal systems will be allowed on Williams right of way or within 25' of Williams facilities. This prohibition includes, but is not limited to, facilities that have the potential of discharging effluent from sewage disposal systems, the discharge of any hydrocarbon substance, the discharge or disposal of any regulated waste, or any other discharge that may prove damaging or corrosive to Williams facilities.
8. All plastic combustible material lines will be installed in steel casing for the full width of Williams right of way.
9. Williams may require that steel combustible material lines (adequately protected from Williams cathodic protection system) be installed under existing Williams pipeline facilities.
10. Williams existing pipeline facilities will be potholed to verify the horizontal and vertical location of all facilities prior to any proposed trenchless construction operation. Once all required potholes have been performed, both plan view and profile drawings showing both Williams existing facilities and the proposed trenchless crossing alignment and profile will be submitted to Williams. Plan and profile drawings are required for all proposed trenchless construction operations. If not completed, Williams may require a subsurface geotechnical investigation be completed prior to construction.
11. All proposed trenchless construction methods may include the installation of steel casing for the full width of Williams right of way.
12. Depending on the trenchless method chosen, distance between Williams facilities and the proposed crossing alignment and profile, and depth of cover, Williams may require inspection holes to be excavated to verify the depth of the bore as it approaches each pipeline. Inspection holes must be excavated to allow Williams on-site representative to visually see the boring head prior to the point where it travels beneath each pipeline.
13. If inspection holes are not performed, the contractor shall monitor the location with precise downhole survey instruments and verify it with surface location equipment (i.e. TruTracker, ParaTrack, or equivalent). The contractor must provide Williams the computer printout of the directional survey and TruTracker/ParaTrack (or equivalent) reports generated by the downhole survey tools daily. Report data shall be in a format suitable for independent calculation of the survey. Deviations between the recorded position and the plan and profile drawing shall be documented and immediately brought to the attention of Williams. Contractor shall notify Williams on-site representative of any drill profile failing to meet the specifications.
14. For a Williams asset that was installed by trenching methods, all trenchless construction shall have a minimum vertical separation of 5 feet from a Williams pipeline when crossing it perpendicular. For any trenchless construction not perpendicular to a Williams pipeline, there shall be a minimum three-dimensional separation of 10 feet. A Williams representative shall be on site to witness the bore staking, pilot hole sighting, observation hole, and any other activity associated with the drill or bore.
15. For a Williams asset that was installed by trenchless methods, all trenchless construction shall have a minimum vertical separation of 10 feet from a Williams pipeline when crossing it perpendicular. For any trenchless construction not perpendicular to a Williams pipeline, there shall be a minimum three-dimensional separation of 25 feet. A Williams representative shall be on site to witness the bore staking, pilot hole sighting, observation hole, and any other activity associated with the drill or bore.
16. An example scenario for three-dimensional separation would be 18 feet lateral separation and 18 feet vertical separation, which would result in approximately 25 feet separation. See Figure 1.

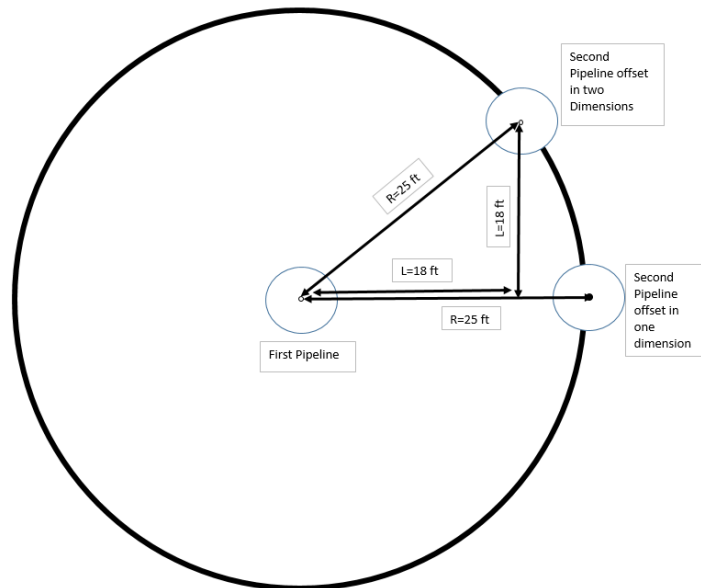


Figure 1: Three-Dimensional Separation Example

17. Contractor shall check for ground subsidence periodically along all attempted trenchless crossings and the final corridor within Williams right-of-way and notify Williams on-site representative immediately upon findings. Contractor shall fill any voids with a cement grout, compact subsoil within the Williams right-of-way, and restore the ground surface to original contours and conditions.
18. If for any reason the proposed trenchless method fails during construction or if any hole is abandoned during the process, contractor shall fill abandoned holes and/or subsurface voids within Williams right-of-way entirely with a cement grout.
19. Upon 15 days of completion, contractor shall furnish the alignment and profile as-built drawing with a description of the survey data used to determine the as-built location and a statement of accuracy used to create the drawing. The drawing shall be submitted in both AutoCAD and PDF format and contain all data points that are within the Williams right-of-way representing final alignment and profile, any abandoned holes, tools, strings of drill pipe, etc. overlaid on the plan and profile drawing.

SURFACE WATER

1. Williams may conduct preliminary engineering studies for any proposed drainage channels or ditches that will discharge toward or within the right of way. Drainage channels or ditches must be adequately protected from erosion and provide a minimum of 48" of cover over the pipelines. Altering (clearing, re-grading, or changing alignment of) an existing drainage channel or ditch requires written approval from Williams.
2. Impoundment of water on Williams right of way is not permitted. Soil erosion control measures will not be installed within the Williams right of way without prior written Williams approval.

STATEMENT REGARDING RIGHTS

1. Nothing contained herein will be construed to convey, waive, or subordinate any of Williams existing rights whatsoever.
2. Williams will be fully and completely compensated for any damages to its facilities resulting from the acts of third parties who are working in the vicinity of Williams facilities with or without Williams consent.
3. Williams will be indemnified from and against all claims, losses, demands, damages, causes of action, suits, and liability of every type and character, including all expenses of litigation, court costs, and attorney's fees, for injury to or death of any person, or for damage to any property, arising out of or in connection with third party work in the vicinity of Williams facilities.

WILLIAMS ENCROACHMENT/FOREIGN LINE CROSSING PERMIT FORM

**Must read when using this form: "Williams Requirements for Landowner & Third Party Construction"



Permit No.
Revision Date
One Call Report No.

This Encroachment/Foreign Line Crossing Permit is made and entered into on the date indicated below by and between the encroaching party ("PERMITTEE") and ("COMPANY"), as set forth below, for the purpose of allowing PERMITTEE to construct or maintain an encroachment and/or foreign line crossing on company's right of way or facilities. Facilities shall include, but are not limited to: fee properties, easements, pipelines, and valve sites.

Encroaching Party "PERMITTEE":		Company Name "COMPANY":	
Name:		COMPANY Representative:	
Address:		Address:	
Phone:		Phone:	
Landowner's Name:		Division/District:	Phone:
		COLLECT CALLS ACCEPTED	

ENCROACHMENT/FOREIGN LINE CROSSING LOCATION

Line/Tract No	Parcel Name/ID	Latitude	Longitude
Section	Township	Range	County/Parish
Alignment Sheet/ Map No.	Mile Post	Engineering Stations	ROW Width/Config.
Type of Encroachment/Foreign Line Crossing			
<input type="checkbox"/>	3rd Party Crossing	<input type="checkbox"/>	Landowner Activity
<input type="checkbox"/>	New Development	<input type="checkbox"/>	Other

ENCROACHMENT/FOREIGN LINE CROSSING DESCRIPTION

Attach Company's Foreign Line Sketch to this Permit as Exhibit "A" illustrating encroachment or foreign line crossing. If applicable, insert additional conditions not reflected in this Permit as Exhibit "B". Both Exhibits shall become a part hereof. Brief Description of encroachment/foreign line crossing:
Does Encroachment or Foreign Line Crossing require excavation or survey per WISOP O&M Procedure 70.10.01 section 5.1? <input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, record form WGP-0092 No. or survey information:

YOUR LOCAL ONE CALL NUMBER IS _____

If damage to "COMPANY" facilities is a result of negligence by the encroaching party's (PERMITTEE'S) failure to adhere to the state "CALL BEFORE YOU DIG" law, "COMPANY" will pursue restitution to the full extent of the law.

This permit is granted subject to the terms, requirements, and conditions shown below and strictly in accordance with specifications shown in the "Williams Requirements for Landowner & Third Party Construction", located in 75.01.01, Attachment A.

- It is understood that the PERMITTEE will cause the encroachment and/or foreign line crossing at no expense to COMPANY. PERMITTEE agrees to supply COMPANY plans and drawings, in detail, illustrating the proposed encroachment and/or foreign line crossing and COMPANY'S facilities, unless COMPANY elects not to require such plans.
- So that "Company" may schedule its personnel and not delay PERMITTEE'S work, PERMITTEE agrees to notify "COMPANY" 48-72 hours before any work commences on or near its right of way facilities.
- This permit does not change or modify any provisions of "COMPANY'S" existing right-of-way contracts or easements, unless such easements are required to be amended as a result of PERMITTEE'S encroachment and/or foreign line crossing. PERMITTEE acknowledges that the granting of this Permit may require amendment of the existing right of way contract or easement to reflect a change in land use or land rights.
- This permit shall be revocable in the event of noncompliance of any terms, requirements, conditions, and specifications of this Permit upon written notice given to PERMITTEE and/or current owner of record.
- PERMITTEE agrees to save harmless COMPANY, its officers, agents, employees and its subcontractors and their officers, agents and employees from any and all claims for damages, injury or death resulting from the continuation and maintenance of said encroachment and/or foreign line crossing. A COMPANY representative must be present during all construction activities that may impact the pipeline facilities. PERMITTEE shall be liable for all costs incurred for any damages.
- PERMITTEE agrees that COMPANY may remove any encroachment and/or foreign line crossing, or portion thereof, if in COMPANY'S judgment it is reasonably necessary to do so in order to construct, alter, maintain, repair or replace gas transmission

facilities located within the right of way and easement. Should COMPANY remove any such encroachments, foreign line crossings or portions thereof, COMPANY will not be liable to PERMITTEE or its successors or assigns for any damages resulting by reason of such removal, except for those damages arising out of the sole negligence of COMPANY.

- COMPANY will request evidence of general liability and other appropriate and usual insurance prior to any activity and/or construction on or near COMPANY rights-of-way. In the event of excavation under COMPANY pipelines, the applicable COMPANY pipeline must be named as additional insured. Any rights of subrogation or recovery will be waived in favor of WGP. The insurance limits, terms and conditions that may be required will be dependent on the specific facilities potentially impacted and what would be usually and prudently obtained in similar industry situations.

PERMITTEE

On this day of _____, 20____, I acknowledge that I have received, and reviewed with a "COMPANY" representative, the requirements, conditions and specifications of this Permit. I also understand the provision and prescribed penalties as provided under the law regarding excavation.

By: _____
Title: _____

COMPANY

By: _____
Title: _____

Pipelines and Informed Planning Alliance



The Pipeline & Hazardous Material Safety Administration (PHMSA) initiated the Pipelines and Informed Planning Alliance (PIPA) to help communities make risk-informed decisions for land use planning and development adjacent to transmission pipelines.

One way to protect communities and reduce transmission pipeline risks is for developers to be aware of transmission pipeline locations and risks when making decisions regarding development within 1,000 feet of pipelines. It is important that his dialogue between developers and pipeline operators occurs early in the planning process while changes can more easily be made.

PIPA has developed recommended practices for protecting communities, protecting transmission pipelines, and communicating among stakeholders. You can access PIPA's recommended practices at <http://primis.phmsa.dot.gov/comm/pipa/landuseplanning.htm>.

Sample of PIPA New Development Recommended Practices

NO.	TITLE AND PRACTICE STATEMENT	LOCAL GOVERNMENT	PROPERTY DEVELOPMENT/ OWNER	TRANSMISSION PIPELINE OPERATOR
ND02	Gather Information for Design of Property Development near Transmission Pipelines In designing a proposed property development the property developer/ owner should use all reasonable means to obtain information about transmission pipeline facilities in the area of the proposed development.		Yes	Yes
ND03	Review Acceptability of Proposed Land Use of Transmission Pipeline Right of Way Prior to Design The property developer/owner should review preliminary information about acceptable land uses on a transmission pipeline right of way prior to the design of a property development.		Yes	
ND04	Coordinate Property Development Design and Construction with Transmission Pipeline Operator When property development is planned within the consultation zone (reference PIPA Recommended Practice BL05), the property developer/ owner and the transmission pipeline operator should communicate to ensure possible impacts of pipeline incidents and maintenance needs are considered during development design and construction.		Yes	Yes
ND08	Collaborate on Alternate Use and Development of Transmission Pipeline Right of Way Property developers/owners, local governments and transmission pipeline operators may collaborate on alternative use of the transmission pipeline right of way and related maintenance.	Yes	Yes	Yes
ND17	Reduce Transmission Pipeline Risk in New Development for Residential, Mixed-Use, and Commercial Land Use New development within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and buildings located to reduce the consequences that could result from a transmission pipeline incident and to provide adequate access to the pipeline for operations and maintenance.	Yes	Yes	
ND18	Consider Transmission Pipeline Operation Noise and Odor in Design and Location of Residential, Mixed-Use, and Commercial Land Use Development	Yes	Yes	Yes

Remember, Call Before You Dig.

A new, federally-mandated national “Call Before You Dig” number, 811, was created to help protect you from unintentionally hitting underground utility lines while working on digging projects. If you plan to dig or do any type of excavation, be sure to dial 811 at least three business days before you begin. Calling 811 before every digging job gets your underground utility lines marked for free.



**Know what's below.
Call before you dig.**

**One free, easy call gets your utility lines marked
AND helps protect you from injury and expense.**

How 811 Works

One easy phone call to 811 starts the process to get your underground utility lines marked for free. When you call 811 from anywhere in the country, your call will be routed to your local One Call Center. Local One Call Center operators will ask you for the location of your digging job and route your call to affected utility companies. Your utility companies will then send a professional locator to your location to mark your lines within a few days. Once your underground lines have been marked, you will know the approximate location of your utility lines and can dig safely.

What Are the Signs of a Natural Gas Pipeline Leak?

- Blowing or hissing sound
- Dust blowing from a hole in the ground
- Continuous bubbling in wet or flooded areas
- Gaseous or hydrocarbon odor
- Dead or discolored vegetation in an otherwise green area
- Flames, if the leak has ignited

What Should I Do if I Suspect a Pipeline Leak?

Your personal safety should be your first concern:

- Evacuate the area and try to prevent anyone from entering.
- Abandon any equipment being used in or near the area.
- Avoid introducing any sources of ignition to the area.
- Call 911 or contact local fire or law enforcement.
- Notify the pipeline company.
- Do not attempt to extinguish a natural gas fire, and do not attempt to operate valves.



INVITATION TO BID #2023-33
Redland Rd Turn Lanes at Ferguson and Bradley Project
ADDENDUM NUMBER 2
May 09, 2023

On April 18, 2023, Clackamas County (“County”) published an Invitation to Bid #2023-33 (“BID”). The County has found that it is in its interest to amend the BID through the issuance of this Addendum #1. Except as expressly amended below, all other terms and conditions of the original BID and subsequent Addenda shall remain unchanged.

The following changes are made to the Project Special Provisions:

1. Subsection 00280 Scope - The paragraph that begins with the words " The Agency's NPDES 1200-CA Permit is not applicable to the Project " is replaced with the following:”

“The Agency's NPDES 1200-CA Permit is applicable to the Project. Before beginning Work on the Project, obtain a NPDES 1200-CA Permit from the applicable local jurisdiction or a NPDES 1200-C Permit that is applicable to the Project.”

These changes will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.

End of Addendum #2



INVITATION TO BID #2023-33
Redland Rd Turn Lanes at Ferguson and Bradley Project
ADDENDUM NUMBER 2A
May 09, 2023

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The following changes are made to the Project Special Provisions:

1. Subsection 00280 Scope - The paragraph that begins with the words " The Agency's NPDES 1200-CA Permit is not applicable to the Project " is replaced with the following:”

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

These changes will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.

End of Addendum #2A